

Bill Glovin: Hi, and welcome to The Dana Foundation podcast. I'm Bill Glovin. Today, we have a very special guest, Shannon Odell, the creator and star of a series called [Your Brain On ...](#) and you can fill in the blank there. You can find these videos at shannonodell.com. When Shannon isn't making these entertaining and informative videos, she's a neuroscience Ph.D. student at Cornell Weill. Like me, she's originally from New Jersey, and we hope you won't hold that against us. Shannon's originally from Byram Township, but that's hardly even New Jersey. It's out on Route 80 in the sticks where there's real nature and hardly any shopping malls and traffic. These podcasts that we're doing here are rather new. So far, we've had the great jazz composer and guitarist, Pat Metheny, and Baba Brinkman, the creator and star of The Rap Guide to Consciousness, which is at the Soho Playhouse through April. We really appreciate you, the listener, and if you like these podcasts, feel free to let us know by email, phone, or carrier pigeon.

Bill Glovin: Anyway, instead of me going on and on, let's get Shannon's story from Shannon. Welcome to the podcast.

Shannon Odell: Thank you for having me.

Bill Glovin: Let's begin with the videos and how they came about.

Shannon Odell: Sure. First of all, I'd like to say I highly identify as being from New Jersey. Though a lot of my Jersey friends say to me, "Sussex County? I don't think that's really New Jersey."

Bill Glovin: It's more like Pennsylvania.

Shannon Odell: Yeah.

Bill Glovin: Yeah.

Shannon Odell: We're right near the border of Pennsylvania.

Bill Glovin: Waterloo. Have you been to the Waterloo?

Shannon Odell: Yeah. I have. I did many school trips there.

Bill Glovin: Yeah. Even I went to school trips there, back in like the 1800s. It's been around a long time. Anyway, getting back to the videos.

Shannon Odell: Yeah. Essentially how they came about was, I had a couple friends in comedy who worked at this media company, Inverse. Inverse's mission is to look at science and technology. They were on the video production team, and they knew I had done a live show called Drunk Science, so they thought we have to make this into a video of some sort. They knew I was a Ph.D. student, and so that's kind of where the first video came from, which was "The Science of What

Happens When You Drink Alcohol.” In that video, I drank alcohol as I talked about it.

I've been performing comedy in this city for, I think, almost six years now. I can't even remember when I came to this city, but since moving to this city, I moved to this city to start a technician job that Albert Einstein College of Medicine, where I was working in a neuroscience lab. So, kind of since I moved to the city, I started out in science, and I started out this other path in comedy. Thankfully, at this point, I've been able to really connect the two.

Bill Glovin: Let's go back to the beginning. Were you interested in science in, let's say, middle school and high school?

Shannon Odell: Yeah. Once I figured I couldn't become a cat when I grew up, I decided I wanted to be a paleontologist. Since then, it kind of evolved, but I always loved science. I was lucky to have a really, really great biology teacher my freshman year in high school, and really encouraged me and, yeah, I kind of fell in love with biology. I was a biology major in college, and towards the end of my college career, I kind of figured out I wanted to go into neuroscience.

Bill Glovin: Where did you do your undergrad?

Shannon Odell: At Vassar College. I was a biology major there, but I had a mini focus in behavior, which kind of became my interest in neuroscience.

Bill Glovin: And let me just say, if you haven't seen these videos, folks, you should really check them out, because they're hysterical, for the most part. The one on alcohol especially grabbed me, but they're all very good. And I guess when Halloween comes, you can have your chance to be a kitten or a cat?

Shannon Odell: Right. Yeah. That's really-

Bill Glovin: Is that your standard costume?

Shannon Odell: No. Not really. I don't even really like cats anymore, but you could watch the video, your brain on what happens when you're around kittens. We do have a video, *Your Brain on Kittens*.

Bill Glovin: You say the word neuroscience, and people's eyes tend to glaze over. How do you overcome that?

Shannon Odell: I think that's definitely a thing that happens. I think, in general, it may be the way that people have been presented with science in general. Most people think of science in an academic sense. They think of maybe textbooks and being locked up in a lab. But that's really not what science is, and I think you're just presenting yourself as a person, just like every other 30-year-old woman, I have friends, I have things I like to do. I'm just a person who happens to study the

brain for a living, and there are things like, I have trouble at my job and I have trouble with experiments. These are things that people relate to, so I think it's kind of breaking down those barriers and not putting yourself on a pedestal that is unapproachable.

