

**EP.138 - Rachel King**

**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. I'm your host for *BioTalk*, and we have a very special guest today. And Andy Eckert, our director, and I looked back in our chronicles of all the *BioTalks* we've done, and found out that the eighth *BioTalk* of 135 now was done with our guest today, and we are so pleased to have Rachel King, the CEO of Biotechnology Innovation Organization, which is BIO to everybody. Everybody refers to it as BIO. I was there before when it was the Biotechnology International Organization, and changed to Innovation, and Rachel probably will talk about that a little bit. But, Rachel, welcome to *BioTalk*. It's been too long, and we're so glad to have you here today.

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**Rachel King:** Oh, thank you, Rich. It's a thrill to be back, and it's great to see you again. Really delighted to be here with you.

**Rich Bendis:** Thank you. And you're a household name in the region, but now becoming national and internationally recognized. But there's probably a lot of listeners that have not met you personally. So I'm going to let you do an introduction of Rachel King to them because nobody knows your background better than you. So give our listeners a little history of how you evolved to where you are today, Rachel.

**Rachel King:** Oh, sure. Well, thank you, Rich. Well, I came to Maryland, gosh, it's a little bit over 30 years ago. It's hard to believe it's been that long. But moved here from Palo Alto, which is where I had actually started working in the biotech industry out in California. And I joined a start-up company in the area called Genetic Therapy, which had about 12 employees at the time, and ended up spending about 10 years there. It was a company that was started here in the area by HealthCare Ventures and a couple of other early-stage investors, led by Jim Barrett, who is a name that many people will recognize.

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And I ended up staying there through the IPO and the eventual sale of that company to Novartis. Then when Jim left to found another company,

I became the CEO of that, and ran it as a division of Novartis for a few years. Eventually left that to work at Novartis, and then left Novartis to join NEA as an entrepreneur-in-residence as a venture capital fund. From NEA, I started GlycoMimetics, and ran that company for many years also through an IPO and deal with Pfizer. Got a couple of programs to late-stage development, until I retired about two years ago. And after about a year of retirement, came out of retirement to take this position at BIO. I had become very involved with BIO over many years through the work I was doing at GlycoMimetics, and loved the organization. And when BIO was going through a leadership transition, and asked me to step in, I was really delighted to do that on an interim basis.

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So I'll be here—so far, it's been almost a year now—but here as we look for another CEO.

**Rich Bendis:**

Thank you. I understand interim and how it works because when I started at BHI back in 2011, I was the interim CEO, and this is 2023.

**Rachel King:**

Well, look what happened. [laugh]

**Rich Bendis:**

I know. [laugh] And then when you say you retired, you never really left the industry, Rachel. You basically stay engaged beyond BIO because you also serve on a bunch of boards within the industry, which also kept you active and also recognizing what was going on within the industry by serving on those boards.

**Rachel King:**

Yes, that's true. I mean, I love the industry, and I love being connected with people. So I did stay on the GlycoMimetics board, also on the Novavax board. I was on the BIO board and the University of Maryland BioPark, so a lot of connections to this area in particular and in the industry. That's true.

**Rich Bendis:**

And the other thing is when you basically started Glyco, and were involved back in the earlier days, our region was ranked sort of like the sixth best biopharma region in the country.

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But if you look at all of the things you've been involved with, and how this region has evolved, and you've gotten to watch the whole thing through this evolution from HGS to MedImmune to all of these other companies, which have grown up here, you probably know now we're the number

three biopharma region in the country, as ranked by Genetic Engineering News on their five criteria. And look what you helped to make happen.

**Rachel King:**

Well, I had a very small role in that, but I think it certainly has been exciting to see how the region has grown, and the contributions that biotech is making to the state of Maryland, which are substantial. So it's been wonderful to see how that is.

**Rich Bendis:**

It's really one of the most critical industries to this region. But let's go back to BIO now. You've had a long involvement with BIO, watched it evolve through the years, and for people who don't know about BIO, talk a little bit about its history, where it is today, sort of the mission and goals, and what you're doing as the new leader of BIO.

