Bonus: Let's Innovate with Rebecca Baron

Nerdin' About Podcast Transcript, Season 3 Bonus

Michael

Hey everyone Space Michael here dropping in to let you know we have a hot new episode to finish off this season of Nerdin' About that's just about done, but in the meantime, we thought we'd put an episode of my other podcast <u>Let's Innovate</u> into your feed. I talk to past participants from the BC Science Fair to catch up with them, and talk about their journey, inspirations, and innovations. This episode I talk to Rebecca Baron who is now at UBC, and has her own podcast <u>Women's Health Interrupted</u>, which you should also go subscribe and listen to, as well as Let's Innovate, and then before you know it a new episode of Nerdin' About will be in your feed. Enjoy!

Michael

Hey everyone, Michael Unger here with another episode of Let's Innovate! A BC Science Fair Foundation podcast where we uncover the passion behind great ideas. In this season, we've been going back to talk to past participants in science fairs to get their perspective on their experience and find out where their passions lie. Today, I'm super honored to be talking with Rebecca Baron, fourth year undergraduate student studying global health and nutrition at the University of British Columbia. Hey, Rebecca, thanks for coming on the show.

Rebecca

Thank you for having me, Michael,

Michael

You are also a fellow podcaster. We're going to be talking a little bit about the podcast you host called Women's Health interrupted for the Women's Health Research Cluster. Before we get to that, let's talk about your science fair experience. What was that like in your life?

Rebecca

Absolutely. So, for my science fair experience, I started off when I was 14 years old. I began by looking at ways in which plants could reduce volatiles or toxins from the air. My mom suffered a lot from asthma. It was a really unique experience, just learning more about how we could really improve air quality and indoor air quality. So, in 2014, my teacher told us that we all had to create a science fair project, I didn't really think much about it at the time. I just wanted to get good enough marks to do well in the course. Little did I know that that project would go on to the Greater Vancouver Regional Science Fair, and then the Canada Wide Science Fair. Then in 2015, I decided to continue with that project. So, I looked into some research about why plants were able to reduce these harmful toxins, and I noticed it's the bacteria growing around the roots that makes this possible. So, I began to do a bit more research and I found a particular strain of bacteria that was able to reduce volatiles from the air, and in 2015 I was so shocked to end up getting the gold medal and the Platinum Award at the National Science Fair. That was such an incredible opportunity, and really began my experience and began my journey into science and academia.

Michael

So, plants are obviously a connection with your mom suffering from asthma. Was that really kind of your impetus? Were you already interested in biology and plants? Or where did that inspiration come from to go in this direction with your project?





Rebecca

Yeah, I think it began from reading a book by Suzanne Simard. So, she wrote this novel called The Hidden Life of Trees. Through that novel, it was really fascinating to read, because I had never known that trees were able to communicate and talk to each other through their roots. She would jokingly say, it's like the worldwide web. I love that. So, I wanted to incorporate that into my project. I did a bit more research into plants and their ability to communicate. I noticed that one thing that they're able to do was also to improve air quality as well.

Rebecca

Have you adapted this into your own life? Are you using plants now in your home, and maybe in your mom's home to help air quality issues?

Rebecca

Absolutely. After I did that science fair project, we probably went out to the store to buy 10 extra plants to add to our home.

Michael

Good to know, I'm going to put that on my list for me as well, I think I need to add some more plants to my home, as well. Well, Rebecca, you took that experience with science fairs and getting some accomplishments, but you also pivoted into an area of female representation. You decided to get up on the stage at a TEDx event and gave a really amazing talk that we're going to link to in the show notes that everyone should watch. But encouraging female representation. Tell us how you got into that and why you wanted to do that?