Bill Glovin: One of your videos was *Your Brain on the Flu*. You were very convincing, and I just couldn't help wondering, did you really have the flu? Or were you totally acting?

Shannon Odell: We planned that shoot before I was sick, but I just happened to be sick for this shoot. It was funny, I had written it, and we were going to shoot it the next week, and I was like, "Chances are, I'll probably be sick," because I think we shot it in January, and I chronically have a cold. I'm bad, I touched the subway poles and I need to wash my hands probably. But I have a weak immune system, so I ended up being sick, so it was kind of funny shooting that shoot. They were like, "Try to make yourself look sicker," I'm like, "I don't think I need to look sicker. I already look pretty sick, and I feel miserable," so, not that much acting needed to happen.

Bill Glovin: Really? Okay. So, take me through the process a little bit of how you create them. First, I guess, you write them? You sit down and probably write them? Do you get any technical guidance from anyone? Or is it just your own research?

Shannon Odell: Yeah. Normally, when I go about episode, what I do is, I start at review articles. Look at the literature, go to a review article, see how people have been talking about the subject. And then, I look at individual studies. All my research starts with, I really think it's important that I start with primary research articles, just because I have access to primary research articles, since I am in grad school, and I have the ability to read them quickly and kind of synthesize them. So, I think it's important that I be able to give the public access to maybe some information that they might not have access to on their own, because of paywalls, or things of that nature.

Bill Glovin: So then, once you have the script, how many people are involved? Do you have a creative team?

Shannon Odell: Yeah. There's a creative production team at Inverse that I work with. They look at my scripts. Sometimes they help me make it more relatable to the public, in case I accidentally use terminology that maybe only neuroscientists would use. Sometimes I forget. And then, they do a lot of the work in terms of finding the location and finding everything that you need in terms of production, providing equipment, and they do an incredible job with the editing, because I need a lot of editing.

Bill Glovin: So, you don't do the editing? You have somebody who handles that?

Shannon Odell: Mm-hmm (affirmative).

Bill Glovin: Is there one person who's been basically editing all of them?

Shannon Odell: Yes. Riley Williams over at Inverse has done so much work with the series. This series wouldn't be anything without him.

Bill Glovin: He does a great job. Let me just tell the listeners that, when you watch one of these videos, you're seeing maps, and portions of the brain, and all kinds of special effects that are being used. The production values are really incredible for this. And I'm thinking this is really costing a lot of money to make. I don't know if you get paid, and I don't know if that even matters to this, but somebody's putting money into this, and that's helping, I'm sure.

Shannon Odell: Yeah. I'm really thankful for Inverse. They're a media company that really works to make science and technology, and news like that accessible, and they have been really open and have come up with such cool ways of presenting information, and they always will double-check things with me. Like, "Is this arrow pointing to the right region of the brain?" I don't think you always get that when you're working with media companies. It can be, they'll want to spin it to make it cool or interesting, where they've been so amazing with working with me and making sure that the story is 100% correct, and really science first.

Bill Glovin: Right. And just to give a plug to Inverse, when I went to their website, I wanted to find out a little bit more about them, and it really wasn't clear, from their top, usually you see an about or a contact. None of that exists. So, I said, "Oh, it must be on the bottom." So, I started to scroll, and I'm scrolling, and I'm scrolling, and I'm scrolling for like three minutes, and I'm not getting to the bottom. The content on there is endless.

Shannon Odell: Yeah. Yeah. They have a really productive team.

Bill Glovin: Man.

Shannon Odell: Yeah.

Bill Glovin: So, they are based in Brooklyn?

Shannon Odell: They're based in New York.

Bill Glovin: Okay.

Shannon Odell: Yeah. In Manhattan.

Bill Glovin: All right. Well, it's a great collaboration, for sure. And I noticed that you got Mickey Hart for your one on music. And for listeners who might not know who that is, he was the long-time drummer of the Grateful Dead. Not the original drummer, but the Grateful Dead basically had two drummers, and he joined them relatively early in the '70s. He's a tough get. I've tried to get him for a story

at one point, and he just bowed out at the last minute, so I've got to give you kudos for landing him.