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**Rachel King:**

Sure. So BIO is the industry association that represents all of the biotech companies in the United States. Anybody who wants to join can. We represent small companies, we represent large companies, and we advocate for the industry, we represent the industry, and we also convene the industry. So what I mean by that is in terms of advocating and representing, we do a lot of policy work to try to ensure that in Washington and in state capitals around the country, there are policies in place that will be supportive of innovation, and also that will ensure that patients get affordable access to the products that our companies develop. So a lot of very intense policy work. And we do that primarily in the United States, but we do also convene a group of organizations outside of the United States, and we work together with them as colleagues to help try to influence policy around the globe. In terms of convening, we convene many different groups of people who have different interests in biotech.

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I think probably the thing that we're best known for is the international convention that takes place every year, and most recently took place in Boston. We had 20,000 people in attendance, over 20,000 this year, and I think about 40% of those came from outside of the United States. So it's a wonderful event that many of the listeners may have been to. That's probably the most visible way that we convene people in the industry. But we do that in smaller ways also, whether it's through this international group I mentioned, or through convening state bioscience

associations from around the country. We also convene patient groups, again, to try to coalesce around advocacy that we share some of the values and policies that we want to try to advance. So that's generally what BIO does. It's a membership organization, so we are led by our members, and by a board that's made up of CEOs from member companies. And I would say that we're known to be distinct from pharma in that we represent the smaller companies. We do have larger companies that are part of our ecosystem, and therefore part of the membership as well, but I think we're most known for the smaller company representations that we do.

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**Rich Bendis:** The other thing is the BIO name, everybody in the past had to have a biotechnology organization or connection. But biotechnology has changed in a way now, so there's many factors impacting biotechnology, and that's one of the reasons we created the name BioHealth rather than biotechnology, because we saw the convergence of technology coming into pharma, bio vaccines, medical devices, and all of that. Tell us a little bit about the transition at BIO now with this convergence that's happening between technology and the bioindustry.

**Rachel King:** Well, yeah, and, in fact, that gets to another important point, which is that I think your focus is on biohealth. Ours is actually a bit broader, that we have biotechnology as it applies to human health but also as it applies to agriculture, as it applies to environmental issues.

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So we really define it broadly and we, I think, are constantly learning about the ways that biotech can be applied in the different settings, the different types of innovation that can be brought to bear. So it's very much in evolution as we think about the potential applications of the technology. It's fascinating to see. Now people are looking at the effect of artificial intelligence, for example, and how might that impact on drug development. So I think being in a technology-related space, of course, we have to always look to innovate ourselves, but also as the industry representative to reflect that innovation in the policy work that we do. So it's a challenge and it's also exciting.

**Rich Bendis:** It's an opportunity too. Do you believe that the mix of members is changing a little bit because of the different people that are getting engaged within the bioindustry today?

**Rachel King:** Yes, I think it will probably continue to evolve. When the organization was started, it was primarily focused on human health. And now, as I said, we've got the agricultural, the environment aspect, and I think we're going to continue to evolve as we get more into things like digital health and these other, again, as the new technologies come to bear on what are the variety of innovations that we can bring to improve human life on the planet in many ways.

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**Rich Bendis:** Right. And your location of being located in Washington, D.C., is very convenient to the major entities, which are all probably within 30, 40 miles of your headquarters with FDA, NIH, CMS, HHS, and so many others that are involved. So talk a little bit about this location in D.C., and your ability to reach out to the major influencers within the industry.

**Rachel King:** Sure. That is a really, as I said, a really important part of what BIO does is to try to advocate for policies that are going to be supportive of innovation. And so in order to do that, we need to get to the people who are making the policies. Of course, some of that is legislative policy, some of that is more things that come out of the administration, and so we need to be present at all of those discussions. And it is really interesting because things require different types of engagement. We have a very interesting example now.

