



Opinion Science Podcast

Hosted by Andy Luttrell

Episode #12: Comedy + Science with Shannon Odell

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Andy Luttrell:

At its core, this podcast is an exercise in science communication. Social scientists spend their careers analyzing data and testing ideas using the scientific method to understand how people think, act, and feel, but then they write detailed reports of their findings and just trade them amongst themselves. But why keep that information tucked away in the brains of a few nerds? We should share it. Let everyone know what we know. Tell the professional communicators, policymakers, activists. That's what this show is all about, but it's not easy. On the one hand, scientists aren't always trained in the art of talking to normal people about anything, let alone complicated science. And on the other hand, lots of people already think science is boring, intellectual, and irrelevant to their lives.

But things are looking up. Public opinion data from Pew Research Center showed that even though in 2016, only 76% of Americans were confident that scientists act in the public interest, by last year that number rose to 86%, and most Americans think scientists have an overall positive effect on society. So, people are generally pro-science on average, but it still doesn't mean they understand it. Fortunately, a big and vibrant science communication community has emerged, filled with bright and talented people who are committed to helping the world become more scientifically savvy. You're listening to Opinion Science, the show about our opinions, where they come from, and how they change. I'm Andy Luttrell, and I talked to one scientist who takes a fun and unique approach to science communication.

Shannon Odell recently finished a Ph.D. in neuroscience and she's also a comedian, and she's tied these two worlds together using comedy as a tool for introducing people to neuroscience and other sciences. She's produced live shows in New York City, co-created the popular web series Your Brain on Blank, cohosts the Science of Self-Care podcast, and is a regular correspondent for the show "What on Earth" on the Science Channel. I talked to Shannon about how she got involved in all of this and why comedy is a useful tool for talking science. But first, to give you a taste of what she does, here's Shannon telling an audience what the prefrontal cortex is all about.

Shannon Odell [Clip from Live Comedy Show]:

So, the prefrontal cortex, just a side note, because I love the prefrontal cortex. This is really the area of the brain that makes you human. It's home to conscious thought. It's home to social behavior. It's also home to judgment, so for that reason, I like to call it the mom of the brain, right? It's the region of the brain that's most likely gonna be like, "Are you really gonna wear that?" It's

the region that's mostly gonna be like, "Oh, you gonna eat that all? Interesting." The region of the brain that's most likely to say, "Really? Because your cousin lives in the city and she got married in her twenties, so not everyone gets married in their thirties in the city." It's also the region of the brain most likely to have the heavy Jersey accent, and that is science. So...

Andy Luttrell:

Yeah, I was going to start by congratulating you, because was that... Did you have an actual commencement, or what happened? So, congratulations on your Ph.D., and follow-up question, what did they do? Was it an online thing?

Shannon Odell:

Yeah. It was online. They sent us our robes in the mail, which was very funny, to still get the package in the mail of the robe. It was nice, because then we could do the pictures in the robes, just to have it, but yeah, it was over Zoom, which was fun I guess. Very silly to be sitting in your bedroom graduating.

Andy Luttrell:

And there, with everybody on at the same time?

Shannon Odell:

Yeah. They had all the med students and the Ph.D. students in a conference Zoom, with everyone on mute, so I guess we could see each other. It ended up being like... I just ended up talking to people in my program in a chat, to feel like kind of we were all together through it.

Andy Luttrell:

Which is how commencements usually go anyway, where you just have snide side conversations with people who are next to you.

Shannon Odell:

Exactly.

Andy Luttrell:

So, can you tell me what your dissertation was? Or what kind of research were you doing there?

Shannon Odell:

Sure. Yeah, so I got my Ph.D. in neuroscience, and more specifically, I studied memory and epigenetics. Basically, the title of my thesis was very big, and long, and boring, but essentially what I looked at was can we find an epigenetic marker, I was looking specifically at DNA methylation, so that is methyl groups on cytosines and DNA, and those can be different for different cells. So, I was looking at are there epigenetic marks that are distinct to cells, more specifically neurons, which are recruited during a memory event?

