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Communicating about Covid-19 with Science Sam

Nerdin' About Podcast Transcript

Michael 0:17
Hey everyone welcome to Nerdin About! I'm space Michael and with me as always is my Nerd Nite Vancouver co-host, the rat detective studying all those rats that are taking over the streets where we have abandoned them, Kaylee Byers, How you doing Kaylee?

Kaylee 0:33
Oh I'm doing great. I've got the rats on my side so things are going to be they're coming up rats for me

Michael 0:37
So you can whisper to them and if we need to kind of like have a gang to take our spaces back, you are the one we're going to go to right?

Kaylee 0:45
Yeah, I am the Splinter rallying the Ninja Turtles in the sewers. 100%

Michael 0:49
Amazing. Can't wait.

Kaylee 0:51
So we are really excited. This is episode number one and today we are sitting down with Dr. Samantha Yammine. Sam's a neuroscientist who earned her PhD from the University of Toronto researching stem cells and brain development. And if that's not cool enough, Sam is also a rockstar science communicator. If you're active on social media at all, you've probably come across her work as Science Sam, and if you're not following her already, you should. Sam, thanks so much for hanging out with us.

Science Sam 1:20
Thanks for having me. I'm so excited to be here and chat with you too.

Kaylee 1:23
Today, we're gonna be talking about some of your science communication stuff. So do you want to tell us a little bit about what you've been communicating about lately?

Science Sam 1:28
Yeah. So my platform of choice is Instagram for sharing science and any fun and engaging ways that I can. Instagram is sort of fun and interactive platform. I really love it. Normally I talk about fun, everyday things like, Huh, I wonder if you ever thought about, you know why the sky is this color or how does this work? But lately, all I've been talking about is COVID-19. I didn't mean to make my page a COVID-19 page, but I just looked back and everything I've posted for the last two months has been about COVID-19 like 20 posts and maybe 1000 stories.

Kaylee 2:08
Actually, I was thinking about that today about whether or not if you were to look back at, you know, two months ago, and when you first started communicating about COVID, if you had any idea that this is sort of where you'd be now with your communications.

Science Sam 2:19
No I mean, I had initially I'd started this thing this year where I would do week long series, because I was feeling like one post is not enough. So I wanted to do like a whole week on a topic and I chose in January to do COVID-19 and then the week ended and I was like, okay, cool, I'll move on. And then everything exploded and I did not move on. And there was just more and more and I never planned on tomorrow I'll talk about this is just something would happen in the news. And I was like I feel compelled to clarify this and add stuff in. So it kind of just happened.

Michael 2:54
So Sam over the past couple of weeks as you've been really focusing in on one subject and like you say you used to have a broad range of subject matters. How are things changed for you now that you're just focusing in on just one subject matter? Is your engagement changed at all as the interactions you've had with people changed at all?

Science Sam 3:13
Yeah, it's really wild. There's a huge, there's probably a mix of now that people are all digital. They're online more. Now that we're all virtual everything. And then also, there's just such a huge appetite for information about COVID-19 that I've seen engagement rates skyrocket. And normally I'd be happy about that. But it's really unfortunate the scenario that's caused that So, but I'm really noticing people are really curious for information. There's a lot of engaged conversations and a lot of people willing to share posts and information which is, which is a nice thing. It's nice that people are willing to engage with science. It's just too bad. The reason why, but yeah, I'm at record high viewer and engagement rates right now which is really telling of the situation that we're in.

Kaylee 4:00
I think it's also kind of telling about the type or how people want their information relayed to them, or especially the audience you're engaging with so maybe you could share a little bit about like, what a post might look like or how you might go around posting because you are getting a ton of engagement and a lot of that is your style.

Science Sam 4:17
Oh, thanks. Yeah, I try. I mean, so the one thing people don't know is that I have in general medical anxiety. I hate going to the doctor, I hate thinking about my personal health, like it really terrifies me. It gives me a lot of anxiety in general, I also am terrified of infectious diseases, I guess like everyone kind of is but I have like a particular fear to the point where in undergrad where we would do the virology unit in our general bio classes, I would actually leave the room sometimes because I was just so nervous about it. So for me, I hate this stuff. I mean, everyone hates it but you know, it like really gets to me. So I've been trying to not make light of the situation because it is very serious, but trying to share the information. We're really just distilling