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One of the things that we're concerned about is the so-called Inflation Reduction Act, which has a number of provisions that affect our industry, including negotiation of drug prices and for certain drugs. That's an example where we need to be engaging with CMS because they're implementing the existing law. And we need to also engage with Congress because there are things about the law that we think we'd like to change. So we're constantly looking, Rich, of where are the levers that we can pull, and how do we think we can most effectively do that? And it takes a long time. Many of these things are not quick answers or not quick decisions that are made. It requires education over a long period of time. It requires engagement, requires building relationships and

hopefully friends on Capitol Hill in the Administration in order to get these things done. But that's very much at the heart of what BIO does is to build those relationships and try to influence those policies.

**Rich Bendis:** And you really can't do it alone. And one of the nice things about your membership with the diversity it has, you have members in all 50 states.

0:10:59 And when you talk about working with Congress, it's always nice if you need to educate some people within Congress about certain issues, you have members generally they can relate to that are in their backyard that are creating jobs and revenues and taxes within those states, which is very important to their constituency.

**Rachel King:** Oh, for sure. And in the end, as is often said, politics is local, right? We need to be able to express the industry's concerns in ways that are meaningful to the members of Congress and to the people that they represent. So whether that means, as you indicate, maybe there's a factory or there's an employer of some kind in a district, but there are also people who show up at town hall meetings, and are concerned about the copay that they have when they go to the pharmacy, and they're trying to get the important therapy that they need. So, in the end, we have to be able to solve the political problems that the members of Congress bring as a result of what they're hearing from their constituents, and so that is—so our approaches are really multifactorial.

0:12:00 We've got to be dealing with members of Congress. We need to be educating the members of BIO, who live in the districts that we've got a very active communications platform that we use through something called *Good Day Bio*. We have our own podcast, we've got our own communications tools, so it's a whole set of efforts that we undertake in order to try to influence these policies.

**Rich Bendis:** I think the other thing that's important is that really the whole industry is trying to improve the quality of health and healthcare for the patient. And a lot of times, people forget about it that we're all in this for the patient. Talk a little bit about the role of BIO in patient advocacy, and how you interact with patients, who are all being served by your members.

**Rachel King:** The patient advocacy part is critical, and it's a really important part of what we do here. We actually started some years ago. Many years ago,

we started a patient advocacy summit, which we do every year in Washington in the fall, and we bring together the patient groups.

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Many patient groups are started because parents or relatives have people in their family who are suffering from a particular disease. And the patient groups are often extremely sophisticated, extremely well organized, and very, very good at describing what they need for their own patients. One of the things that we realized was that bringing those groups together really helps everybody because they can learn from each other, we can learn from them, we can help facilitate some of the meetings that they might want to do on Capitol Hill, and so we realized that by bringing these groups together, we can really leverage all that energy and the experiences that they have to help make the case to support both innovation and affordable access. So we do work very closely with patient advocates. It's a very important part of what BIO does.

**Rich Bendis:**

Other than the advocacy, you talked about some of the major issues that the industry is facing today, and pricing being one of them. There's another one I think that's impacting a lot of the early-stage companies, and that's access to capital.

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And I just got some new venture capital reports that are out for the first half of this year, and showing like an 83% decrease. It's not just in the bioindustry; it's all industries. But I know that a lot of our emerging companies in the healthcare and the bioindustries are finding a little more challenge right now to get some of that start-up capital, follow-on capital, series A capital. And the other thing is valuations are down a little bit. So how does this fit into your role as an advocacy group in this industry? And are you hearing about this as one of the major challenges from your members?

**Rachel King:**

Yeah, absolutely, and it's a tough market now for companies, and it's affecting a lot of companies, and, I was going to say, maybe all companies right now. It certainly affects in terms of access but also in terms of valuation. So I think there are two ways that we think about this, if I try to bring it to the high level. One is that we do look at things specifically related to what we call capital formation.

0:14:58                   What are policies that specifically could facilitate capital formation, whether it's tax policy, whether it has to do with reporting requirements for small cap public companies, things that specifically could improve the capital-raising aspect of what we do? At a higher level, these are all the broader issues that affect the innovation ecosystem also contribute to what you're talking about, and that's where we get concerned about things like the Inflation Reduction Act, concerned around accelerated approval. There's some challenges to that pathway that also affect the so-called innovation ecosystem. Another area that's of concern to us as far as the ecosystem is concerned is the increasing role of the PBMs, the pharmacy benefit managers, and the fact that those middlemen are taking a higher and higher percentage of the value chain. And so the innovators are getting less of the value chain, which is a disincentive to investment in this sector.