So, something that we know about memory is that memories are coded in physical neurons, and that that coding happens... It's sparse. So, a small group of neurons will code for one memory, while another group of neurons will code for another memory, so kind of a question in neuroscience is what's dictating that one group of neurons is going to encode at one time, while another group of neurons is encoding at another time? What is that black box? What's directing those cells? And there's probably a lot of different things that are directing those cells, but my

thesis was kind of untangling this idea, are there DNA methylation marks that we can see in cells that have recently been recruited to a memory that are distinct, that kind of show us, “Oh, these cells were kind of ready to be incorporated into a memory?”

Andy Luttrell:

So, you’re saying your thesis work didn’t solve the problem of memory.

Shannon Odell:

Yeah. You know, unfortunately... Unfortunately, one thesis never solves it.

Andy Luttrell:

Okay. Well, we’ll have to wait on that. So, was it memory that got you into this area? Or was it the neuroscience angle? Or where did the seed of all of this start?

Shannon Odell:

Yeah. It’s actually... My story is very weird, because I was not thinking I was gonna go into memory. I have the classic story of I thought I was gonna study one thing, I did the first experiment, and I had to rewrite my proposal, because it wasn’t gonna go the way I wanted. We got too interesting of results. I was supposed to do an experiment that was supposed to be like null and void, like, “I’m not gonna get any result,” and I got a result. Which is normally the different... the opposite in science. Normally, you think a result’s gonna happen, and you don’t get anything.

Andy Luttrell:

And you get nothing.

Shannon Odell:

Yeah, so it was exciting for my advisor. I think me, a first-year neuroscience student, I was overwhelmed. But you know, that’s how science goes. So, I joined my lab because I was interested in studying early life adversity. More specifically, my lab works in mouse models, obviously, because we work in epigenetics and it’s kind of hard to work in epigenetics if you work in humans, because you need to get DNA out of brains, which is hard unless you’re using postmortem tissue. So, we work in mouse models.

More specifically, how early life adversity, so things like maternal separation and how that results in adulthood anxiety, or anxiety-like phenotypes. So, I was interested in that angle.

Andy Luttrell:

So, that’s a very specific thing to come in with an interest in.

Shannon Odell:

Yes. Well, I was interested in neuropsychiatric diseases in general, so I was interested in anxiety, interested in depression, and I got... I went far away from that.

Andy Luttrell:

Just spun out of control.

Shannon Odell:

Exactly. So, basically my work was coming off of a paper that looked at that early life adversity, that kind of epigenetic mark of early life adversity, and I wanted to study that more, but then I was just testing out a model we had and kind of saw that oops, this model in itself has some... if I use this model, I'm seeing a difference in memory in general, and then we had to kind of dig in the weeds to figure out why.

Andy Luttrell:

Yeah. It's so bizarre how that happens, like I'm thinking that... So, the research that I do a lot these days is on morality and how people's sense of morality affects their opinions on things, and their resistance to changing their mind, but that was not... I had no idea that that was an interest of mine. It really was just like a grad student before me had left off it mid-project, and I just picked it up, and I went, "Oh, this is my whole thing now." And so, now that's the thing, so it's bizarre how you can sort of come in with a vague idea of what you're looking to do, and then that totally changes, so it's nice to hear that that's true in other areas, also.

Shannon Odell:

Yeah. I think so. I mean, and what I always, when I talk to grad students that are starting off, you figured out you're interested, say in neuroscience, because you're in a neuroscience program. Yes, you should be interested in the research going on in the lab, but so much of what becomes of interest in science will be like, "Okay, do you have a mentor that you find interesting?" Or how you're asking a question, what are the methods that that question, you get to use in order to answer that question? And I feel like that ends up being more important even than like the question that you're asking. Because you're not really thinking about the question that you're asking sometimes. Sometimes, you just have a little mini, mini, mini experiment, and you're like, "I just need to figure out this little, little experiment." Yeah.

Andy Luttrell:

So, where did the communication part come in? Was that always something that you wanted to do?

Shannon Odell:

Yeah. I mean, around the same time, so I graduated undergrad in 2012 from Vassar College, and I moved to the city to be a research technician in a lab, a neuroscience lab, up at Albert Einstein, New York City, and when I moved here, I had in college done a lot of performance. Never comedy, but just like kind of performance, and I moved to the city and I didn't have many friends here. I'm gonna be real. I didn't have many friends here, and I needed to find a way to meet people, and someone suggested to me, "Oh, you should take a comedy class." And I thought, "Okay, sure." Like I have nothing else to lose, I'm in the city and I barely know anyone.