Shannon Odell: Yeah.

Bill Glovin: He's quite a character.

Shannon Odell: Yeah. He's a character, and he's a busy man, but actually, his team reached out to us, which was really awesome, I guess. His team had seen the alcohol video, or the flu video, and they said, "Hey, we're doing this event at the Museum of Natural History. It would be awesome if you could come and record it, and we can do something about music in the brain." It was really serendipitous, because the Museum of Natural History was also doing an exhibit on sound and different sensory information, so sound was part of it, so we could kind of get into the exhibit and record our episode there, and then also have Mickey talk in a little bit at the beginning and stuff.

Bill Glovin: He's quite a character, and he works closely with a fellow named Adam Gazzaley, who is also ... Well, he's not a rising star. He's a star in sort of neuroscience circles, especially having to do with music and brain games in that field.

So, how long does it take you from inception to completion for one of these?

Shannon Odell: for a while there, we were really producing them very quickly. We had a timeline at one point where I would write a week, it was like every two weeks, essentially. In terms of from script to shooting, but then of course, editing the videos, because they put so much work into the art that they put in it, and the cuts, and the graphics, so then that would take another two weeks, or another month. But it moved pretty quickly. There was a point where I was deep in researching all different types of things, like every day, I was at my computer. But it was so fun to read all these articles that I wouldn't necessarily look at, because when you're getting your Ph.D., you hyper-focus into one specific thing, and you go to lectures, and you hear about things, but you don't get to kind of look at the literature at large, so it was really fun.

Bill Glovin: Get more of a generalist education by doing the work, which is helpful, because I think it lends itself to probably helping you have a framework for your own specialty area, when you understand how other things kind of work alongside it.

Shannon Odell: Yeah.

Bill Glovin: And that's got to be positive.

Shannon Odell: Absolutely.

Bill Glovin: So, that brings me to your own kind of neuroscience education, and fitting it all together must be crazy. The one about *Your Brain On Caffeine*, that probably ranked true to you.

Shannon Odell: Really rang true. That and the *Your Brain On Sleep Deprivation*. I don't know if you saw that one?

Bill Glovin: Yes. I saw all of them.

Shannon Odell: Those hit close to home.

Bill Glovin: Yeah. Right.

Shannon Odell: I have been really lucky in my program to really be able to have a nice work-life balance in my Ph.D. program. I've been able to do my Ph.D., I'm there during the day, and then, in the evenings, I kind of live my other life, which involves sometimes making these videos, or doing my live comedy shows, or sometimes doing comedy shows that have nothing to do with science. It's been a lot, but I like being busy.

Bill Glovin: Yeah. You must.

Shannon Odell: Yeah. It's a love-hate relationship. I always strive. I'm like, "Oh, I can't wait to have a full weekend off," and then I hit the full weekend off, and I'm like, "I am so bored." Unless I'm running from place to place, I'm like, "What is there to do? Watch TV? I don't want to do that."

Bill Glovin: Yeah. Well, that's the New York City pace, right?

Shannon Odell: Yeah.

Bill Glovin: You get used to that.

Shannon Odell: Exactly.

Bill Glovin: And then, you go other places, and you go, "How can they even survive going this pace?"

Shannon Odell: I know. I go back home to Jersey and I'm like, "Ugh."

Bill Glovin: Oh, yeah. Kind of look out the window and see trees.

Shannon Odell: Yeah.

Bill Glovin: And birds, and nothing much is happening. Yeah.

Bill Glovin: Tell us a little about your own specialty area. What are you working on? And what do you plan to do with it?

Shannon Odell: I work in epigenetics. Specifically, we look at a certain region of the brain called the hippocampus, which is home to memory. I look at a hyper-specific region of the hippocampus called the dentate gyrus. Epigenetics, basically these are the marks that are on top of our DNA. They're in charge of what genes get expressed, and therefore what proteins are on a cell. So they create, really, the working parts of each cell, and dictate what cells do, or what neurons do. So, I look at a very molecular level of these dentate gyrus cells, and kind of how their epigenetic state relates to memory at large. It's looking at a super micro part of the cell, and then seeing, behaviorally, what it does to memory.

