Episode 93: "Both/And" Strengthens Behavioural Science

with Jeremy Gretton, Behavioural Scientist with the Ontario Behavioural Insights Unit.

Jeremy Gretton reflects on his time applying BI in academia, the private sector, and government. We discuss why many "a or b" questions are better answered with "both/and": Combining academic and applied expertise, qualitative and quantitative approaches, behaviour and systems change, and rigour and impact are all more powerful than choosing "either/or". Jeremy also shares recent work on public trust and vaccination by Public Health Canada.

Transcript:

KIRSTIN APPELT, HOST: Welcome to this edition of Calling DIBS. I'm your host, Kirstin Appelt, Research Director with UBC Decision Insights for Business and Society, or DIBS for short. Today, we're calling DIBS on Jeremy Gretton.

Jeremy is a Behavioural Scientist with the Ontario Behavioural Insights Unit. He's previously worked as a Senior Advisor with the Behavioural Insights Team's Canada office, and that was around the time I was actually introduced to Jeremy, because he presented on some fascinating work that BIT was doing to reach nonprofit program participants. And that was a presentation to our DIBS seminar back in 2023.

Prior to that, Jeremy worked with consulting firm BEworks. Jeremy's also spent time in academia with a PhD at the Ohio State University and a postdoc at the University of Waterloo. Today, we're going to hear about an entirely different program of work, because Jeremy recently finished up a stint as a Senior Behavioural Science Advisor with the Public Health Agency of Canada. We'll hear about some of the projects Jeremy worked on at Public Health, as well as a bit of a landscape survey from his various experiences across the BI space.

Let's dive in. Welcome to the podcast, Jeremy.

JEREMY GRETTON, GUEST: Thank you, Kirstin.

APPELT: Let's just start with a basic intro question, hopefully a softball. Tell us a little bit about yourself.

GRETTON: Whoa whoa whoa, no, haha. So, yeah, as you said, I'm currently a Behavioural Scientist at the Behavioural Insights Unit within the Ontario Public Service. I've gotten the opportunity to apply behavioural science here, there, and it seems almost everywhere, and I'm really thankful for it. Maybe more importantly, I'm a lucky husband and father of two, Clara and Peter. So there's a lot to life, but I'm very happy to talk about this part of it.

APPELT: Excellent. Well, long time listeners are going to know my next question, but what brought you to behavioural insights? What was your journey to working in this field?

GRETTON: Sure. I feel like there's a short version and the medium version and the long version, I don't know what this qualifies as. But in undergraduate at Queen's University, I studied psychology and got really interested in social psychology, both from a practical perspective, it seemed very relevant to everyday life, but also from a philosophical perspective. It was one angle on understanding why people do good or evil. Just one perspective, but informative.

I got to do graduate training at Ohio State in social psychology, looking at attitudes and behaviour and persuasion and bias and how we try to compensate for our biases, so I learned a ton there. But then my first foray into applied behavioural insights was right out of grad school, I had the opportunity to work at BEworks Works or Behavioural Economics Works, which is a consultancy that relies on behavioural science. Since then, I've worked in a number of places, and I'm happy to talk about it, but I think that was sort of where I got my foot in the door of applied behavioural science.

APPELT: That's so interesting. Especially that idea of the lens on good and evil. And given current events in the world that is really top of mind.

GRETTON: Yeah we need more good and less evil.

APPELT: Well, before we dive into some of your more recent work, you mentioned, and I mentioned in your intro and you just briefly mentioned that you have been around the BI landscape a bit. And so I'd love to hear a little bit about that, because I find that the different organizations and different sectors all approach behavioural insights in a slightly different way.

So looking over your last decade, what has it been like working in academia and private sector and social enterprise and government? What are some of the main differences and similarities?

GRETTON: In a way, I'm really fortunate to have, you know, I hope, a unique perspective there. I think that in terms of similarities, there are many. I've been fortunate to work at places, and this isn't a given, but places that care about rigor and about purpose, like you alluded to, social purpose. So I think that's important because there might be stereotypes about, oh, if you're in industry, you know, do you care about rigor? And I found that you can. I've learned a lot in so-called industry.

And conversely, in academia, oh, maybe people are just in ivory towers thinking about, you know, only theories. But I've worked with people and hopefully been a person who cares about how the theories are applied too. So I think one thing I'm glad to say is that wherever you're working, you can do meaningful work, but there's certainly differences too.