So, I did, and luckily I met people, but I also kind of fell in love with doing comedy. And so, the communication, the science communication really came from I think the comedy. So, I was doing comedy and finding my voice in comedy, and then I was at the same time, I had started a Ph.D. program, and then I was figuring out ways I wanted... Like, what is my comedic voice? And what is my story? And my story obviously involves science, and that's how I started involving science more in my comedy. Kind of really started with... I started producing and hosting this show called Drunk Science, which I produce here in New York City, where we have scientists come on, and

we have comedians come on, and our comedians perform scientific dissertations on scientific topics, which is really fun, and we have scientists there, and we do interviews, and it's just like a big, fun, everyone's drinking, we're playing drinking games.

I'm so thankful for that show, because while I was just a host, it helped open up my mind to how science and comedy can go hand in hand, and then from there, I started writing scripts, and working with Your Brain on Blank, which is a digital show that I hosted and wrote for. And then started doing stand-up that involved talking about memory and the human brain, and then started my podcast, and that started this, and this started that. And yeah, it all just kind of came from me trying to find my comedic voice, and me realizing that, "Yeah, I like science a lot, so maybe I can sneak in some science communication in here, too."

Andy Luttrell:

So, were you doing this science stand-up, if I'm going to call it that, like at sort of your run of the mill shows? Mics and showcases?

Shannon Odell:

Yeah. I would say at a mic, I tried to... If I'm testing stuff at a mic, I try to put in a couple science jokes, and then... Because I also have lots of material that's just about me, and just about general material, I guess you would call it. But I would say what's great about New York City is there's so many niche comedy scenes, and there is a niche science comedy scene here, which is really incredible. So, there are science comedy open mics, and I've been able to do a lot of shows that were science specific, and it's great to come with 15 minutes of material that's all science and know that the crowd's not gonna be like, "What's going on here?"

Andy Luttrell:

Well, what's so cool to me about the open mic culture is that it's a culture of trying the same thing over and over in different ways, which is not anything you get in any other kind of communication, right? Imagine you're giving a research talk at a conference. I mean, I guess you could try and just force people to listen to you over and over again, but generally that's not how it is. You sort of prepare it, and then you give it, and then it's over. And so, what I think is very cool about that is it just is sort of a forum for honing in on how can I convey that idea in a way that's engaging and entertaining? That's me I guess foisting my perspective on you. Does that resonate with how you-

Shannon Odell:

Yeah. No, absolutely, and I think this kind of goes back to what I think a lot about, that I think science and comedy have a ton in common. I think there's similar methods involved, and I think being a scientist really helps me as a comedian. And I think if you talk to a lot of comedians, you'll hear in their methods that it is very scientific, you know? You go to an open mic, and you're recording yourself saying a joke, and you notice that you're saying the same words, and one time it gets a laugh and another time it doesn't, and you're listening like, "Oh, I put more emphasis on that word." Or like, "I put a longer pause here." And it's just you're collecting data, you're going to different mics, you're collecting data, and kind of trying to create the funniest thing. Yeah. I really like that about... Yes, comedy.

And it is nice in terms of like, yeah, being a young scientist, and going for my Ph.D., my advisor used to always comment, "You get so nervous for science talks. I don't get it. You leave the lab

and you go out and you do comedy, and you go on stage.” Yet for some reason, I would be... Any talk I had to give, I was rehearsing it, I was making my colleagues come and listen to it over and over again. I would get so caught up. But I’m wondering if it’s because in comedy, everything is sort of practiced, and in science it’s like, “Oh yeah, just talk about it.” It’s like, “No, I need that kind of method.”

Andy Luttrell:

I can imagine. Without doing it 100 times already, to do it for the first time in front of real people. So, I was actually... You’ve touched on it a little bit, but I was gonna say that in watching some of the stuff that you’ve done, you toe the line between comedy and science super well-

Shannon Odell:

Oh, thank you.

