

EP.194 Lisa Johnson

Narrator: You're listening to *BioTalk* with Rich Bendis, the only podcast focused on the BioHealth Capital Region. Each episode, we'll talk to leaders in the industry to break down the biggest topics happening today in BioHealth.

Rich Bendis: Hi, this is Rich Bendis, your host for *BioTalk*. We have been off a few weeks, but we're back in the swing of things again. We thought we'd bring back one of our prior guests because she and I go back many years. She's in a state that was one of the early adopters of the term BioHealth, which we love since we're with BioHealth Innovation. I have Lisa Johnson, who is the CEO of BioForward Wisconsin. Lisa was a guest about five years ago, but a lot of things have changed in Wisconsin over the last five years, and we thought it'd be appropriate to bring Lisa back to update everybody, especially since she deals in the BioHealth world every day. Lisa, welcome back to *BioTalk*.

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Lisa Johnson: Thanks for having me, Rich. It's good to be back with you.

Rich Bendis: It's great to have you. A lot of the listeners probably who are new that we're not here five years ago, they don't know a lot about Lisa Johnson and BioForward. So, we're going to start with you giving a little brief introduction of yourself for the listeners, Lisa.

Lisa Johnson: Thanks, Rich. I've had most of my career, I'm going to say, in the BioHealth industry. I go back—here's my age—going back to 1989. Worked with a team to launch a company called Novagen. So, I do have this entrepreneurial background where you do every job as an entrepreneur to make it successful. But my primary responsibilities, my background is more in administration, the finance, business development, licensing. Did a ton of licensing technologies, and we were fortunate to be sold to Merck KGaA, which a lot of people know is MilliporeSigma now in the United States. I worked for Merck for over 10 years, so great opportunities, corporate development operation, a lot of international experience.

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Then I was with another startup, and then I got to go to government. You're talking to a person that kind of flies around in different areas. I

was VP of Entrepreneurship and Innovation for our state economic development. Then since May 2015, I've been leading BioForward.

Rich Bendis: It's nice that you've had all of that diversity in your experience because it makes you better prepared to work with the environment that you're in today, working with entrepreneurs, working with the public sector, academia, and taking advantages from federal government programs. So, based on this journey that you had, let's talk a little bit over the last 10 years. Introduce BioForward Wisconsin to the listeners. Talk about what its role is and how it supports the BioHealth ecosystem in the state.

Lisa Johnson: BioForward is a nonprofit organization, a state association, where it's a member-driven organization representing Wisconsin's BioHealth industry. As we say, we come together.

0:03:00 We provide a unified voice for the industry. We unite the statewide ecosystem. We advocate. A huge part of the value and how we come together is to advocate legislatively, and even marketing, for their interests, promoting Wisconsin as a global destination for BioHealth investment and growth. We invest. As an association, we take that revenue, and we invest back into our industry, through strategic initiatives—and we're going to be talking about the Tech Hub soon—economic impact reports, investor portfolio reports, attraction and expansion efforts, and then major events. So, it's really just—think of this as a unified group of companies, research institutions, all coming together to promote this industry, grow this industry together under BioForward.

Rich Bendis: Most states have a lead organization that represents bio or the international bio organization. Are you that organization within the state of Wisconsin?

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Lisa Johnson: That is correct.

Rich Bendis: So, you're the bio-designated organization for Wisconsin. Very good. That gives the listeners a little different perspective. The other thing is, since you're a nonprofit and, you said, member-based or member-driven, a lot of people who are in the nonprofit world want to know how

organizations like yourself and ourself are financed. So, how do you finance yourself over this 10-, 11-year period?

Lisa Johnson: Every year then our members pay us a fee, membership dues, different levels based on sizes. Some choose to pay even additional more. They're called our Medallion members. So, that gives us revenue to be then put back into the industry, like the different areas I was saying, advocacy being a big one. We have a lobbyist. We also have a huge purchasing consortium. From that purchasing consortium, we get some additional revenue that—it's not only huge discounts back to our companies because we have this gargantuan purchasing consortium, but that revenue, we get a little piece of revenue coming off those purchases back to us.

