

Ep.10 - Dr. Britany Affolter-Caine

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SPEAKERS

Announcer, Ed Clemente, Dr. Britnay Affolter-Caine

- A** 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.
- E** 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 for the show and today I'm fortunate to have Dr. Britany Affolter-Caine, Executive Director - University Research Corridor. Welcome, Britany.
- D** Dr. Britany Affolter-Caine 00:45
Thanks Ed, glad to be here.

E

Ed Clemente 00:47

And she's also not only does that but we've known each other a long time and I don't know which job I met you first might have been at Spark or the Detroit Chamber? Which one?

D

Dr. Britany Affolter-Caine 00:58

It was the Detroit Chamber. You were kind enough to do a spot for us in a video we were producing for Intern in Michigan at the time.

E

Ed Clemente 01:06

Oh yea - you got a better memory than me. Um, let's talk a little bit about the University Research Corridor, because, you know, even though I know a lot of people who are the inside baseball, people know what it is. Like, if you meet somebody, it's never heard of it before. What do you kind of tell them to give a definition for them?

D

Dr. Britany Affolter-Caine 01:26

Yeah, good question. So um, you know, the way I described is what is what we are we are an alliance of Michigan's three largest research institutions. In fact, we're Michigan's only three Carnegie classified R1s, there are only about maybe 118 in the nation, public and private, and our three, our three of the public ones. And so you know, it's fairly unique among states to have at least three R1s, and certainly three R1s that are public serving, but Michigan is one of those. And so you know, when I describe what we do, as this alliance is to really distinguish what it mean, what's our value proposition for the state, how does the state benefit from having these three institutions. And so, and I will tell you, I shamelessly brag about each and every one of them every day of the week and twice on Sunday. So because they are the same in that they are public, and they are R1s, but they're very unique from each other and highly complimentary. So for instance, you've got University of Michigan, which is the largest public research university in the nation. And the second largest overall there have behind just Johns Hopkins in terms of research. And you've got MSU, which is a premier land grant institution. And then Wayne State, which is entirely in the city of Detroit, and is one of the nation's premier urban serving institutions. So collectively, I like to say we would never have the reach we have, but for MSU, and to every county, and we would not have the scale of research we do but for U of M and we certainly wouldn't have the depth of impact we have in Michigan's largest city, but for Wayne State. So. So that's how I describe it.



Ed Clemente 03:18

It's a pretty good cross section. I know. I'll get to this question a little later about how who else to benchmark yourself with? But is that unusual that we have like a urban really sort of sub I don't know what U of M is, it's almost like a city state to itself. But an MSU really being more of an ag school, you know, historically, right.



Dr. Britany Affolter-Caine 03:41

Historically, but I think, you know, one of the greatest assets they bring to the state, in addition to the fact that they're an excellent research institution is that through their extension, and that really helps provide that reach. Wayne State is unique in that, you know, not a lot of cities have research universities of the scale they are, that are truly dedicated to the city. They're really focused on, you know, their leadership and their commitment as an anchor institution. And then, of course, you know, U of M, it's a global institution, and yeah, it's massive. I live in Ypsilanti and a couple people on the street who work for U of M, you know, I mean, it's it is it's quite large, but that benefits the state as well. And again, having three R1s and three presidents who know each other well, as well as the leadership. We work closely with leaders in government relations, research, communications, tech transfer, and also business engagement. So you know, it's helpful for them to they're all really driving and a lot of the same things and to be able to communicate with one another and share what they're doing is a value and we do that through the URC too.



Ed Clemente 05:00

So just a couple of definitions R1 really means just it's a research university that has so many faculties that do publish papers or...



Dr. Britany Affolter-Caine 05:13

Yeah, that there are several categories of universities, how do you categorize them, and Carnegie is probably the most well known classification scheme for higher ed. And so an R1 simply means it is the most research intensive of institutions. So you have research twos, which are also research intensive, but not at the same level, as you would see with R1. So for instance, I'm pretty sure Michigan Tech is a research two probably, and then you've got regional institutions, and they're, they're, you know, in within each category, depending on where you're at, really does signal where their core competencies are, and, and what their mission is, and what their impact is likely to be.

E

Ed Clemente 06:05

I wanted to touch on just a little bit is that you also mentioned, you don't have to go too deep of a dive is but tech transfer, because I think, is so critical at least when I was in the legislature, I did a lot of bills to sponsor the tech transfer, because the real long tail value sometimes of universities, is that tech transfer. So you want to explain it to like the general public?