Andy Luttrell:

It’s genuinely funny and the science is there, and I feel like in that equation, all too often that balance is not there, right? Like I’ve seen lots of scientists try to be funny, and it is a mixed bag. And you know, I’ve known plenty of comedians who have no place talking about science, right? And so, you spoke a little bit about how those two things go together. Do those generally seem compatible to you? Or is there some friction that you kind of have to put effort into weaving those things together?

Shannon Odell:

Yeah. I mean, I think.... Well, just coming from the science side, I think we can easily talk about kind of the characters we play in science, and like if we’re giving a scientific talk, even the way we speak, and we don’t have to... There is a character you play as a comedian, too. You’re talking in a very specific way, and using words that... You’re cursing. You wouldn’t curse in a scientific conference, but very likely a lot of stand-ups do curse in their act.

What was the question? I think I just totally lost my train of thought.

Andy Luttrell:

It was just about the amount of effort it takes to weave comedy and science together.

Shannon Odell:

Oh, yes, yeah. So, I think they are different in certain ways, but I think especially where I am as a neuroscientist, and I’m sure maybe you could speak to it, as well, I study how the human brain works, and so of course there’s comedy in that, because it’s like it’s the science of us, and how we behave, and how our brain works, which is everything. So, it’s so easy to pull in those personal experiences and those personal jokes, and then I like to say I sneak in science, where it’s like, “Oh, here’s a funny thing. Here’s kind of an...” And also, it’s about observations. I always talk about this with science and comedy, that science is about observations and comedy is about making observations about the world, and then you say, “Ha! Isn’t that true?” And everyone sits and laughs, because it is true.

So, yeah, I think they do go well in a lot of ways. Yeah, I think it’s great when scientists get into comedy, because I think scientists have such wonderful personalities, and I think sometimes they think they’re not for the comedy world, but scientists are some of the funniest people I have ever

met. You know? Like I know a lot of comedians, but on Drunk Science, our funniest person on stage is always the scientist, without fail. Especially when they're the expert on stage and they can put everyone in check when we ask stupid questions, it's just... I don't know. I really love integrating the two.

Andy Luttrell:

Yeah, so I wanted to know more about the Drunk Science show, and in part how you convince scientists to do it, and also what their role is in the show.

Shannon Odell:

Sure. Yeah, I mean I think there's definitely a self-selection going on, like I'm sending an email that says, "Invitation to Drunk Science," so there's some people who are not gonna want to do that. But there are other people who see that email and they're like, "Oh, yeah. Sign me up." I never really have to convince people. I think people who want to do it are pretty game for it. But yeah, how it works is in the show, the scientist is really our guest of honor, so we introduce all the comedians, everyone's on stage, then we bring the scientist on and our first drinking game is that we do an interview with the scientist. And in that, what we try to really have on stage is a casual conversation.

The drinks are there not because we want to get everyone trashed, but it's kind of like a little like a... I'm sure you know about this, like kind of a behavioral mod, like, 'Oh, we're all relaxed because we're drinking.' We're not in school. We're not at desks or anything,. So, we can ask anything. Nothing's a dumb question. And just talk to a scientist. For some people, they don't get to talk to a scientist, or ask questions to a scientist, or see a scientist, or see a scientist just talk about what their day-to-day work is, and for most scientists it's paperwork, which I think a lot of people are surprised to hear about. Yeah, that's kind of the tone in the beginning, and the scientist is there. They judge, in quotations, "judge" the comedians' dissertations, but the comedians' dissertations are always just... They're slideshows. They always have science in there, but they're mostly jokes and bits.

But it's always just a really fun dynamic to have the comedians there giving their take on what they saw on Wikipedia that the science is, and then you have your scientist there to kind of keep it in check. Yeah, it's just like a fun, kind of relaxed environment.

Andy Luttrell:

Do you get the feeling that people come away having learned about science?

Shannon Odell:

Yeah. I think definitely. I mean, we do have... Our crowd has a ton of grad students in it. We have a very strong contingent of grad students who go. But the topics range, right? So, one day we'll have a neuroscientist, the next month we'll have someone on climate science, so even if you are a scientist, you don't know about all types of science. But I think, yeah, there are always takeaways. I'm learning every time I go and I'm a scientist, so I'm imagining everyone else is learning. Yeah, I think there are so many little snippets of things that I've learned throughout the years on Drunk Science, and I've gotten interested in things that I didn't even know I was interested in until I heard an expert talk about it, and then I was like, "Oh, that's really cool."