0:15:56                   So there are a lot of things that kind of affect that broader ecosystem that BIO is also very specifically concerned about, in addition to the more specific capital formation issues.

**Rich Bendis:**           I think there's some very positive things. Everything's not negative right now because I think some of the good things that are happening is if you look at NIH funding, it continues to grow every year. And as a result of that, the SBIR, Small Business Innovation Research grant component of the NHI funding is a percentage of the overall funding, which continues to grow. And then you have barter, which has become a new funding source, which we didn't have many years ago when you were raising money. And then we have the new ARPA-H coming out, which is a two-and-a-half-billion-dollar new institute, which is going to just—they just announced today they made their first investment down in Atlanta, Georgia, with Emory University, \$24 million. That's not like a half-a-million-dollar grant; that's a \$24 million tranche of money that's available.

0:16:53                   So I guess there are positive signals that certain things are growing, and we need the federal and the government funding because they end up becoming a major angel or seed investor to help seed some of these future innovations that we need in this industry.

**Rachel King:**           You're completely right. And I would say anybody who really works in this industry for a long time is a long-term optimist, right? That's what we



have to be, and I am a long-term optimist. So in spite of the gloom that we've been talking about in terms of the current financing climate, I do agree with you that long-term I'm an optimist. And in part, that's because of the tremendous progress that the industry has made, and the tremendous progress that the industry has been able to demonstrate in terms of improvements to human health. The industry really came to the table in an incredible way during the COVID pandemic. I think everybody was surprised with what humanity was able to accomplish. And in large measure, that was because we had such a strong biopharma industry that was able to respond quickly to the needs of that pandemic.

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And that's actually another great example of the public-private partnership that you were alluding to through what happened with Operation Warp Speed. So government policy absolutely matters. It absolutely has an impact. And it can be incentives. It can be investments like the ones that you've described. Unfortunately, it can also be disincentives like the IRA. But they matter. What the government does, what policies the government has in place will affect the industry. We'll be able to respond. And over the long run, I think that the fact that we've been able to continue to deliver as we have makes me optimistic that we will continue over time to get support. But we have to continue to make our case. We've got to remind people that incentives do matter because investors could put money in the end into software. They could put it into new apps on their cell phone, or they could put it into another treatment for some form of cancer that still is not sufficiently well addressed. So we have to continue to work hard to be sure that we get those government incentives.

**Rich Bendis:**

Well, continue to be an optimistic leader, which you are, Rachel. It's extremely important.

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But when we look at the state of the industry today, and you look at the macro picture, and you're talking to your members and constituents or whoever you're talking to, what is your stump speech related to the state of the industry today?

**Rachel King:**

Well, I do think that we're being really challenged. I think that there are a lot of factors right now that are really pressing on what I consider to be sort of the innovation ecosystem that make this a really challenging time. And I've mentioned a number of them, but just to kind of recap, I think

IRA is a real challenge. The challenges to things like the Accelerated Approval Pathway is another major challenge. The role of PBMs is another, and capital formation climate is another one. One of the problems that we have, one of the challenges that we have is that we do need to address the issue of affordability and access. And as an industry, we need to care deeply about that because the problem happens when a patient goes—nobody cares about innovation if the innovation is not something that they can access when they need it, or that their loved one can access when they need it, right?

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And so it's really critical that we ensure that that is possible. What's challenging is that because our system is so complicated, we actually as innovators, the innovator industry, we don't control the price that the person pays when they get their drug at the pharmacy. The insurance company or the PBM controls that. When you think about an example where if someone goes to the pharmacy, and the drug that they need that their doctor has prescribed comes with a \$3,000 copay that they can't afford, if the government comes along, and negotiates a price that cuts the price of the drug in half, and the patient goes to the pharmacy, and they still have that \$3,000 unaffordable copay, that does not help. It does not achieve the objective that we all share, which is getting the right drug to the patient who needs it. So we need to also be working toward solutions around affordable access.