D

Dr. Britany Affolter-Caine 06:30

Yeah, so you know, there's, I think I should start probably with the research side, you know, our universities do research in many different fields, some of that research is what we would call basic, and it's just kind of pure science and see what you know, to understand things better the phenomena, different phenomena is in different fields. And then there's applied research, and that is really with the intention of developing a technology or innovation to solve a real world problem. And so what technology transfer does is any innovation or technology, or discovery is what it would be referred to, in the tech transfer language is developed, they want to help move that technology where it can best be used by the intended users, whether that's, like if it's a medical device should be used in hospital settings, or whatever its target is. Basically it's moving whatever innovation and technology that we develop in our labs, out into the marketplace where it can benefit society.

E

Ed Clemente 07:40

You know, and I should probably get to this quickly is that you can probably explain it better than I can, but we're fortunate to well, not fortunate they had COVID-19, but we had three university presidents that are all medical doctors, right. And sure, you guys, really, I mean, you guys are very involved in, could you talk about some of that research that paid off sort of during this COVID era we've been in?

D

Dr. Britany Affolter-Caine 08:06

Yea, I mean, I think...so we actually have my three institutions plus Oakland University headed by medical doctors. It is a fairly unique thing nationwide, medical doctors are not often find themselves in the position of President. But we have you know, our three they have been able to use their expertise and I should say, you know, one is an expert in epidemiology, another as an expert in infectious diseases, and another is an expert in immunology. So not just medical doctors, but medical doctors with expertise and knowledge in areas that are so important to understanding COVID. And so, you know,

they have certainly applied their expertise in managing their campuses, but also in terms of supporting the state and business, the business community, in lending, you know, their contributions to various committees, whether it is you know, the Governor's Task Force on Coronavirus, and it's the Michigan Corona Virus Taskforce on Racial Disparities, which actually, President Wilson at Wayne State is a nationally recognized expert in that space. But they have also all served to help guide the Governor along with other leaders in industry and other key segments and in how best to be managing the state in fighting COVID. So that's, that's been a key role. They've also rolled out a couple of opinion pieces through presidents and encouraging people to get the vaccine when it is available to them. Which of course we're going to need some more of that for a while.

E

Ed Clemente 09:59

Well, why don't you; you put a plug in for Dr. Wilson, you want to put the plug in for the other two presidents as well give their name.

D

Dr. Britany Affolter-Caine 10:07

Yeah. So President Stanley at Michigan State, you know, he's, he, he wasn't in his role at MSU for very long before COVID hit. But but he, you know, having been a president for 10 years prior to coming to MSU, he clearly had the experience. And I think we have, we have benefited greatly from having him in that role. And, of course, President Schlissel at U of M, which, you know, the one of the biggest things that has been a challenge for all three of the Presidents as well as the VPs for research and the community is what to do with research during COVID. And they had to quickly ramp down a lot of labs and then find ways that were safe in slowly ramping back up the research enterprise. And so we're getting back at capacity. But again, having all three presidents with that kind of expertise has been really helpful in in managing campus operations, in addition to lending their expertise at the state level.

A

Announcer 11:09

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E

Ed Clemente 11:26

Yeah, and I want to just touch on a few things about all the different sort of research papers. I know you guys have been putting out. And I've been fortunate to sit in on a

couple of your presentations, but you want to highlight some of those.

D Dr. Brittany Affolter-Caine 11:39
Which ones are you... are you specifically talking about?

E Ed Clemente 11:41
Like the infrastructure one?

D Dr. Brittany Affolter-Caine 11:42
Oh yea. So you know, one of the things I've been really proud of is we went on an infrastructure tour, following a report that we put out in 2018. We made six stops, we partnered with local hosts, we brought in experts from our universities around key infrastructure issues that that community was facing, whether it be broadband or sewer, and water or energy, what have you, right, so we took a look at those things. And it was really interesting, the local hosts then brought in experts from the community and from the state level, and the one that really stands out right now, given what we've experienced with COVID is we were in Sandusky, Michigan, and we were at the ISD. And we had folks there from the Merit Network and Michigan connect and our universities and the community talking about broadband access, which which is a critical issue in the thumb region as well as across the state. And it was really eye opening the ISD for instance, the state didn't know but the ISD ended up actually kind of bootstrapping their own solution by creating these contraptions like bra-like contraptions on trees to put up wireless technologies to expand broadband. I like to say they were bra strapping, right, so But, but that's what we were learning. And so by coming together, we are able to talk about what we're learning in our universities talk about what the strategy is worth the state and the community level, and hopefully come up with some greater solutions going forward. And there probably is, you know, that's, that remains one of the most important infrastructure areas we need to get a handle on and the pandemic exclamation point on that for all of us.

E Ed Clemente 13:38
Well, you're gonna think this is a little crazy, but I've only got a few more questions for you, I told you this goes by fast. Yeah. You know, I know that. The URC does a lot to sort of, you know, I say, and not the word groom, but you support talent, and, you know, with the university structure, and mainly for private sector industries, correct. You want to, is that sort of that might be paraphrasing.