Andy Luttrell:

It sounds, too, that your fusion of comedy and science is, like you said, born out of kind of finding your own identity and style of communication. Because there's a version of the story where you go, "Well, comedy is just the effective way to convey science. I only rely on it because I feel like it is the most effective way." Versus a story where you go, "Well, that's just who I am and I also want to talk about science, and so they have to go together because it's the one person doing both of them." Do you have a sense, is there any part of it that's like comedy is an effective pill to help the science go down? Or is it you really don't care about that part of it?

Shannon Odell:

Yeah. No, I think that's... I mean, that's a huge part of it. I don't think that's why I originally started on this journey. I think it's kind of like a happy circumstance, like happy end. At the end, I'm like, "Oh, wow. This actually is effective in science communication." Yeah, there are studies that have shown that if you're laughing, you're more receptive to new ideas. Things like that. So, if we get people in a room and we're laughing with a scientist, and then the scientist tells you a fact, you might be more receptive to hearing that fact. I think it's a really effective tool.

It's also I think really great at creating a level playing field. I think sometimes, if you've never met a scientist or you don't regularly interact with scientists, you might think of them as not approachable, and in the show, we're all laughing together. We're all showing our humanity, which I think is a lot of what comedy does. It shows you your humanity. And then I think it's just like a way to make people more receptive to the science and understand that scientists are just people. Yeah, so hopefully that's effective in communication.

Andy Luttrell:

And even at the least, it's just getting people in the door, right? Like the people aren't often volunteering to go watch science lectures, but people happily go to comedy shows and see, well, like you said, sneak in the science while people are already there, and then maybe the comedy doesn't necessarily help. I mean, so one thing, I know in persuasion there's been some work on like does humor influence persuasion, and I always find those studies unsatisfying, because their materials aren't funny. It's like they're testing the effect of people believing that someone is trying to be funny more often than not.

Shannon Odell:

Right. Yeah, yeah, yeah.

Andy Luttrell:

And I just feel like... and there's research on what makes things funny and how humor works, and again, it's always so unsatisfying, because I feel like if you're in a research lab reading a joke, you can't concoct a less... an experience that's less amenable to actual humor. And so, it's nice to see that just in the wild, these things work. These things co-occur and that magic can happen, so to speak, even if we can't isolate the process.

Shannon Odell:

I think some of the best studies on that, I looked at a couple on the Daily Show, because that's something that's like actually funny material and looking at people's involvement in political causes pre watching the Daily Show and after watching the Daily Show. So, I really think of the

Daily Show and things like that, like political humor, as really kind of the place that has shown that political humor can get people involved in politics, so why can't comedic science get people involved in science?

Andy Luttrell:

Can you talk about the Your Brain on Blank series? And sort of where that came from? And I imagine that you're writing a lot of that, is that the case?

Shannon Odell:

Yeah.

Andy Luttrell:

And so, I'm curious what your process is for... You have a topic. Where do you start to sort of think about how to convey that kind of information?

Shannon Odell:

Yeah, so the story with Your Brain on Blank, it was really interesting, because it started out as one, just like one standalone video that kind of became a series, which the first video was on Your Brain on Alcohol, which is the most popular one, as well. It is the one... I'm unfortunately known for a lot of alcohol-related things. I did a science communication workshop, and someone had a typo on my badge. Instead of putting producer of Drunk Science, it just said Drunk Scientist on it as my title. I was like, "Yeah, I guess that is who I am."

So, with that, it was supposed to be just like a one-off video, and I had some friends from the comedy scene who were producers at this media company, Inverse, and they knew that I did this show, Drunk Science, and they said, "Oh, wouldn't it be fun if you did a science explainer video while you drank, of like what was happening in your body as you drank, or what's happening more specifically in your brain as you drink." So, we did that one video, and it was tons of fun, and it just kind of really went viral, which is my first time ever going viral, which was really, really great. And I think it had like 33 million views on it or something crazy like that.