the facts, acknowledging that we're all scared. And then we can have the conversation and I'm not trying to like freak people out. And I find just watching the news, even the evening news for like, five minutes, I'm so stressed with the way they talk about it. They don't take a breath. They don't acknowledge that they're also scared. And it's just like, bam, bam, bam, scary facts. And I just can't consume information that way. So I try not to deliver information that way. I try to like maybe just have like a fun and light picture. And then we'll get serious in the text, or something like that. And just give options and I'll warn people like, Hey, take a deep breath, I'm going to tell you something kind of intense. And then it just kind of the cool thing about Instagram is there's layers for how to interact. And maybe you're not ready, you can just swipe away if you're not ready for that information. You can come back to it later or you don't have to read the whole caption or, you know, it gives people the option and that's what I like about it as a platform.

Michael 5:51
Yeah, so Sam, we actually met you actually last summer we went to the Banff Science Communication at Beakerhead and I really loved your session you

Science Sam 5:59
So such good times.

Michael 6:01
It was an amazing time, shout out to our Banff sci-comm peeps out there. But you walked us through how to really construct an Instagram post. And I wonder if you could maybe just give us a quick kind of summary for people out there. There's a lot of organizations I know in my field in the science communication field, there's basically everyone is going online, they're learning these new technologies rapidly on the fly. So maybe write down sort of what an Instagram post looks like, or should look like.

Science Sam 6:30
Yeah, I think the, I mean Instagram is a visual platform, so your post is usually going to be a video or a picture. So you really do have to put some care into what that visual is. And it should be something that's going to make me stop scrolling. So putting time into that visual, it's not as easy as a tweet, it takes more time because you have to curate that photo or video. But the other thing is, when you're writing your captions, just scroll through your personal newsfeed and see that it's a quite conversational platform. It's not very formal. So If you're communicating science on Instagram, you'll want to kind of match that you might not, you might be on brand for you to be very formal. But for me, I want to be a place where people can have conversations. So I keep it conversational, and I try to speak in the same way that any other person creating content on the platform would speak. So if I look at like a fitness blogger, and the captions that they're writing, Mine tend to be in the same style, you know, light and easy to read, but still packed with a lot of information. And also thinking like, Who are you trying to reach? And does that photo match with what the other type of content they might be looking for. So if you're trying to reach people to myth bust about beauty, let's say, well, then you better have a flat lay with you know, it's very monochromatic and lots of bright white backgrounds and marble and, and, you know, match the aesthetics of your target audience because that's what the platform is really about showing people

more of what they like. And so if you want to break out of the echo chamber, you got to, you got to use something as leverage,

Michael 7:57
And there's really two, almost two different platforms on one because you have the main feed of Instagram, but then you also have the stories. And I think right now your stories have been really resonating because there's a lot of nuanced, very detailed information that's changing. And I've noticed that you've actually been using your stories in a really interesting way. Could you maybe tell us about sort of the differences of your posts?

Science Sam 8:20
Yeah. Oh, thanks for saying that. I love the story feature because it's quick and casual. And it's very interactive. You can have like quizzes and polls and all of this fun stuff and animations and it just lets you give information one by one. I think people try to like put so much text in one story. Meanwhile, you can just put like one sentence and then I tap for the next and tap for the next. And it's very engaging. It's actually designed to be a little bit addictive, which I don't love. But if we're using it for talking about something important, it's maybe a little better. So I really like this idea of telling a story through the stories feature and doing storytelling on there and just one by one, guiding people through something. And then using really interactive features like the stickers and polls to get feedback on whether things are making sense, and what are people really worried about. And that way, it's a conversation. And it's not just me talking at people, because we don't like that. We're talking with people. And we're giving easy ways to have multi directional conversation. That's high throughput and efficient.

Kaylee 9:24
And I think you've even showed that in the way that you take, like, you'll take people's questions and actually answer them, like, you'll show questions and you'll answer them in real time and break them down. I think that that actually really demonstrates that there's a conversation going on that you don't always actually see when you're going through stories,

Science Sam 9:40
Because that's what's so important. I have a really biased social media newsfeed because a lot of my friends are scientists and researchers. So I see a lot of I see like a very narrow view of the world a lot of the time. And so it's really the questions that my friends and family ask me and like people in my direct messages asking me that's how I know what to post about next. Cuz I'm like, Oh, this is what people are, are wondering about this is what they're seeing in the news. Okay? I gotta respond to that. So not having that multi directional conversation, just assuming, you know, what people want to hear about is not a good way to approach science communication. Even looking through Google Trends data, you'll see that like, this past week, people were no longer looking about people were still looking up, like some health things related to COVID. But the top questions were about finance, personal finance, and applying for Employment Insurance and all that stuff. So it kind of makes sense to respect that that's what people are curious about and maybe pivot.