0:05:04 Some sponsorship money here and there, but we honestly try to mostly just generate our revenue from our members at this purchasing consortium.

Rich Bendis: Would it be fair to call yourself as a trade association as well, Lisa?

Lisa Johnson: Yes, that's correct.

Rich Bendis: Just from a designation standpoint, since you do advocacy, you're more a (c)(6) rather than a (c)(3) organization?

Lisa Johnson: That's correct.

Rich Bendis: For those listeners who don't know the difference, a (c)(3) isn't allowed to lobby or do what you'd classify active advocacy, whereas a (c)(6) economic development organization can, which gives you the ability to interact at the state or the federal level on an advocacy basis for your members.

Lisa Johnson: Correct.

Rich Bendis: As I mentioned earlier in the introductory comments, Wisconsin was one of the early adopters of the term BioHealth, which I was fortunate enough to help create about 15 years ago when we were creating BioHealth Innovation to describe the industry sector.

0:06:03 Let's go into the details about how Wisconsin views the term BioHealth, what's included from an industry perspective in your terminology, and

then talk a little bit about the sector growth in BioHealth in Wisconsin, since that's a term that's been adopted in Wisconsin over 10 years ago.

Lisa Johnson:

I have to say, I learned this term from a visionary individual called Rich Bendis. [laugh] The credit goes to you, Rich. I had BioForward start use it. I started in 2015, and we started using this term in 2016. I come from business development. How are we going to differentiate ourselves from other major, I mean, what I described as true biotech states like California, like Massachusetts, New Jersey, North Carolina, or cities like Boston, San Diego? Although Wisconsin has this wide breadth of whether it's bioscience—I'll get into the whole BioHealth.

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For us to say we are a major biotech center, I'm sorry, that was really difficult to sell when there's all of these already existing powerful states. We have this broad base of sectors and strength that encompass the biosciences aspect. In Wisconsin, that means API and biologics manufacturing. It means CROs, research reagents, and instrumentation. Then we also have some therapeutics like Arrowhead Therapeutics. But we also have strength beyond this biosciences in digital health. That came out of—Epic is the major electronic medical records company. A lot of individuals have left that company over these couple of decades, and started their own companies. So, we have this huge now industry sector digital health in Wisconsin. We have GE HealthCare here, that obviously powerful med device company. We've had Exact Sciences that is in diagnostics that was just purchased by Abbott.

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When you start to look at digital health, med device, diagnostic, that's all in the healthcare space. So, as we look at our strength—and certainly we have the strength in the biosciences, but now we have all this health space—it made sense to say, hey, this is a BioHealth state. This is not just biosciences or biotech, and not just healthcare; it is a combination. So, that's when we felt we have to start marketing a BioHealth term. Now we're 10 years into it, and people throughout the state are using the term "a Tech Hub." Again, we're going to be talking about that we received that designation from the EDA. It's called the Wisconsin Biohealth Tech Hub. Our research institutions are researching, creating technologies across this breadth of sectors from the biosciences to the health. They're even encompassing this term. Like, the UW Madison

School of Medicine and Public Health has their BioHealth industry partnerships that connects industry with researchers.

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We still have to define the term once in a while. It still hasn't replaced "biotech." But I love that you use this term, Rich. I think everyone should be using it. It describes the overall industry better than just saying biotech or life sciences or med device, medtech. I think it encompasses all those sectors into one under BioHealth.

Rich Bendis:

Well, I think your description is one of the best I've heard, and describing the companies that participate as your members and in the ecosystem in Wisconsin are really representative of what the term BioHealth stands for. It's really the convergence between the traditional life science, and the bio sector, and technology with the AI, machine learning, and quantum that's coming into it today. Since you have one of the largest technology companies in the healthcare sector with Epic there, you've been living this ever since Epic was created, but people just didn't know how to characterize it.

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So, thank you for the way you've described it and the adoption of that term. Let's talk a little bit about how the evolution of the BioHealth industry and ecosystem in Wisconsin has changed and evolved over the last 5 to 10 years, especially since you created BioForward. Where do you see the major shifts in the way the industry has gone over the last 5 to 10 years?