So in in grad school, in academia, my experience was more basic research. So often it's very detailed analyses of things like, not just does A cause B, but why? What's the underlying mechanism? These are called mediation analyses. Or doing very intricate experimental designs and sometimes mis-programming because I was working and we're always learning, but very intricate designs where you're manipulating a bunch of different variables separately to try to disentangle, you know, what matters.

Whereas in applied contexts, in my experience, oftentimes we'll use what we call a more of a kitchen sink intervention, where especially if it's a one shot intervention, you want to put your best foot forward, metaphorically speaking, in which case you might end up combining a lot of different insights, even if you're not totally sure what was the secret sauce. So I think with a lot of these topics, there isn't a right or wrong answer, but different ways to try to tackle challenges.

Yeah, and some other differences include who your target audience or your stakeholders are. In my experience, oftentimes in academia, there's more what you might call freedom of studying things in order to benefit theory, but not necessarily being directed to the same extent. Whereas if you're in industry or government, oftentimes people come because they do have questions or requests of you-- your client wants to better understand how to encourage people to save energy, or the government wants you to help better understand how can we message regarding vaccination and so forth. So again, I think all of it can be meaningful, but often the source of the research questions differs too.

APPELT: Those are really valid points. And I wanted to go back to something you were saying about the kitchen sink approach, because this is something that I think when you're in a straight academic program, it's a bit of an anathema, like, oh, we wouldn't put multiple things together. But then when you're in applied contexts, you, I mean, I 100% advocate that in a lot of contexts.

And so just to give a maybe more fulsome definition of a kitchen sink approach, to me, that's when we have multiple kind of behavioural insights ideas in a single intervention. Maybe we're doing like simplification and changing who the messenger is, and, you know, something else that makes sense. So in your perspective, what are some of the benefits of that approach in the applied field?

GRETTON: For sure. And as with everything that I say, there's caveats. You know, it depends on the project, and it's not to say there isn't detail. But I think a big practical benefit is just, with a lot of nudges, if I can use that term, like you mentioned, simplification or salience and so forth, it's not a given that it will help. For example, there's evidence that if something is more formal, sometimes that's more persuasive, so there might be trade offs. But often it seems like this is kind of our best foot forward. Probably this is going to help or not harm. And then why not test everything? Well, it could take more time to prepare such a study. You might need a bigger sample in order to make conclusions that the individual pieces mattered. So it simplifies it without hopefully overly simplifying.

You can still learn a ton from a kitchen sink approach where, ideally, you're comparing it to different control conditions and maybe a few other conditions. But if you have, let's say, four different variables like salience, I don't know, color of a letter and so forth, even if each of them only has two different versions, if you manipulate each of them independently, that's two times two times two times two. So 16 different conditions, which sometimes is too much complexity and not necessarily needed.

APPELT: Yeah. And I find it goes back to what you were saying to before about the academic versus applied approach. In the academic approach, if you're really interested in a specific theory and it doesn't pan out, you'll just run another study. You have that budget and resource and timeline. Whereas with applied research you often only have one shot at a study. And so if nothing happens, then that's the end of that. But if you have this kitchen sink approach more likely to have an impact, and then if there's interest, you can always go back and try to disentangle. But getting that foot in the door of an initial result can be really helpful for the partnerships.

Any other insights or reflections based on your survey of the landscape?

GRETTON: Well, I mean, I hope so, but I think that yeah, probably nothing a whole lot beyond that other than again, I think that there are a number of different stereotypes, both within academia, again, like you alluded to, it can seem anathema to have these kitchen sinks. And in applied contexts, some people might leave academia because they felt it was meaningless. And again, I'm thankful that does not have to be the case, and they can be mutually helpful.

So in applied contexts, we have really benefited from a lot of good research done in so-called academic contexts. And conversely, I think that academics are benefiting from their work being put to good use. And also you can inform theory in applied contexts. There's nothing saying you can't.

APPELT: Yeah, absolutely. And I think, you know, a really great demonstration of that is just how much we've learned from context, right? Like there was for a long time in academia this idea that, you know, a good theory applies across audiences and contexts, and we've really learned that something that holds with one population won't necessarily hold with another population. And you don't learn that with just undergraduate participants necessarily.

GRETTON: Yeah.