Rebecca

Yeah, that's a great question. At the age of 16, I had just decided, you know what, I want to take this research and share it with a wider audience. So, I was looking into ways to begin dipping my toes into public advocacy and speaking out to the scientific community in general. So, I thought doing a TEDx talk would be one of like the coolest ways to really begin that process. Little did I know how much effort and time goes into it, but it was very eye opening and since then, I've really fallen in love with advocacy and advocating for increased female representation in academia. The reason why I decided to speak about that topic and about that issue was because I remember in 2015, I was standing on the stage receiving my platinum and gold award, and I was looking out at all the participants in the room. I noticed that the number of male participants outweighed the number of girls. I began thinking to myself, why is that the case? Why are there a few more boys to girls? Why is that ratio skewed? So, I did a bit more research. I noticed that it is an issue, this is a topic that needs to be addressed. Ensuring that girls have better representation in science and academia is a really important thing to look at. So, I decided to take my own thoughts and my own personal experiences in encountering gender bias, and stereotypes in the scientific field. So, then I took that onto the international stage, which I thought was really cool.

Michael

Interesting. So, I'm curious, because you were quite young, when you decided to get up on that TEDx stage, which I commend you for, it's quite brave. It's a big opportunity, and it lives on the internet forever. I think it's a really wonderful platform to say here's your thesis statement at such an early age, which will then feed into the work that you're now doing. What that did for

you, at that time in your life, to give you some confidence, or maybe to set up those themes that will be in your life.



Rebecca

Yeah, I remember at the age of 16, that was definitely my first large public speaking, event. I remember my hands were shaking so bad before going on to the stage, that when we had to hook the mics up into our clothes, I just remember the mic falling onto the floor, and it being a little bit of a mess there. You do have to realize that even if you are if you are a teenager, or you're someone who's younger and might not feel like you don't have that experience, it's important to realize that you have to start somewhere, you always have to begin at a starting line, it doesn't matter when in life that will be you do have to start at some point. So, take that leap of faith and trust that your own skills and aptitude will be able to at least get you into a really great position where you can share your message or whatever you feel passionate with the rest of the world.

Michael

Yeah, and you've taken this theme of female representation, you've now moved into UBC, where you're still going to school there. Now you host this really amazing podcast for the UBC Women's Health Initiative called Women's Health interrupted. Tell us about how that came about and how that has shifted your focus a bit.

Rebecca

Yeah, so for the podcasting realm, I only first began to dabble in it at the start of COVID when everything was pretty much online. So, myself and my really good friend, her name's Bonnie Yu, began this podcast called Back of a Napkin, and that's where I began. It was an excuse to reach out to professionals in the field and speak to researchers who we thought were really interesting and had really great stories to tell. We wanted an in, so that was kind of our in to reach out to them. From there, I realized how much fun it was to conduct interviews and to speak to individuals who had really unique stories. So, I reached out to UBCs Women's Health Research cluster, and they were beginning their podcast called Women's Health Interrupted. So I cohosted that for the past year with another UBC student, and together we were able to learn a bit more about why women were not being adequately represented in the fields of science. So, we were speaking to different researchers learning a bit more about themes of intimate partner violence, that was a really interesting episode that I really loved, and ways in which we can improve these conversations and ensure that there was more research being done on women's health.

Michael

Yeah, I wonder if there's a connection with science fairs, and when you're working on a project and you're working with other people's research and how now you're going out and you're reading other people's research to bring into your podcast and disseminating that research and then communicating it back through your podcast. Tell us about how that work has gone for you.

Rebecca

Yeah, so science fair definitely taught me about the process of creating a research topic or research question, creating a hypothesis and then backing that up with more evidence. So, I think that really gave me the insights into other literature and other research that is out there. I now have a better understanding, I think of the research process. So that definitely helped. I think those tools and those skills are really important to have even further into your career, you

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always need to learn, you always have to know how to effectively write and communicate your thoughts and ideas with other researchers in the field. So, for me, just having that background experience with science fair, really helped to advance that understanding of that knowledge.

Rebecca

Yeah, it's really amazing. I was here watching your TED talk, and about female representation, I'm a male, and I'm listening to your podcast about women's health, and I'm realizing that these aren't just female or women issues, these are human issues that males can play a very active role and very big role and be curious about learning about. I'm wondering, what are some of those things that males can do in this field to help better understand female representation in science? And also, women's health issues?