Lisa Johnson:

What I see the major shift—and I think we even talked about this when we last spoke several years ago. But what was so different than from my company being moved out is that companies are expanding here rather than purchasing a company, and moving it out of Wisconsin to the coast. That has completely changed. We have major corporations in this space that are staying here. I have already mentioned GE HealthCare, Medical Imaging, Epic, I've already mentioned. Eli Lilly has now brought manufacturing to Southeast Wisconsin.

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So, pharma companies are certainly purchasing Wisconsin companies. We had AbbVie last year purchase Nimble Therapeutics. Abbott, I already mentioned that as well that Abbott recently purchasing Exact Sciences, a diagnostic company. You didn't see as many of those also big purchases or a Lilly coming into the state years ago. So, that is all changing. Some of

that is also—you know. We all know there's federal pressures too on domestic manufacturing, but nevertheless, I mean, for that to start happening in Wisconsin—we have two major research institutions, the Medical College of Wisconsin, UW-Madison. Those are things that people aren't aware. It's not that necessarily it's changed, but for Madison to be ranked sixth nationally in research funding—the media tends to concentrate on all the coastal research institutions. But, in reality, the Midwest, Michigan, and Wisconsin, they're some of the top research institutions that we have in this nation.

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The Midwest and Wisconsin is now starting to be shown, globally recognized, where I think years ago that wasn't as much the case. It's being proven in our economic input reports that we put out every two years, even just our university BioHealth research over the last four years, Wisconsin surpassed the US in growth, with a 28% growth rate versus the US at 20%. So, that's a change. There are these things you don't know and also a change that we're seeing just the investments and the ability to do these things. That just took longer in Wisconsin and the Midwest, but we're just seeing this shift now starting to happen.

Rich Bendis:

The perspective is good. I think one of the things that I've noticed, as an outsider to Wisconsin, is whenever I used to go to Wisconsin, always I'd go to Madison, and we had to talk about WARF and Wisconsin. That's almost all we heard about 10 to 15 years ago.

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What I like is the way you've described it now is that it's become more of a statewide initiative rather than a UW-Madison-Wisconsin initiative, especially with major things like the Eli Lilly expansion in the Southeast. We're starting to begin to interact with the Medical Center of Wisconsin in Milwaukee, which, when I talked to them, they basically said we were almost outcast or outsiders many years ago and not embraced by what was going on from a statewide initiative. If you weren't in Madison, you weren't included. But I think what you're trying to do with BioForward Wisconsin is to bring everybody together to get a little more synergy and integration on a statewide basis. Is that accurate?

Lisa Johnson:

That is accurate, Rich, and thanks for saying that. I mean, I have worked so hard to make us be a statewide organization. Madison is powerful. There's just no question. It's a long history in Madison. So, other parts of

the state, it's just a little bit further behind. But Milwaukee, when I came on in 2016, nine months later, I opened a Milwaukee office.

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We now even have an office in Northwest Wisconsin in Eau Claire. There is a major growth in that Southeast Wisconsin and that Milwaukee area, down towards the Chicago area, and I think we're going to continue to see that. It is important that we continue to elevate and recognize the importance of entities like the Medical College of Wisconsin and other universities throughout the state that are having an impact on this industry.

Rich Bendis:

I think another major catalyst was what you mentioned—and you've mentioned a couple times, and we're going to finally talk about it—is the Department of Commerce, through their EDA program, launched the Tech Hubs program. Wisconsin put in a proposal back in 2023 to try to be designated as a Tech Hub. You mentioned you were designated as a Wisconsin BioHealth Tech Hub by the EDA. I don't know if a lot of people understand the magnitude of that, but talk a little bit about the process, how you brought a team together to make the application, what you think made you successful in winning a Tech Hub designation, and where it is today.

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Lisa Johnson:

Just for a background for the audience, it was an outstanding report that the Brookings Institute completed back in December 2019, advocating for a Tech Hub program, which was then the basis for the Tech Hub legislation that was embedded in the *CHIPS and Science Act*, and I think that was September 2022, maybe. We need to be visionary in this country to be able to compete with China, who is investing massive amounts of money into biotechnology. Getting back to a little bit more to your question, it's important that we have federal policy, that it's predictable, it's stable, increase funding—and I know this isn't Tech Hub—increase funding to NIH, NSF, to compete with China. So, we need creative programs then like the Tech Hubs to strengthen these clusters that are not nascent.