APPELT: And then the other thing I wanted to just pull on from what you were saying is kind of this idea that they are almost complementary approaches. And I think that's part of what makes academic applied partnerships so valuable, is that bringing these different lenses to the work, when you have them both at the table, you have a lot more value than if you just have one side at the table.

GRETTON: Definitely, yeah. And I'm fortunate to have been a part of a few of said partnerships, especially during the Covid pandemic. I think it was great for me to be able to work as an academic at Waterloo at the time, with Doctor Derek Koehler, getting to collaborate with folks in government. And conversely, now that I'm in government, again we're really thankful for collaborators and resources from traditional academia.

APPELT: Yeah I always consider myself as having one foot in each of the world, and I find that I learn so much from both and I wouldn't give up either. So there's no way I'm going to stop straddling the worlds because you learn so much from each new theory, new practice, everything.

Well, speaking of different ways of working in behavioural science, beyond what we've talked about so far, there's also the idea of different types of projects. There's like the full scale research project using a randomized controlled trial or other design, but there's also different ways of having an impact. And I know the BeSci-O or Behavioural Science Office at the Public Health Agency does a lot of different methods. Can you tell us a little bit about how the BeSci-O tackles problems?

GRETTON: Yeah for sure. So just like you alluded to, and I guess this is perhaps a similarity across government and industry is that there's a whole variety of scale depending on your resources, depending on urgency and so forth. But I think in my experience, sometimes we had very quick requests. You know, what does the evidence say about a given decision making topic related to public health? So something like how to message about vaccination, perhaps or perhaps determinants of trustworthiness. So sometimes we would be consulted very quickly to provide feedback, but I think that's good that you're relying on folks who are hopefully the experts in the room or in the agency.

Other sort of relatively quick tasks might be reviewing surveys. Public Health does a ton of surveys to better understand things like levels of vaccination, attitudes and beliefs to do with vaccination, and there's a whole science of survey design, as well as attitudes, behaviour and so forth. So it was great to be consulted in the development of those sort of surveys.

And then there's sort of intermediate level engagements, things like maybe conducting a literature review to better support colleagues understanding of a topic, such as how to communicate about public health related topics. Try not to be too specific, but literature review, it's not, again, unique to academia, thankfully. Maybe designing or providing feedback on webinars to help sort of spread the word of behavioural science and what

it has to say about different important topics like how to communicate about debunking and misinformation, which is maybe unfortunately relevant to public health. And then, like you said, full scale or randomized control trials, for sure.

BeSci-O has conducted some and is continuing to do so whether it's testing different messages or different processes, I think all of those are of interest. And one project that I was a part of, although admittedly after data was collected, was a survey looking at predictors of childhood vaccination. So sort of roughly the whole gamut, as I understand it, a whole variety of initiatives.

APPELT: Yeah, and that's, I think, a really good snapshot. It definitely resonates with some of the work I've seen in some of my partnerships with folks. And I think often speaking of coming in with an academic mindset, we focus on the RCTs, but then there's all these other ways to bring value.

And I wanted to just spotlight a couple of things you mentioned, like the survey design piece. A good survey is a bit of magic and a bad survey, if you get the data after a bad survey has gone out, there's like so little you can do with the data if you realize the questions can be interpreted a bunch of different ways, or the data is really hard to code. So I definitely plus one the idea of assisting with survey design.

And then I also wanted to just pick up on the idea of the lit review, because I think that's another interesting one. And I like that one because I think historically, in days of yore, we would just think of a lit review as being an academic literature review, but now we're doing cross jurisdictional scans because there's so much out there from the other applied units.

So I think it's really valuable to you to have folks who can pull from across the literature, because one thing I noticed when I'm teaching and which makes logical sense, but if someone's working in, let's say, a return to work context, then they look for other examples of return to work, and they don't necessarily look for other examples of the base problem within that. Like maybe it's people aren't coming to an appointment, but they're not looking at the reminder literature, they're just looking at the return to work literature. And so being able to have both of those literatures brought together, it's a really, really value add.

GRETTON: Yeah, I may be echoing a bit of what you're saying, but I think that speaks to, yes, the value of academic and implied partnership, or at least understanding in the sense that there's some great frameworks, like the COM-B model looking at capability, opportunity, motivation, because often it's true. There's a higher order way of thinking about barriers, thinking about the interventions where you don't want to get sort of blinders on or whatever you want to call it, where you'd assume that it's only about this specific application.