And then it just became a whole series. Next we tried like, "Okay, let's do caffeine." And then we did that, and that one was successful, so then it became like a two series thing. Yeah, we had two seasons, which was really great. There still may be... It's kind of like an ongoing thing that sometimes we do an episode if there's an episode that comes along, but yeah, my process for that, it was interesting, because it was my first time kind of like writing scientific scripts. But I had that experience with Drunk Science, and I had started to put a little bit of science into my stand-up, and so basically I always went at it like I was doing a review paper. So, I would read reviews. It's just like the same thing that you would do with a scientific review. Let's see the reviews that are out there, what's the most current research? I'd pick things that were most interesting to me, like for example, of like Your Brain on Puppies, I was really interested in baby schema.

So, I just read a lot of new studies on baby schema. Yeah, baby schema, that's right. Yeah.

Andy Luttrell:

What is that?

Shannon Odell:

Oh, that's like the idea that puppies have big eyes and symmetrical features, which kind of the idea is that it triggers the same maternal paternal pathways if we see something that is cute. Yeah, so basically just always start with the research, kind of like making little summaries of each paper, and then I'd build out my scripts, and it was kind of like I would always start with all the science, like what are the science points I would want to get across, and then just kind of putting in humor. The humor was actually like always came in after, so it was like, "Okay..." What was really great about the series was the idea was that I was doing the things, so there was a lot of situational humor that I could put in. There was a lot of like, "Oh, I know about this from personal experience, like what are jokes that I would make of just the topic of going through a breakup?" Like there are tons of jokes and things that you can do with that.

And then there was a lot of humor that we could just do on set, of just like being on set, what about this goof, what about that goof? Luckily, I worked with really great director and producers who are both comedians, so like we got to really do a lot of fun things with it, which was really fun.

Andy Luttrell:

So, having done my homework for talking to you, I listened to some of the Self-Care podcast, and it feels like it's sort of a similar thing, where you're sort of... There's a topic that you know is coming up, and what I also have noticed about the work that you've done is that you're very savvy about connecting with people who are also strong on the entertainer performing side, right? And so, kind of in all of these things, you're able to benefit both from your own strengths, and then also having a team of people to sort of carry the whole thing along, because there is a challenge in just sort of being like the one voice conveying all of those bits and pieces. And so, I'm guessing the podcast works similarly, so you all will agree on some topic and then you'll tinker on Google Scholar, a topic-

Shannon Odell:

Yeah, exactly. I mean, I think that's what's really great about the Science of Self-Care is with that, I get to have my two friends, who are very talented, very funny comedians, and they're kind of like a stand in sometimes of the audience, of like I'm saying... They keep me in check, too, when I'm talking about science, and they don't either understand what I'm saying, or they think, "That study did what? I don't think that really shows anything." And you're like, "Yeah, this is interesting." You start thinking about how we conduct science in general. But yeah, it's really great working with... I've luckily had the chance to work with really, really great comedians, who make everything I do so funny.

Andy Luttrell:

And even your point about them being non-scientists is useful, too. So, I find in this show these conversations are super fun, and then afterwards sometimes I go, "Ooh, I might have just fallen into shop talk with another person who does the same stuff as me." And the hope is that anyone could follow the conversation, and so it is useful to have someone be like, "All right, that didn't make any sense."

Shannon Odell:

Yeah. Yeah. Yeah. As like a, "What is that?" Or like on the podcast, like let's say it was a meta analysis, they're like, "A meta who? What are you talking about?" It's like, "Oh yeah. Let me

explain the words that I'm using." Yeah, they're such a great voice of reason, and also both so, so funny, and goofy, and weird, and I love them both.

Andy Luttrell:

Did you do much teaching in grad school, or no?

Shannon Odell:

I did a bit of teaching, a bit of TAing. At Cornell, we don't have an undergrad program. We just have... Because it's Cornell Medicine, it's in the city, so it's just the medical campus, so I did a bit of TAing for our grad students, but I'm hoping to get into more teaching now.

Andy Luttrell:

I was wondering if that was also a forum to... There is a little bit of open mic-eyness to teaching, where it's like each time you teach the same thing you're like, "All right, no, this is the better way to tell that story or to give this example."

Shannon Odell:

I can imagine.

Andy Luttrell:

Yeah, so what are the things on the horizon, then? So, you've sort of alluded to things toward the future. I'm sure any plans you had got... let's call it derailed in the last couple months.