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Like, Wisconsin, you couldn't apply to the Tech Hubs program if it was just beginning. You need to show strength, and that's where our economic impact reports would come in, that we could prove that we

had a strong BioHealth industry here. But then at the same time, we also had to prove that we were willing to invest. I'm a big proponent of the federal government can't only do that; you have to be willing to invest yourself. So, we came together in 2023. It was a fast process by the federal government. "Prove to us—give us your proposal." I go on, and I go, "Well, our industry is called the Wisconsin Biohealth Industry. We're going to call it the Wisconsin Biohealth Tech Hub." The government—it was great—they had different technology areas. It could be AI, quantum computing you brought up, minerals, all kinds of different technology areas. Certainly they had biotechnology, med device, genomics, I should say, as a place on one of their technology areas. So, that is what Wisconsin went after. There were 192 applications, and there were 31 designations.

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Then you had to go after phase 2 to get the actual funding. Out of that 31, 12 were selected. The Wisconsin Biohealth Tech Hub was one of those. I did want to bring up how you brought up the Medical College of Wisconsin. What we did with this and what was really exciting—it was just fun to be able to do some like this, even though it was agonizing; also, it's a complicated process to go after these federal grants—is that we collaborated between Madison and Milwaukee. We had to put together a consortium. You had to put together projects that could advance this Tech Hub, and those projects came out of Madison and they came out of Milwaukee. One is led by Medical College of Wisconsin, and then you have another one. One of our projects is out of UW School of Medicine and Public Health. That's in Madison. What it's showing, demonstrating is we can come together out of this state, to come together to advance something not just for our state but for this nation.

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The whole idea is national and economic security for the United States. We had to put together that application and, like you said, I think we're both proud that it's actually called the Wisconsin Biohealth Tech Hub. [laugh]

Rich Bendis:

Yeah [laugh], what a great name.

Lisa Johnson:

It was a great name.

Rich Bendis:

I'm talking to Lisa Johnson, who's the CEO of BioForward Wisconsin. Let's talk a little bit about the magnitude of the funding with that Tech Hub

designation, how many years it is, and what kind of programs have you been able to implement as a result of getting this federal funding to match the state funding?

Lisa Johnson: It's a five-year program with the federal government. I always do like to clarify for people, because we're all taxpayers, you have to incur an expense before you get reimbursed. Our award from the EDA was 49 million. They don't just send 49 million to BioForward. It's project-based. GE HealthCare has a project. There's projects under this Tech Hub that are submitting and trying to build their initiatives.

0:19:02 For us, we have multiple initiatives that are coming out of these different project areas. We have a data hub. The MCW also has mobile units that are going out for diagnostic purposes, trying to go out to all parts of our state. So, it's very data-oriented. Tech Hub and GE HealthCare, like I said, is involved. But we also have a workforce component that was very important to the federal government, to meet the needs of our industry for the future. Actually, our technical colleges and our university system are working together as partners to do that. Although that was '23 we were designated, and we were announced in '24, it really was just last year, '25, we started to do all of our hiring and put things in place. So, it's still in its earliest stages, but we have goals that we've met, and funding that has been put in place. We've looked to make some great advancements here in the years to come.

0:20:00 One other thing I'd like to mention, there is an entrepreneurial component. We just had over 600,000 in grants go out to entrepreneurs, our early-stage companies that was using the state funding to advance those early-stage companies in our industry.

Rich Bendis: That's fantastic. It's nice that it's not just big companies, but you're supporting the entrepreneurial network as well. Generally, with these federal designations, one of the things they talk about is sustainability. Once your five-year is over with this designation, sometimes they come back and do renewals and extensions. But was sustainability and how to maintain something like this after the EDA funding an important component of your proposal?

Lisa Johnson: Yes, you had to show that. So, if you look at our proposal—and all the tech hubs that were funded had this—one, you had to have matching

funds certainly to get it, but you had to have an investment by consortium members that had to be in place to really prove that if they're investing now, then investment will continue.