And likewise, yeah, applied researchers can contribute to basic understanding, perhaps by being willing to consider what do so-called white papers or so-called grey literature say? So maybe it's not published in the journal, but it could still be rigourous and meaningful.

APPELT: Yeah, absolutely. And then also sometimes that's where you get these insights around, oh, this idea that is tested in the lab space actually hasn't worked the same way when it's been used in different contexts, so that's been eye-opening. So lots of different options on the table as we just went through. What informs which direction or route a project goes?

GRETTON: Yeah, another good question. So in the context of government, you can think about higher order, you know, government policies or mandates or priorities. That can certainly affect, you know, maybe which areas of public health you're focusing on, what is seen as most urgent and prioritized at the time. Of course,

that depends on the historical factors and the season. But also thankfully, in my experience, there was accommodation for individual skills and individual experiences and individual preferences.

So for me, I really appreciated getting to work on research in the vaccination space and public trust space, which was in part a function of me appreciating those areas and having some relevant experience, or certainly I got to develop that on the job and continue to grow it. So it's, in my experience, been a combination of higher up, you know, what's the priority? And then also in your specific team.

APPELT: Nice. That's the the perfect way I think at making sure it's impactful, but also that the people are engaged in the work.

GRETTON: Yeah, exactly.

APPELT: Well, you alluded to some of the work you've done, so let's get into that. Let's get granular. So in our previous conversation, you kind of described your portfolio at Public Health as focusing in part on public trust, which we can talk about, like fostering trust, rebuilding trust, preventing ruptures of trust. What was some of the work you did in that space?

GRETTON: Sure, yeah. And again, it is certainly eclectic. Part of it is collaborative with folks in the Privy Council Office. Their Impact Canada team does great work serving, better understanding levels of trust, predictors of trust outcomes from trust. So some of it is more survey based work.

But one ongoing piece of research led by former colleague Angela Mastroianni, also at PCO collaborating with BeSci-O, Behavioural Science Office, is looking at how to communicate amidst uncertainty in a way that hopefully fosters rather than loses public trust. So that's been a mixture of what you might call secondary research, so basically literature review in so many words looking at what has been done. There's a lot of research looking at different kinds of uncertainty. Is it a lack of evidence? Is it conflicting evidence? Is it just a matter of hedging? So what does that uncertainty mean for trust in the communicator? So we've been looking at research that existed but also conducting novel research, in progress, not in field, but I think it will be shortly, testing different ways of communicating, given that public health officials need to be able to communicate transparently.

And science and public health science, as people are familiar from Covid and beyond, there's a lot of uncertainty. You know, what's the healthy approach to diet or exercise is famously uncertain-- that doesn't mean there's nothing out there. But if you're going to be transparent, you need to communicate a number of different uncertainties. So this research will be looking at just how best to communicate it so people are informed, but you also hopefully gain don't lose trust by virtue of acknowledging nuances or knowledge gaps.

APPELT: That's really interesting. And yeah, definitely brings back the Covid experience and the difficulty of communicating that sometimes information changes not because people were wrong or, you know, had bad intentions, but the science... you know, we're learning. As you learn more sometimes advice changes. You know, like the old adage about like, are eggs healthy? Are eggs unhealthy? Is it the yolk that's healthy or the white? And that changing guidance over time.

GRETTON: Yeah, and it's been interesting to, I mean, selfishly speaking, but like I said, while at Waterloo-- I wasn't at Waterloo, I was at home. It was during the pandemic. But virtually at Waterloo, we got to do work looking at, in a more sort of basic context, but how to communicate changing guidance and how, if you forewarn people like "change is normal, it's part of science" and that could be helpful.

Now, obviously, you know, guidance could change for a number of different reasons. But one reason is just it's the nature of science. I think one thing that I'll just note is that I liked being part of the trust and vaccination files because they go hand in hand so much. So people, understandably, you know, get vaccinated or they're more likely to if they have trust in the government. And the same goes for a number of different behaviours.

So I think that at the end of the day, largely speaking, the focus is on behaviour change, people doing things that are healthy for themselves and their community, but I think these psychological factors still matter a lot, because often how people behave is, surprise surprise, depending on their level of trust. So I don't know if I have a whole lot more to say, but that's one thing to keep in mind. It's trust, but it's not just this wishy washy thing. It also relates to how people behave.