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But I think that's what's driving a lot of the political challenges that the industry is having is that political leaders are saying we've got to do something about this access issue, and coming up with things that are actually not necessarily helping that and, in the meantime, are also affecting negatively the environment for innovation. So it's a complex group of issues, and it is a challenging time. But, ultimately, we need to be advocating both for innovation and for access.

**Rich Bendis:**

Basically, I generally ask entrepreneurs what keeps them awake at night, and I think you just explained to us what keeps you awake at night.

**Rachel King:**

Yes [laugh], it is. All of that keeps me awake.

**Rich Bendis:**

[laugh] All that? But you're still smiling, and you look very fresh today, Rachel. Let's bring it back home a little bit. Talk about the region that you're in, BioHealth Innovation is located in. And you mentioned Warp

Speed, and a lot of listeners would not know this. And we're talking to Rachel King, who's the CEO of BIO. Forty per cent of the Warp Speed money came to one county in the United States, and I don't know if a lot of people know that.

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But Montgomery County companies received 40% of the Warp Speed to show how important the companies within this region have been to help address the COVID challenge that we had at that time. So that's pretty exciting because probably 10 years ago, that would never have happened.

**Rachel King:**

And it's fascinating too, when you think about it. Now, this season, this COVID season in the fall, we expect that there are going to be three vaccines on the market: Pfizer, Moderna, and Novavax—Novavax, of course, which is one of our local companies, one that I'm on the board of. And it's something we can all be really proud of, I think, also as with respect to the region, as you say, but also for our national industry, with all the work that's been going on over the past several years that the three vaccines that have kind of continued to show efficacy and safety, good so-called reactogenicity, these are developed by American companies. So it's something we can all really be proud of, and proud of the way that the government supported that, and worked together with the industry to make that possible.

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**Rich Bendis:**

Right. And I think when you talk about a long-term perspective, everybody has to understand that in the bioindustry, it's not a straight-line projection. You go through peaks and valleys as you go through the evolution with your companies. We have some companies going through that right now, and we know that on the long-term, they're going to come out OK on the other end. But sometimes people have too short a mentality when they're thinking about the challenges we have but, ultimately, the strong survive within this industry.

**Rachel King:**

Yeah, and we've all lived through those ups and those downs, that's for sure.

**Rich Bendis:**

That's for sure. So let's talk a little bit about the future of BIO. We've talked about our region. We talked about how important it is with the FDA, NIH, HHS, CMS and everything else that we have here. But more

importantly, let's look at the global mission and goals for BIO, and what are you seeing over the next 5 to 10 years, as well, long term for this industry and for your members?

**Rachel King:**

So BIO is going to need to continue to innovate, just the way our companies do.

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And when we innovate, we tend to innovate around policy matters, where we think about what are the different things that we can do to support the industry. So we will continue to be doing that. And I can't tell you what shape that's going to take, but I know that we will be able to continue to do that. It's interesting, some years ago, legislators in a still contentious time [laugh], maybe not as politically contentious as it is today, bipartisan legislators came together and passed 21st Century Cures Act, which was designed to really look at some new big things in terms of what the government could do to support the industry. I think we're going to continue to need to find things like that where we can find bipartisan approaches that recognize that we all benefit when we have a healthy industry. We benefit economically. We benefit in terms of our public health. We benefit individually when we can have the drugs that each of us need when we have those needs. So we at BIO will continue to be looking for ways that we can find those bipartisan solutions that will support innovation.

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I think we're also going to be challenged to find ways to incorporate, as we were talking a little bit earlier, incorporate new technologies in ways there'll be whole new policies that are going to be required as a result of whatever the next new technology is. And how can we provide member services that are going to be helpful to our members, not only from a policy standpoint but also from an operating standpoint, because BIO does that too? So we are constantly challenging ourselves to innovate, just like our companies do. And, as I said, I can't tell you exactly what that shape is going to be in 5 to 10 years, but I know that we're going to be continually challenging ourselves to keep up with the innovation that we see in our members.