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Then we're looking at models for the data hub, the care scan van that I was talking a little bit about from the Medical College of Wisconsin. What are those models, going forward, and revenue structures that they're going to have on their own? Workforce certainly, I think, always has that ability to be sustainable in the sense of industry is working with those technical colleges. Our state is certainly helping fund some aspects of that. That would be an ongoing proposition going forward, especially with an industry that's growing like this. We certainly had to put that out there. GE HealthCare's project, that will be sustainable for them, going forward, with their software that they have. So, there were certainly aspects that you do have to show sustainability.

Rich Bendis:

Let me just ask a question related to the current administration, who sometimes hasn't been as supportive related to life sciences, healthcare, or entrepreneurialism.

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Do you believe you're safe with your funding? Did they save the funds so that you're safe through the next three to four years, regardless of where this administration's position is?

Lisa Johnson:

It was not cut last year. There is very strong bipartisan support. For example, Senator Young has been great in supporting all types with, like, the National Security Council for Biotechnology. He was a big part of that. A tech hub resides within Indiana. It's both Republican and Democratic states these tech hubs are in. So far, Department of Commerce, EDA has been very supportive of the tech hubs. But, for any of us, we've seen what has happened with NIH funding. That to us is a major issue that that is not an area where you should start to cut or not fund fully. There shouldn't be this unpredictability. I hope that that's the same with the tech hubs, because I do think these are the type of programs, if we are going to compete, and I say China all the time, but I know the federal government understands that is we have to have some innovative programs to be able to compete with China in the future.

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Rich Bendis: No question, and best of luck for all of us on the continued and increased support for the initiatives that we both try to work on. When we talk about financing, not just for the tech hub, I think you and I met many years ago when you were with government, but you were involved also with some of the investment programs and what was there to support entrepreneurs. So, we've gone through somewhat of a winter, an early stage winter for entrepreneurs right now. So, how is Wisconsin and BioForward doing and your entrepreneurs within Wisconsin in trying to find the pre-seed and the seed funding they need to advance their companies and their technologies? What are you trying to do to look at creative ways to find incremental financing support for this ecosystem?

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Lisa Johnson: Yeah, we were talking about this, Rich. It's difficult across the nation. The funding is tight right now. Certainly in the state—and this happened several years ago, as you were mentioning, and I brought this out when I was with WEDC—we have investments in the state with the SBIR matching grant program. Now, we still need SBIR reauthorization to be signed in the [laugh]—to be reauthorized that, again, another critical program by the federal government for us to compete. But we do have that matching grant program. We have angel investment, venture investment, tax credit programs. That has certainly helped. We have a shared lab space entity called Forward BIOLABS, based in Madison. Now because of the Tech Hub, we are expanding that into Milwaukee. That's cost-effective means. I know, when I started the company and we were in an innovation center, any way that we can get reduced costs, have equipment given to us that we can utilize without using investment capital, that makes a huge difference to be able to launch a company.

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So, we have those things in place. I mentioned the over 600,000 and there's more to come in grants to early stage companies through our Tech Hub. Then another thing that BioForward is investing in is our Wisconsin BioHealth investor portfolio report, just marketing. Again, getting back to business development, if you aren't telling people, they aren't going to know. So, we are trying to do more and more marketing of the deals that are ongoing, trying to attract more investors into the state. We had our first report last fall. We have another one coming out

this summer. So, it's really just trying to get our state to do even more marketing what we have happening in the state.

Rich Bendis: Well, it sounds like you still have a pretty robust system. It's just that we need to keep them all funded, right? [laugh]

Lisa Johnson: Right.

Rich Bendis: Let's talk a little bit about the future. You've had some great success over the last 10 years with BioForward. What do you see as the major gaps you need to address, and what are some of the goals over the next three to five years that you have for BioForward and the state of Wisconsin?

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Lisa Johnson: I mean, it's what we've already been talking about. First and foremost, we need—a gap is if our research institutions are not funded. It's out of our control. We now are back to the federal government. But our research institutions have to remain strong and well-funded through the NIH, NSF. BioForward doesn't have that, but we can be fighting for it. So, many of us, we just need to fight for these things and be heard, because we have to be able to compete long term. I think there's an energy collaborative spirit happening right now, certainly here, and the Tech Hub has helped with that. We just need to keep that going and to motivate now this next generation, again, not just nationally but in Wisconsin, where we need to make sure, because there has been reduced funding and we need to increase it, is our education systems desperately need more funding, our K through 12, our universities. We need the next generation of the engineers, technicians, computer scientists.