Michael 10:36
I'm wondering about talking specifically getting into COVID. For just a sec, are there things that you have been learning about COVID-19 that you do find actually really interesting, but find it challenging to talk about because it's not really kind of helping people in the immediate to allay their anxieties?

Science Sam 10:54
Yeah, that's a really good point. And I think it's one that's really important. The tone of our communications does really matter. I've even had some feedback from people saying - very few people and typically a certain demographic - saying they thought I wasn't taking it seriously enough and that I was being too light. So I do really think deeply about the tone. Some things that I found interesting but haven't felt appropriate to talk about yet, would be the behavioral psychology of it. Like panic buying is a fascinating phenomenon. And the way that people behave under fear. For me as a neuroscientist and someone who loves psychology I find fascinating, like how, because that's a public health is about collective actions. And so yes, we have to think you know, what will limit people's risk: social distancing? Yes, maybe some usage of masks, okay. But the thing that we're not factoring in is the social psychology and the behavioral psychology, and the way we say certain messages how that will influence the way people act, that has a huge impact on the trajectories of the spread, of the virus causing COVID-19 and I don't think that that's an area of science that I think we're able to factor in right now. But I think it's really interesting. And I think you can kind of people would almost get defensive, you know, no one wants to be told they're, they're a panic buyer. You know, we'd feel really guilty. But I think just trying to understand those behaviors are really, really key to knowing how to appropriately deliver information, there might be something that's like perfectly reasonable to do. But for a social psychology reason, you can't tell people to do it, because things could get out of hand, or it might lead to another act, you know, so I think that's a really interesting nuance, and then just how the virus itself works is really fascinating. And it has some really cool features that differentiate it from other c-oronaviruses, but it's kind of just tacky, to you know, glorify the virus in my opinion, at this point. I think we can pivot the way we talk about it being like, well, it's the reason it's a challenge to and it's contagious is because of x y, but, you know?

Michael 12:57
Yeah, I'd sort of harken it to you know, if there's an asteroid coming towards the Earth. You know a lot of people in my field be like, fuck this asteroid is awesome. Let's learn more about it, and other people are like “it's going to destroy us all!’

Science Sam 13:07
And I think we also have to remember people do have a limited attention span. And for perfectly valid mental health reasons aren't going to be consuming COVID content 24/7, I hope. And so we do need to think what is the priority so I even see scientists online having debates about like nuances and papers and I'm and wanting to discuss like, well, there could be turbulent air flow that makes a droplet go further and whatever. And I'm like, is this the moment to plant seeds of doubt in our public health professionals? Is this the moment for that it might be a very rare phenomenon. Let's discuss that at some point. But let's not make everyone so confident that you're right. And public health officials are wrong because that leads to a greater - like, time and place. That's it. Read the room.

Kaylee 13:55
Yeah, I think that's a really good point like that conversation. I've followed some of your stories that were talking about sort of this idea of droplet versus aerosolization and aerosolization is scary, right? I mean, the idea, that it could be in the air is scary and to be able to take it and say, Okay, so here's, here's what science has found in this scenario. And these are the situations under which that might happen. But here's what you still should be thinking about, I think, is really good to ground people. Because you can take that information that oh, no, it can be in the air for three hours, and run away with it.

Science Sam 14:28
And that's the thing. This is where science and health and medicine are different. Science is about the exceptional cases, the exceptions, the rare scenarios, and you're always trying to rule those things out. And science is very detail focused, health and medicine cannot be that way. They need to think about the population, because health operates in a larger system. And so there might be fringe cases where, you know, something peculiar happens. It's interesting scientifically, but at the end of the day, we look at epidemiology data, and we see it doesn't seem like robustly that's how this is spreading. And so we need to base our practices based on that. Because if we looked at every edge case scenario, we would never be able to reach a decision. And we would also have really impractical policies that would be more harmful than good. And that's the difficult, that's the grey area of our world that we need to lean into more and acknowledge, it's a little bit messy, and we need to be accepting of that and the way we communicate.