D

Dr. Britany Affolter-Caine 14:08

Well - I mean, I think it does, I think it depends, right. We are still the place two that are producing a lot of PhDs, who go into many different fields industry included, but also our university systems and nonprofit organizations and the like. So yeah, I mean, I think it's, I think it's all over talent. So, you know, we've got - we produce, you know, more than 36,000 graduates each year prepared for the 21st century. Many of them are in fields that are of critical nature, like mental health, right, or the medical field, which I've already talked about, you know, we know that in the state of Michigan, four out of 10 medical doctors got their degree their medical degree from me URC institution. So So those things matter. But we're also producing engineers, for instance, we produce each year, about 5000 engineering degrees, half, roughly half split, undergrad and half the graduate level, which is important at all levels, in industry as well. And so, yeah, so that's, you know, we're we're certainly preparing and we do work really hard to not only prepare talent that is in demand by industry and other organizations, but we do work really hard to introduce a lot of our talent to opportunities in Michigan, we engage with employers across the state to help access that talent. And I'm actually really glad that there is the new program, the Michigan STEM Forward, which just was approved this week through the MEDC and MSF, that is going to be providing 425-450 students with STEM students in internships and small tech companies. That's the kind of thing that can really help us to make that connection between our talent and local companies.

E

Ed Clemente 16:18

Um, you know, there were a few other studies, too, I wanted you to touch on. But was there a bio science talent? One? I don't know, I'm reading this off your website.

D

Dr. Britany Affolter-Caine 16:28

Yea - we did a life science report a few years ago, I think one of the headlines of that that's interesting for the MEDC audience, is to realize that when we went through the Great Recession, the only industry in Michigan to actually have added jobs was in life sciences. So every other industry lost, which just you know, it's not our largest industry, but it is a really key industry for us. And the good news about that, with having the URC here in the state, is that each year when we benchmark to the seven other university innovation clusters, the best of the best in the nation, it's part of how we keep ourselves honest, year to year, how we're performing and stacking up. What can we brag on? And what can we not, right? One of the one of the brag points, though, is consistent year in and year out is that our universities together produce more medical talent than any of the other clusters we benchmark to and that includes places like California's Silicon Valley, and North Carolina's Research Triangle and Boston's Route 128. So that's, um, we think

that's, that's really important, particularly given the industry here.

E

Ed Clemente 17:48

The one thing on the engineering and I always heard this, but could be an urban myth, but like we have more engineers actually residing in the state of Michigan than other states do. Is that pretty much true? And I would imagine some that fits into what you just said, I would guess.

D

Dr. Brittany Affolter-Caine 18:05

Yeah. So I did in 2018, I did a quick analysis just on degrees. So it's not people living here. I think some of our economic development partners have looked at that. And it usually comes down between us and California. And California is obviously like a really, really large state. Yeah. But at least in terms of degrees conferred, you know, Michigan, out of all of the universities producing engineering degrees, we ranked fifth in the nation. And I will tell you, if we're counting just URC degrees, if we were a state, we would be 11th. I had places like Georgia, and Virginia and North Carolina. So you're right, engineering is huge here. But it's also the type of engineering which is really aligned well with our industries.

E

Ed Clemente 18:53

So where you mentioned some of my question, you already answered it, which was who we benchmark ourselves with, and we've just touched on those. The last question is going to be good for you, because I know you're pretty outdoorsy person but what's your favorite part about living in Michigan? I know you originally came from Ohio...

D

Dr. Brittany Affolter-Caine 19:11

Shhh, are you allowed to tell people that?

E

Ed Clemente 19:13

No I don't usually but, no. You love Michigan, I know you do know.

D

Dr. Brittany Affolter-Caine 19:19

I do. I do. Um, it's hard to I know you were I knew you were gonna ask me that so I was thinking about it. Where do I like to go? There are so many great places to go in the state.

But you know, the one that is kind of close to home for me and that I have spent a lot of time at is on the Pottawatomie Trail as part of the Pinckney Rec. And I spent a lot of time hiking there but I also you know, I like I like to train for triathlon. So I do a lot of training out there running the trails and then doing some open water swims in Silver Lake. So I would say though, that is probably my favorite thing to do in Michigan, and I have to say, if I hadn't had that opportunity to go out there during the pandemic, I might have lost it; But it was a Godsend. And I'm definitely looking forward to the other thing that is fun to do after you do a good workout at the Pato and that is join friends at a local watering hole for a burger and a pint. So that would be nice. It's coming.



Ed Clemente 20:29

You know, and I know your family, your husband's a coach for cross country, right and your kids. Yeah, country too. So they spent a lot of time outside I know that. Well, I want to thank you again, for taking the time to be here today. Once again, our guest was Dr. Britany Affolter-Caine, Executive Director for the University Research Corridor. Thanks again for being here, Brittany.



Dr. Britany Affolter-Caine 20:50

Hey, Ed, thanks so much for having me.



Announcer 20:53

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