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We can't compete otherwise. That can be in a nation, but it can be just very dedicated by a state. How do you attract people here if you aren't willing to finance and fund those things? For BioForward, us continuing to work across the state and knowing—and for our legislators across the state to know that we don't think this is only about Madison and Milwaukee, if you can't have a fully successful state, it drags it down. You can't just have just a few centers that are prospering. So, we're just working to do whatever we can to support this broad range of the ecosystem, from the entrepreneurs to our larger companies and attraction efforts and partnerships. It's not easy. It's a lot of moving pieces [laugh], but we have our work cut out for us for just a state. Other

states, they have some of these programs in place, and so we have to continue to do what we can.

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But I do also look on a Midwestern nation, as you've heard me saying, because I hate it when we only put our borders up around all of us and we don't think as a broader unit. I think we have to continue to do that.

Rich Bendis:

What has been done in Wisconsin, other states would envy, but I think BioForward is that private-public partnership, which is sort of a BioHealth intermediary. As we understand challenges that everybody in the United States is having with the federal government, the question becomes, how do we decrease our dependence with industry, with entrepreneurs, with academia on the federal government, and take control more of our own destiny? So, I think that's the biggest challenge we all have.

Lisa Johnson:

That is correct. It really is connecting, especially between industry. Our research institutions are doing a great job of saying, "Listen, we have to have industry now. We have to have these partnerships." So, being more flexible, where I think in the past sometimes academia can be very bureaucratic.

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So, I think those partnerships are really coming together, and I really have been happy about the Tech Hub in that way. Those collaborations just elevate even further our industry working with our research institutions. So, yes, I absolutely agree with you, you cannot just be always dependent upon federal funding.

Rich Bendis:

Correct. Well, this has been a great update for five years since we last talked. Hopefully we don't have to wait five more years. Is there anything that we didn't discuss you'd like the listeners to know about? A reminder, again, we're talking to Lisa Johnson, the CEO and founder of BioForward Wisconsin. Lisa, is there anything we didn't talk about that you want to leave the listeners with?

Lisa Johnson:

Well, I will clarify, I'm not the founder of BioForward.

Rich Bendis:

Oh, OK.

Lisa Johnson:

No, no. BioForward, actually, it was like the Wisconsin Biotechnology and Medical Devices Association way back in 1988, so it's actually been around a long time.

0:30:00 It had a name change. It's just that I took over in 2015.

Rich Bendis: OK. You've helped in the rebranding...

Lisa Johnson: There we go.

Rich Bendis: and new leadership and new energy, so take it from there.

Lisa Johnson: New energy, and brought in the BioHealth term, there we go, that's what I founded it on. [laugh]

Rich Bendis: OK, very good. So, what did we miss in our conversation? Anything?

Lisa Johnson: I don't think anything, no, I think you did a great job, and I appreciate the opportunity to be able to speak with you again. It's been a pleasure.

Rich Bendis: Well, thank you. But I just asked the questions; you provided the content and the information, Lisa. So, it's not me doing a good job; it's what you're doing in Wisconsin. So, keep up the good work, and hopefully we'll get a chance to—maybe with some of the discussions we're having, as I mentioned, we might be able to have a little closer engagement with you because, as you say, it's not just about what's going on in Wisconsin, it's what's going on regionally and nationally, and how do you find the way to bring these assets and these networks together that benefit everybody, rather than being so insular in the way we've been in the past?

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Lisa Johnson: That's right, and advocacy can do that. I mean, that's where we come together. We have to fight together, and I think it's good.

Rich Bendis: Well, it was great to catch up with you again, Lisa. Anytime you have great news to promote, just let us know, and we'll help spread the word with you.

Lisa Johnson: Sounds good. Well, thanks so much.

Narrator: Thanks for listening to *BioTalk* with Rich Bendis.

End of recording