Shannon Odell:

Yeah.

Andy Luttrell:

But what were some of the directions that you're moving in now?

Shannon Odell:

Yeah, so I defended in December, and yeah, my hope was to go fully freelance, to do freelance science communication. I'm working currently with a fitness brand to work on creating science videos for them on the science of exercise, so basically doing projects like that, creating video projects, and continuing on with science comedy. So, continuing on with Drunk Science, continuing on with the Science of Self-Care and trying to create more projects which link science and comedy. Yeah, obviously things get derailed, but that's okay. We get back to them.

Andy Luttrell:

Yeah. We'll figure it out. I'm doing... Are you still doing Drunk Science online, I think I saw?

Shannon Odell:

Yes. We did one of our shows online. We think we're gonna probably do... The thing with New York is that we probably won't go back to live events for a very long time, and that's been hard on the comedy community, because that's... For a lot of people, that's how they made money, which is... Part of my income came from live performance, as well. So, it's just redirecting, and luckily everyone got really good at Zoom comedy shows and creating teams that know how to run Zoom comedy shows, and stream them to YouTube, and so yeah, we're working on putting together another online show, as well.

Andy Luttrell:

Nice. Do you have lessons for... Even just to pull back the lens a little on science communication in general, are there things that you've learned about talking about neuroscience to people who aren't neuroscientists that other scientists could benefit from as they increasingly try to bring their work outside the lab and to the public?

Shannon Odell:

Yeah. I mean, I think one of the greatest things that I learned in the process was don't try to be... Don't look at like, "Oh, I think science communication is this." And then try to force yourself to fit that mold. There are many different ideas of what science communication is and there was a while there where I was trying to be what I thought science communication was, and ultimately your biggest strength is still figure out what your voice is. Like I was saying before, I found my science communication voice because I was looking for my comedic voice, so whatever resonates to you. For me, I found the way that I would talk to my friends in comedy about science kind of translated to everything I do in science communications, so whether that be with a podcast, or with Drunk Science, and I found that to be an effective tool of science communication, and that was just kind of through personal experience.

So, I would say yeah, trying to figure out your voice and how you think about science and how you learned about science, and what makes things easy for you to understand, yeah, is... There's no one way to do it. Don't think that you have to do things a certain way to be a science communicator. You can do whatever you want. If you're communicating about science, that's good.

Andy Luttrell:

Are there things that you've seen in the comedy world? Actually, one of the questions I was going to ask you was about balancing life in science and comedy, because those, even if the process of them is similar, the lifestyle of them is pretty different. And so, how much did you sort of compartmentalize those things versus just sort of go, "These are just moments in the day, and whether they're happening here or there, it doesn't matter."

Shannon Odell:

Yeah. You know, I've been doing comedy for eight years. Have I done as many open mics as a person who's been doing comedy for eight years and just focusing on open mics? Absolutely not, because I was doing this other Ph.D. thing in the meantime. And in the same way, did I have the same work routine as every Ph.D. student? Absolutely not. But I luckily figured out pretty early on, maybe two years in, that I knew my career was going to be, or I want my career to be combining those two things, so I made sure that both of them were somewhat balanced, because ultimately in a Ph.D. program, you want to do your dissertation and do it well. But you also are creating a career for yourself, so the idea of do what's meaningful to your career, so does that mean teaching classes, as well? So, then teach classes as well. Those are just as important in creating your career.

So, yeah, finding the balance, it's not easy. I say this as if I had a perfection vision. It wasn't easy to figure out or even if... You know, the feelings of guilt, of like, "I'm not doing enough comedy." Or like, "I'm not doing enough science." Of course, those creep in too, but yeah, just figuring out the balance that's best for your and best for what you see as your vision of your career I think is important. Don't tell people, don't let people tell you like, "You should be doing more mics." Or

like, “You should be doing more time in lab.” As long as you’re doing your work, yeah, I don’t know, people have opinions on a lot of things, I found out through grad school. And in comedy.

Andy Luttrell:

Yeah, right. Because both of those things are things that there are kind of hardened, old school ideas about what it takes to succeed, so I think I mentioned in my email that I did stand-up throughout grad school, and I felt very... I wasn’t good at living both of those lives at the same time, because I felt like the same thing you were saying, where it’s like grad school, they go, “Well, you should be working all the time. Why would you... You can’t go out to this thing at night and do this other thing.” And in comedy they go, “Well, if you’re not hitting three mics a night, then you’re not doing anything.”