APPELT: Yeah, there's a direct connection there for sure. We started to already touch on this a little bit, but I'm just curious, given the proliferation of misinformation, was countering misinformation part of the work or how do you see that fitting in?

GRETTON: Yeah, I think it's definitely relevant. I don't think that I would say that I myself was countering it per se, but thankfully, there's a growing research on the behavioural science of debunking and misinformation. And we did have opportunities to help inform folks in government and beyond regarding the science that exists there. So we didn't discover this, this was secondary research, but there's evidence, for example, that the source matters when it comes to debunking.

So there's this interesting connection between trust and misinformation. Obviously, misinformation could diminish trust if it's misinformation about vaccination and if people believe it, they might decrease their trust in public health, unfortunately. But a flip side, or at least a different link between trust and misinformation is that if you trust the source, the messenger of a debunk, then the debunking can be more effective. There's a lot of research.

There's also evidence that the so-called backfire effect was overstated. So we used to be wary, I believe. "Oh, you know, be careful about debunking because people might dig their heels in more", but I think the sense now is that, largely speaking, debunking can be helpful. Being more thorough can be helpful, but certainly you should be mindful of how you're communicating, being empathetic with an audience that might not agree with you, and so forth. So there's a ton of research out there, thankfully, I can't say that I created it, but I'm thankful for it.

APPELT: Yeah, absolutely. Well, we've talked a lot about trust and you were saying how trust and vaccination kind of go hand in hand. Any of your work on vaccination and behavioural science that you want to share?

GRETTON: For sure. I think I alluded to one study where, as I noted, it was mainly survey based, and I joined after the data had been collected. So how much credit can I take? But this was led by a former colleague, Dr. Harry MacKay. Also a great chance to collaborate between Privy Council Office and the Behavioural Science Office. And it was looking at routine childhood immunization since the pandemic. And I'm going to shout it out, it's been published in the journal Vaccine, and it's called Confidence and barriers: Analysis of factors associated with timely routine childhood vaccination in Canada during the COVID-19 pandemic. So that's probably too many words.

APPELT: Just rolls trippingly off the tongue.

GRETTON: Yeah, so I think that basically sums up the whole paper. But know what we were looking at was a lot of different things, but I think a key finding is that, especially among parents of younger kids, when it came

to predicting whether kids got routine childhood immunizations in a timely fashion, so things like mumps, measles and rubella, MMR, and so forth, is predicted by not only the parent's vaccine confidence, but also self-reported barriers like clinic closures or language barriers and so forth. And how I like to put it nowadays is that it may seem obvious that vaccine confidence should matter. I mean, it might not, but it did.

And it might seem obvious that barriers, so obstacles, to getting vaccinated should matter, at least if you think about it. Oh yeah, I guess, you know, people might not get vaccinated if they can't. But I think that the interaction effect is key. So specifically, what we found was that if people didn't report any barriers in those situations, their vaccine attitudes or vaccine confidence predicted whether their kids got vaccinated on time. If parents were more in favor of vaccination then their kids were more likely to get vaccinated on time. But if parents reported barriers to vaccination, then there was no longer a significant link between vaccine attitudes and behaviour. It is correlational, so interpretation-- there's different interpretations. But it would appear that basically you want to take into account both attitudes and barriers.

So you want to encourage, you know, earning trust in vaccines, but also taking into account logistics, language barriers and so forth both seem to matter interactively.

APPELT: Yeah, that's really interesting. And it's a good reminder that you can't focus on one to the exclusion of the other. Both are hugely important.

GRETTON: For sure. And for me, again, sort of from a self-centered perspective, bringing it full circle, in grad school, a lot of what I studied was attitudes. So people's evaluations and sort of like opinions: do you think something is Good? Bad? Both? Neither. And there had been debate about, oh, do attitudes matter? Do they even predict behaviour at all? And a key finding is this moderator effect, basically suggesting, well yeah, sometimes they predict behaviour, sometimes they don't. Try to better understand when. And I like to think this is one example of informing that discussion suggesting facts and confidence does matter, but especially if people are otherwise able to get their kid vaccinated.

APPELT: Yeah. And like you said, it makes a lot of sense if you think about it. But you don't necessarily take that lens when you first approach a problem. But, you know, you can be as gung-ho about vaccines as you want, but if there's no clinic within 300km, it doesn't matter if you're gung-ho or not.