Kaylee 15:28
So maybe based on that messiness, I mean, so you, yourself are not a COVID researcher, but you are a scientist and you are a science communicator, how do you decide which information you're going to use and how do you research it and decide what parts to share? Like that seems to me as I follow you that it's like every single day that you're reading new pieces of scientific research and breaking it down.

Science Sam 15:49
At this point I've read, honestly, I've read a lot I could, I could do a small dissertation on that well, maybe not quite, but I it's been a lot of reading. I will I won't lie, I'm almost constantly reading about this. And for whatever reason, that hasn't negatively impacted me too much. I think I'm - I like details, it helps me. I will say after two months of steady posting about it, I don't regret anything I've said really. And I haven't had to retract things, because I've been overly cautious before posting. There have been some small, small things I wish I'd said differently, especially with respect to masks. But overall, I haven't had to change anything. And that's because I'm relying on the public health officials like the WHO and the CDC. I'm also reading the studies themselves that are being reported on in the media. And I'm really then checking experts in those fields, checking what they're saying on Twitter and cross referencing based on the skills I have for reading papers like Does this make sense? Do I think this was well done? What are the actual conclusions? And Twitter has been an incredible source. I'm sitting in on any webinar. I can a lot of public health organizations and departments from universities are doing free webinars. I'm sitting in on them. And so I'm collating information from all of those very

reputable resources. And being really cautious asking people I'll often put is there like, Can anyone answer this question for me? And then I'll get a virologist answer. And we'll have a conversation. And so that's, that's been a privilege that I have access to those people that I can pull from. But it's also been a lot, a lot of time. And I think if you're not willing to put in that time, at this point, you should not be communicating on it. You should then just if you're not willing to invest the time in being accurate, which not everyone can do, I think you should just focus on amplifying those who are investing that time because we don't need more voices right now we need to amplify the right ones. And the only reason I've decided to add to all the noise online is because I haven't seen anyone, many people give credible reputation on Instagram. So I don't do much on Twitter. I don't I don't do it because there's tons of great Twitter content but very few of those people putting out great Twitter content or putting it on Instagram.

Kaylee 18:04
So we've talked about I mean, this is a serious global health issue right? And something that I've noticed is that also the tone of your communications have changed with time. And I'm wondering, what has sort of been behind that shift? Like sort of the language that you use, and the way that you talk to people is, it seems like it's, it started off, you know, here's some interesting things that we're learning. And then as you're moving more into maybe like, what are public health officials telling us, you know, much more direct? Have you noticed that have you sort of felt that process yourself?

Science Sam 18:33
I think usually I'm comfortable sitting with the uncertainties and unknowns. And I love actually pointing people's attention to that. If I'm going to talk about some cells in the brain, I want you to revel in the mysteries of what we don't know. But I think I have tried to pivot to - there are some things we know that are important. I think we can address the uncertainties because this is an evolving situation. But with that said, it's not a free for all I've noticed some people being like, well, shouldn't we just be safer and go over the top and it's like, Well, yeah, but we know how to be safer. We know that physical distancing is important. We know that covering your cough and sneeze is very important. We know that self-isolating after travel and if you have any symptoms is important because the virus sheds and can be transmitted really early on in the onset of symptoms like those are things we know. And so I want to revel less in the uncertainty right now and really focus on like, forget the new headline. This doesn't change what we know. This is still important. Forget what you're seeing about sneezes going further than we thought. If you're covering your cough and sneeze and staying home when you have symptoms, that didn't change anything for how that should impact our behaviour.

Michael 19:42
All right, well, let's get to our segment Watcha Nerdin About?

Sam, what are you nerding about?

Science Sam 20:04
Right now? I would say my number one obsession besides my work and all the COVID stuff, are my plants. I'm a new plant parent. I made it my new year's resolution to get some plants this year

Finally, and keep them alive. So I got a bunch of plants in January. boy am I happy I did that because now they keep me company in quarantine. And so I have 12 plant babies and I love them so much. And I used to make fun of people who were like this and now I am that person and I live for it. So I got a Fiddle Leaf Fig, or *Ficus lyrata* which I later found out is the most difficult plant to take care of. So I'm in a Facebook group for Fiddle Leaf Fig parents who send pictures about their struggles with their plants. Apparently all of the plants that I was drawn to and that I purchased naively are like the most difficult to take care of so it's been a pretty fun experience. And that's what I'm nerding about. I measure light intensity. I stick my finger in the soil to see how they're doing. It's like a little home experiment. I'm loving it.