Bill Glovin: What is the endgame for that kind of research? How will it translate into possibly helping people?

Shannon Odell: There are so many different things that, in terms of disease, or psychological states that affect memory. We have things like Alzheimer's, which of course we know is memory-related, but also, things like PTSD. So, really understanding how memory works at a very molecular level is really important in order to find new treatments or new avenues of treatment, really.

Bill Glovin: Okay. Listeners, you can wake up now. We're going to get back to the videos. How many have you made so far? And how many more do you plan to make?

Shannon Odell: I think our first season had maybe 12. 10 or 12. We also did these other videos that were called Office Hours. They weren't on a specific topic, but I essentially answered questions that viewers had sent in, which was really fun. And then, we did three episodes in this season. Now, as you mentioned, it takes a lot of money to produce these high-production scale videos, so mainly we make the videos, now when, for example, when we did *Your Brain On Horror*, AMC Theaters had come in and said, "Hey, we want to promote the movie *Halloween*. Can you do a video about what happens to your brain when you're watching a horror film?" So, they funded us and we were able to create a cool video about that.

Bill Glovin: Wow.

Shannon Odell: Yeah. And for the conspiracy theories episode, that was sponsored by The CW. They had a new show called *Roswell* that was about Roswell, New Mexico.

Bill Glovin: Sure.

Shannon Odell: So, we basically now, are in a state where we wait to see if someone wants to sponsor a video, and then we create it.

Bill Glovin: Oh, wow. So, that's interesting that a lot of your videos have been the idea of someone else, who have come to you once they've seen what you've done, and know how good it potentially can be, and they want to kind of get on the bandwagon.

Shannon Odell: Yeah.

Bill Glovin: That's a great thing.

Shannon Odell: Yeah. And I love the idea that it's ... I didn't even know I could find that much on what happens to your brain with conspiracy theories, but there's so much research out there, and why people cling onto the conspiracy theories, or why we might believe in conspiracy theories. So, there's really, really any topic you can think of, could find some neuroscience behind it.

Bill Glovin: How about the Dispensary Association? When are they going to band together and say, "Hey, how about your brain on marijuana?"

Shannon Odell: Right? Yeah.

Bill Glovin: Cannabinoids, or CBC. That's a hot topic right now.

Shannon Odell: Absolutely. Yeah.

Bill Glovin: If you're listening out there, you guys, Shannon's ready.

Shannon Odell: Yeah. We're ready. We're ready to make an episode.

Bill Glovin: How have they tracked your audience? I noticed they made some claims that seem fairly bold in terms of millions of hits. Is that really true?

Shannon Odell: Yeah. Those are all from the Facebook Watch page. We have them up on YouTube, but the main platform of these videos is on Facebook Watch, which we have been really lucky to create a fan base. We have over 400,000 followers to that page alone. I think the alcohol video at this point, according to Facebook, has around 33,000,000 views, which feels wild to me.

Bill Glovin: Wow, I've shown it to about 3,000 people myself.

Shannon Odell: Oh, there you go. Thank you very much. Yeah, they seem to resonate, which I love. I love the idea of learning, and I love neuroscience, so I'm glad when people latch onto the videos and learn something, and want to share them. That's really awesome.

Bill Glovin: I showed the one about puppies to my daughter, who works with animals, loves animals. It started off with something like you said, "Puppies are dumb creatures," or something like that. And she immediately was like, "I hate this."

Shannon Odell: Oh my gosh, yes.

Bill Glovin: She took such offense at that. I was like, "Wow. Hang in there. It was just a joke."

Shannon Odell: Right. Yeah. Yeah. It's just a joke.

Bill Glovin: There's a lot of sensitivities, for sure, with that stuff.

Shannon Odell: I know.

Bill Glovin: So, you've got to be careful, right?

Shannon Odell: Yeah. I've definitely ... For that video in particular, I think what I said was, "Their dumb little faces," which I find is an endearing term. When I say a dog has a dumb little face, I mean it's so cute it's dumb. And I got a lot of emails about that.

Bill Glovin: Oh, you did?

Shannon Odell: "How dare you call dogs dumb?" I'm not saying they're dumb, I'm just saying they have dumb little faces.