Rebecca

Yes, that's so true, Michael, anyone could really help out with these issues and these topics. I have two younger brothers. So, in our household, this is always a topic of conversation, how can we get more male engagement with these topics. So, I believe that it's really about ensuring that young woman around you feel inspired, they feel safe, and they feel like they can share their stories, I was extremely fortunate, because my family is very supportive of my academic endeavors. Even as a student going through science fair, they were the ones who are always cheering from the sidelines and being there to support me whenever I needed it. So just being able to have someone in that capacity and in that role really can help further your own research and further your own projects. So, for young woman, it's really important that they do have those support networks available and at their disposal.

Michael

Absolutely. I mean, I think even in my own life, I have a sister that grew up and she certainly broke the norms of what a traditional girl might do. She was the skateboarder, she was the snowboarder way more physically active than I was. These females that are very, very close and in my life, I think being curious as a male about what issues they're going through, are important for males to understand, because quite often, they're not the conversations that are happening. So, I think that's really what it where it needs to be framed around is that this is us working together for the betterment of everyone. Also, males as well, because these are the people that are also supporting us, right?

Rebecca

Yeah. I mean, it's 50% of the population. When you take out 50%, like, what are you left with? It's a really important issue. I feel like we're heading in the right direction now. But you know, it's a constant topic of conversation and something that we continue to have to talk about, and to keep at the front of our minds.

Michael

Absolutely. So, everyone out there, go watch the TED Talk by Rebecca Baron, as well as the podcast that you host. I think we're about ready for some rapid fire questions. So, you ready, Rebecca?

Rebecca

Shoot away.



Michael

Alright, Rebecca, I've tailored one just for you for our first rapid fire. And that is, if you could interview anyone for your podcast, who would it be?

Rebecca

If I could interview anyone, it would probably be Ann Makosinski. She was one of the first science fair alumni that I learned about through the Google Science Fair. So, she had created this project called the hollow flashlight, where you hold a flashlight and through the energy in the heat from your hands, it lights up, and you can use that in the dark. I thought how cool is that? How does she think of such an interesting topic? I mean, that'd be so useful for me. Anyways, she really inspired me, and I think if I could interview her and have her on the podcast, that would be such a cool experience.

Michael

Awesome. Ann is really cool. Everyone should go check her out on her social media and look at all the work that she is doing, and if you're listening get on to Rebecca's podcast. Next question for you, Rebecca. Is there a piece of media like a book movie or video game that has had the most influence on you?

Rebecca

I think the book "Woman on the Ballot" written by Betsy McGregor is one of the first pieces of writing that I really connected with. So, a lot of it had to talk about female representation and getting more women engaged in politics. For myself, I'm someone who has been very inclined towards more of the scientific academic route. I didn't really think how policymakers and individuals in government can really shape and change the landscape of academia. After reading her book, it really inspired me to think more about the broader picture and ways in which we can enact change through a government perspective. So that was really interesting, and I would highly recommend it if anyone is fascinated by those topics.

Michael

Excellent. Well, we'll put that into the show notes as well for people to look up. Last and final question for you Rebecca. Do you have any advice for future science fair participants?

Rebecca

Be inspired. That is my advice.

Michael

Be inspired!

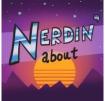
Rebecca

Yeah. Because for myself, if you aren't passionate and in love with your project, the judges won't be able to see that or tell. So, you have to show how much you are inspired by the research that you're doing, by the work that's being done. Obviously, it's creating some sort of change or ripple effect in academia. So, I would highly recommend just being inspired by your own project and sharing that passion with other people as well.

Michael

Awesome. Well, hopefully everyone listening to you here in this podcast is inspired to not only learn more about you and all of the work that you do, but in their own projects as well. If you are in science fairs right now gearing up to the end of a science fair season, you can learn more on

our website, all of the resources we have there to help you on social media @YouthInnovationShowcase, which is also starting up, @YouthInnovation on Twitter. We have a monthly workshops that we're doing can check us out there,



as well as we're have our fundraiser, a big Sweatin' For Science. So, if you're wanting to get out there and exercise and raise some money for science fairs, you can get a team and get out there. I'm going to be doing some running as we get into some warmer weather. If you'd like to follow what I'm up to here at the Space Centre where I work. @MichaelJohnUnger on Instagram MichaelJUnger on Twitter. All right, folks, that's it for this episode. Until next time, let's innovate!