Michael 21:12
Amazing. Kaylee, what you nerding about?

Kaylee 21:14
So Michael, you know this but Sam, you may not know this. So Sam Neill, the actor who plays Dr. Grant on Jurassic Park, is the love of my life. And Jurassic Park is my favorite movie. And something that's actually been really delightful via social media. So Sam Neil has an Instagram, which, to my delight, I was one of his earliest followers. And now he has many followers. And he's been playing little guitar songs every night and reading poetry into his Instagram and showing these hilarious little videos and it's just been beautiful escape, follow him. He's so delightful when he's not self-isolated. He lives on a farm and like, takes pictures with his favorite pig and duck all the time it's an absolute delight.

Science Sam 22:03
I love this side of you.

Kaylee 22:05
I once wrote him a fan letter and got really embarrassed and put it in my recycling bin.

Science Sam 22:12
Is it gone? Yeah, like I need you to send it.

Kaylee 22:15
Don't you worry, I can rewrite it. Michael, whatcha nerding about?

Michael 22:21
Well as you know, Kaylee, my favorite show of all-time is Star Trek and very specifically Star Trek: The Next Generation

Science Sam 22:29
Shock!

Michael 22:30
And I just finished, I know it is shocking

Science Sam 22:33
The space guy likes space?

Michael 22:36
There's lots of space shows out there to like it just so happens that that's the best one. And Picard is the new series that has just come out. I just wrapped up the series. Now. It's not the best, but I did enjoy it. But it does. It does bring back a lot of like my favorite characters and a lot of times I just zone into like my happy place which is, you know, on the Enterprise, with Data with Riker, and no spoilers, some of those characters come into the series. And I started thinking, 'cuz the show does get into ideas of artificial intelligence and how society changes as we move towards that. That place where humans and robots are interacting with each other. And I remembered this one episode, it's in Season One, where there's a virus that infects the Enterprise. And Data is the only one that can save the day. And I'm thinking about how robots and artificial intelligence could perhaps help our healthcare industry, you know, thinking about all the healthcare workers that are at risk right now. And if we had Data or the Doctor from Voyager, who's a hologram, who could help in this day and age and it just made me so happy to think that maybe that's a future that will be a reality and it just made me really happy. Even though there's dystopia all around us.

Science Sam 23:56
Can I say something about that? I actually have, one of the webinars I tuned into was a doctor who was saying that if we had structured the way that we do consults in the hospital, basically the doctors who are like actually working the floors, they're also having to make these critical decisions. And so it's really inefficient that they're having to switch between doing procedures and then making decisions. And there's just not a lot of time versus if you had a partially virtual setup, where the decision maker is at home, doing all of the making all the decisions, calling out the orders, and then you have the people in place actually doing all the procedures, it could be a lot more efficient. You could have someone who's focused and has time to think about 100 things instead of having people split between and so it's something that like already, we could be implementing more tech to streamline things and we're not because healthcare moves slowly, especially in Canada, where it's like social - anyways. It's just it's like we need it. We will get out of it. I made fun of you for the Star Trek reference, but it was very relevant. I take it back.

Michael 25:01
Well Sam thank you so much for joining us on Nerdin Around of course. We can find you on Instagram on Tik Tok at "Science Sam" is that right?

Science Sam 25:11
I am Science.Sam on Instagram and Tik Tok and I'm HeyScienceSam everywhere else so Facebook and Twitter. Twitter's where I get angry about stuff. So if you want to see sassy Sam, I'm nice and friendly on Instagram. I'm sassy as hell on Twitter.

Michael 25:26
Shout out to our local artists friends, Jay Arner made a theme song for us, which we're about to hear for Nerdin About as well as Armin Mortazavi, our poster guy who makes all of our posters for Nerd Nite Vancouver also made one for a podcast. We really appreciate all of the artists that

are especially going through hard times that don't qualify for Employment Insurance. As we go forward with this podcast, we are going to be looking for ways to connect more with our community because that's what we used to do with our monthly event at the Fox Cabaret. Please connect with us on our socials which is @NerdNiteYVR on Twitter and Instagram. That's it for us, see you next time, folks.

Transcribed by https://otter.ai