Bill Glovin: Wow. Do you have any comedy mentors, or people you especially admire?

Shannon Odell: Yeah. Comedy mentors. I think this idea of bridging education and comedy is a really cool idea. I know, for example, the show *Adam Ruins Everything*, have you heard of that?

Bill Glovin: No, don't know of it.

Shannon Odell: It's on truTV, and what they do is, it's a comedian, Adam Conroy, I think is his name? He basically breaks down different things and talks about all the facts and science beneath things. It's kind of very similar to *Your Brain On Blank*, but it happens to be a TV show. I think people listen to comedians, and comedians have a platform, so I think it's great when we can use it to educate people.

Shannon Odell: I also just love Jenny Slate, is one of my favorite comedians. Chelsea Peretti, is one of my favorite comedians.

Bill Glovin: Have you done any stand-up yourself?

Shannon Odell: Yes. I do do stand-up. I tend to do a lot of stand-up on my life as a neuroscientist, or as a Ph.D. candidate, and what that's like. I don't know how relatable it is to people, but it helps. It's almost like a catharsis to me.

Bill Glovin: Are you getting anywhere?

Shannon Odell: Yeah. I do shows here and there, mostly in comedy basements. You know how it goes in New York. But yeah. It's fun.

Bill Glovin: Would you ever consider possibly full-time work in the entertainment business instead of going into neuroscience research?

Shannon Odell: My hope for the future is to go into science communication, and whatever that means. Whether that means becoming a writer, or a scientific outlet, or becoming an editor, or my dream would be host a TV show that's kind of like *Your Brain On Blank*, except on a big scale, and really use humor to teach people about science, because those are my two favorite things.

Bill Glovin: Well, where do you see yourself in 10 years? Or is that an astute question, you can't even imagine that?

Shannon Odell: Eh. I can't even imagine myself out of this Ph.D. program, even though I'm very close to graduating, but that tends to be the thought that you feel as you're approaching your dissertation date, that you can't imagine anything else but working on your dissertation. But I hope to be still working in science, and probably that means communicating science to the public in some way. Hopefully making people laugh, still.

Bill Glovin: Yeah. Laughter is fun, and your videos are certainly, they're comedy.

Shannon Odell: Yeah.

Bill Glovin: I found them very amusing. And I think that's a great place to end. Again, thank you, Shannon, I know how busy you are juggling 47 things, for coming in here. And keep up the good work. We wish you the best. And hopefully you'll keep on making these things.

Shannon Odell: Thank you so much.

Bill Glovin: And you'll become super famous and you'll get invited to the White House when we have a new president.

Shannon Odell: Yeah, yeah. Let's wait until then.

Bill Glovin: Let's wait until then. And the skies the limit. Let's go, New Jersey.

Shannon Odell: Yes. Let's go, New Jersey.

Bill Glovin: That's our Dana Foundation podcast with Shannon Odell, creator of *Your Brain On* fill in the blank videos. The subjects include kittens, alcohol, hangovers, breakups, the flu, horror, social media, sugar, and the list goes on.

Bill Glovin:

Facebook has come under some pretty intense criticism over the past year or so over privacy concerns, and deservedly so. But this is one time being on Facebook really paid off. My daughter's friend, Andi Obarski, who also happens to be a Facebook friend of mine, handled the cinematography on Shannon's most recent video, *Your Brain On Conspiracy Theories*. I saw the posting on my feed, and the rest is history, as they say. There are two places you can find Shannon's videos, either at shannonodell.com, that's two Ls in Odell, or on Facebook Watch.

You can find all of our Dana Foundation content at dana.org, and our most recent podcast on the slider at the top of the page. All other Dana and Cerebrum podcasts can be found by going to our multimedia link on our other platforms, which includes Spotify, iTunes, YouTube, SoundCloud, and others.

I'd like to give a shout out to Bruce Hanson, who was the founder in principal behind two bands, the epic Fellaheen, and his newest project, Dogpile on the Rabbit. Bruce composed the piece of music you were hearing throughout the podcast, and if you want to hear more, go to fellaheen.com.

From The Dana Foundation offices in Midtown Manhattan, thanks to you, the listener, for checking us out. Have a great day.