GRETTON: I think it hopefully reiterates the value of empathizing with your target audience and qualitative methods service to better understand. Because if you're just messaging because you're assuming a given barrier like you're saying, you know, motivation, but maybe people are motivated, then hopefully a little more listening can help clarify what the real barriers might be.

APPELT: Yeah. And it was also reminding me too, about this so-called, I-frame versus S-frame debate, which I think we've all landed on it's both not one or the other. You know, we want to be changing individual level things as well as more systemic factors like access. Well, this is all been really interesting. Before I move us into closing, I just want to see if there's any other parts of the work you were hoping to to speak to, and that we haven't had a chance to talk about yet.

GRETTON: At the behavioural science office and beyond, I think there's rightfully a prioritization on mixed methods. I think that just like perhaps academia, industry, government, people can form factions, which is itself a social phenomenon. So too with quantitative and qualitative work, my training was more quantitative, the numbers, so I probably have my own biases there. But there is certainly value to having both, you know, listening to the people you're trying to help and also conducting, you know, large scale studies when possible

to ensure your data are generalizable. So I think a lot of my takeaways are just "both/and, both/and" and listen.

APPELT: Yeah, I don't know if it's a function of age or the science advancing or what, but I've definitely become more and more of a both/and rather than an either or across, like you said, academic versus applied and qualitative versus quantitative and I-frame and S-frame. It turns out there's no verses, they're all just "ands".

GRETTON: Yeah, exactly.

APPELT: Well, this has been super informative and really interesting to hear about. I usually wrap up by asking if folks have a message for folks who are newer to the field BI practitioners in training.

GRETTON: Sure, yeah. And I do think that the both/and is a big part of it, among many other words of wisdom, mostly from other people. Michael Hallsworth's manifesto on behavioural science, I think, provides a good overview of some of the debates and his recommendations. Obviously take it with a grain of salt, form your own opinions. But it's a reminder, among other things, that BI, behavioural insights, is a lens or a perspective. It's more than just a list of biases or nudges.

There's some really interesting lists out there of like, oh, there's 200 biases. Oh no, there's 300. I think [INAUDIBLE] says there's a bias-bias. So I think that's fun. And I definitely like referencing biases and understanding them and not acknowledging that I'm biased, although I certainly am. But I think that it's good to remember that it's more of a perspective. Things like valuing the scientific method and certainly understanding the biases, but also just the capability of human thinking. You know, biases can make you think, oh, you know, things are so bad, but there's an adaptive value to a lot of mental shortcuts or heuristics. So treating behavioural science and behavioural insights as a lens, not just a list of biases, I want to sort of quote Michael Hallsworth there.

As noted before, really try to understand your audience. There's the phrase "when all you have is a hammer, everything looks like a nail" and it's helpful to keep in mind in a given context. You might think you've got a great intervention, but definitely consult the audience to better clarify what the barriers really are, because you might miss the mark otherwise. But more optimistically, if you are able to understand your audience and if you are supported in conducting research, then you can learn a lot, which I value as someone with academic training, and you can also help people a lot, which again, I think is a common goal across many different sectors.

APPELT: Those are really great. And yeah, I just wanted to build on your point around the lens. So I think sometimes people say like, oh, there's a pushback against behavioural insights and biases and maybe, you know, it's going to be wiped off the map. But I think, like you said, it goes back to this. The underlying idea is that there is value in the scientific method and in thinking about human behaviour, and not just ignoring human behaviour. Like, certain biases maybe be confirmed or disconfirmed, but the idea that human behaviour is an important element of anything involving humans is an idea that I think is here to stay, at least.

GRETTON: Definitely.

APPELT: Well, thank you so much. This has been such a good conversation, and it's been really interesting to see both how the BI landscape has been evolving, and I think when you said BI is a lens, the other thing that came to mind for me is, it's also not a static thing. BI is evolving, and so it's fun to chat about how it's evolving. Treat to get to hear a little bit about the work that the brilliant folks at the BeSci-O are doing, and eager to see how that continues, and also to see what your ongoing going contributions are, whether it's at Ontario BeSci-

O or anywhere else you make a pit stop on your journey. So yeah, thank you for doing the work. Thank you for joining us today. Really appreciate your time.

GRETTON: Thanks so much.

APPELT: And thanks to our listeners for joining another episode of Calling DIBS.