And you go, “Well, both of those can’t happen at the same time.”

Shannon Odell:

Right. Exactly.

Andy Luttrell:

And so yeah, something’s gotta give, so happy to hear that you were able to strike that balance. And even, I don’t know if this is a reality, but there are misconceptions about what both of those worlds are, too, so that each doesn’t understand the other. And so, yeah, hard to convince people that no, both of these things are useful and fun, and worthy of your time.

Shannon Odell:

Right. And I feel like it’s just in part, I mean luckily I found a really great lab, and a really great comedy community. I just feel like the more transparent I was with people, that... I was always afraid in the beginning of like telling scientists that I was a comedian, because I thought they would think what I was doing was silly, or not worth my time, or I wasn’t a serious scientist because I was doing comedy. But then the more I opened up to people, very few scientists really had much of an... They thought it was cool. So-

Andy Luttrell:

Yeah, there was one time I told someone, and they were like, “Oh, well, why don’t you just go do that for a year and then come back?” And I was like, “Whoa! I did not see that coming.”

Shannon Odell:

Right. Yeah.

Andy Luttrell:

And I think you also... There are lots of scientists who have those kinds of secret ambitions, like even in music, so this person was like, “I really regret not taking some time to just be a musician for a while before going to grad school.” And I was like, “Well, yeah. You never know. You never know what’s working for people.”

Shannon Odell:

Yeah.

Andy Luttrell:

There's no one way to do anything.

Shannon Odell:

Exactly. And it's like I think that narrative, hopefully that narrative is changing a little bit, the idea that when you're in a Ph.D. program or when you're going to grad school it's like you have to have a toxic work schedule. Hopefully that narrative is changing, and that you also have to be a full person when you leave grad school. You need to have hobbies. You need to have things that make you feel good. Not that science doesn't make you feel good, but like... You need balance.

Andy Luttrell:

Spoken like the host of a Self-Care podcast.

Shannon Odell:

Yes. Exactly.

Andy Luttrell:

So, the train of thought I was on before this was just to ask whether in being in the comedy world, is there any insight that you've gotten from comedians that's affected your science communication? Or that people could benefit from? Or like ways comedians handle audiences or adapt to unpredictable situations that would be of use to science communicators?

Shannon Odell:

Yeah. I mean, I think I owe so much of my science communication to the comedians I came up watching, and like friends that I've watched throughout the years. I think what's... Something I really love about improv comedy is that, because I did a lot of improv comedy to start out with, is this idea that like, "Okay, you said something. We can move on from that." I think with science, we can get so caught up in our words, and I think it's okay to like... You're doing science communication, oops, I fumbled that, let me just correct that. Because scientists are people and we're trying our best to communicate the facts as well as we can, but we're going to make mistakes because we are humans, just like at an open mic you might do a joke and it might not be funny at all, and that's okay. You learned that that joke wasn't funny. It was funny to maybe you in your head, but not to a general audience. I think I've learned a little bit of that, like this forgiveness of like as a science communicator, it is important that we fact check, and we're holding ourselves to a high standard, but mistakes can happen, and as long as you're open to correcting those mistakes and being transparent about it, I think that's something I really learned from comedy, and it's okay.

Andy Luttrell:

That's a very inspiring place to end, so I appreciate you coming on, Shannon, talking about the stuff that you do. This has been great to hear about.

Shannon Odell:

Yeah, it was so great meeting you. This was a very fun conversation.

Andy Luttrell:

Thank you so much to Shannon for coming on and having that fun conversation. Check out the show notes for a link to her website and be sure to catch up on her fantastic science videos on

YouTube. If you're new to the show, be sure to subscribe on Apple Podcasts or wherever it is you get podcasts. You don't want to miss out on this beautiful ear candy. And this is also a great opportunity to rate and review this show. Your kind words and five-star ratings help people find this podcast. As always, you can find us at OpinionSciencePodcast.com, and follow us on Twitter or Facebook @OpinionSciPod. Okay, this outro is officially over. See you next week. Bye-bye.