**Rich Bendis:**

Right, and I think the key to it is a couple things you said. One is private-public partnerships because it all can't be government and it all can't be industry. People have to work together to leverage the resources and assets they have that will bring us quicker to the solutions we're looking

for. The other is bipartisan, and I won't get into any political discussion with you at all today, and I'm sure you would welcome that.

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Bipartisan is so critical to this industry and all industries for the economy of the United States and what we're trying to do for healthcare to make it better for all of the patients out there. So those two things are so critical, and BIO is like Switzerland. You've got to be right in the middle and somewhat neutral but have a strong opinion to advocate for those things that are best for all of your members and for the population.

**Rachel King:**

Yeah. And ultimately, I do believe that our issues are bipartisan issues. I mean, not every single one, and not every single—you're not going to get support on everything we might want. But at the heart, I think we do have good opportunities for bipartisanship because of the contributions that the industry does make to human health and to the economy. And I think we all want to support that. But our challenge is to craft policies that can have that bipartisan appeal. It's really more of a centrist type approach.

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And there are good people, thoughtful people on both sides of the aisle on Capitol Hill, great staff that really know and understand the complexities that we're dealing with. And it's true, there's a lot of kind of sausage-making that goes into the ultimate formation of policy, but it is really important that we strive for these bipartisan solutions because that's where we're going to be able to make progress.

**Rich Bendis:**

Super. Now you've talked a little bit about the future of BIO. Let's talk about the future of Rachel King. In your interim role, you've retired once, and, to be honest with you, your leadership is impeccable, and you basically have a great perspective because you've participated in so many different elements of the industry with your background. So you're perfect in the role that you're in. So we're hoping you don't leave soon. But talk a little bit about what your personal goals are, Rachel.

**Rachel King:**

Thank you, Rich, you're very kind, and I consider myself really, really lucky that I've had this opportunity to be at BIO now. It's been wonderful. The team here is just great.

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The work is meaningful, it's exciting, and so I'm really grateful for the opportunity. I did make it very clear recently that I'm not going to pursue the full-time position long-term at Bio, simply because I had good reasons

for retiring the first time, and now I have more with a couple of grandchildren, and wanting to spend time with family, with friends, etc., and to simply do other things. That being said, between now and when I do leave BIO to my successor, I'm going to be spending a lot of time with the board ensuring that we find an excellent person to fill this role, and do everything that I can to ensure that that person has a smooth transition. And I suspect that I will likely stay involved in some fashion, perhaps on boards involved with the industry, because it continues to mean a lot to me, and I would like to find ways to stay involved.

**Rich Bendis:** Well, if you remember, probably—I don't know—seven, eight years ago, I asked you to be on the BHI board, remember? [laugh]

**Rachel King:** I do.

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**Rich Bendis:** But maybe when you retire again for the second time, you'll have time for some of these volunteer nonprofit boards again. And I won't ask you yet. Is there anything that you would like to tell the listeners that we haven't discussed at all, Rachel?

**Rachel King:** I think just to reiterate how exciting it has been for me over these past 30 years, I would say, to see the growth of bioscience in Maryland. It's really been wonderful. And when I reflect on what was here when I first got here, and what's here now, it's quite remarkable, and something that I think we can all be really proud of and excited about and grateful to be part of. So I just wanted to reflect that back.

**Rich Bendis:** Well, thank you. And then the last thing I'm going to say is that you're going to reappear in an event that you were in many years ago. This will be the 9th Annual BioHealth Capital Region Forum, which is going to be at US Pharmacopeia, right off of Twinbrook in Rockville. It's going to be September 19th, and Rachel has graciously accepted a keynote speaking position on Tuesday the 19th in the morning.

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We're going to have a full house, standing room only, Rachel. So if you would like to come see Rachel, and hear more about the future of BIO and our region, come listen to Rachel King, the President of Bio Organization speak at the BioHealth Capital Region Forum. So, Rachel,

thank you very much for being on *BioTalk* today, and we'll come back and talk to you again many years in the future when you retire again.

**Rachel King:** Thank you for having me, Rich. It's been a pleasure.

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

**End of recording**