

## *Practical Significance* | Episode 7: Turning the Tables on Glen, Richard, Roger, and John!



**Donna:** Welcome everyone to *Practical Significance*. I just can't tell you how excited that Ron and I are to have this episode—podcast on podcasting. We are joined by four exceptional colleagues, all of whom have podcasts. So, we will have **Glen Wright Colopy**, who has *Data and Science*, **Roger Peng**, who has the *Effort Report* and *Not So Standard Deviations*, **John Bailer**, who is one of the hosts of *Stats + Stories*, and **Richard Zink** who hosts the *Biopharm* Podcast. So, join us for a really lively conversation to learn all there is to know about podcasting. And I'm going to get started by asking Roger and Glen to talk about the origin story for yourselves in podcasting. So, Roger, tell us how you got started.

**Roger:** Yeah, so I've been listening to podcasts for a really long time, maybe before they were even cool. And you know, one of the things that I noticed is as the data science area grew, is that there wasn't quite the ecosystem of podcasts that, for example, like the tech community had. So, there were a lot of tech podcasts talking about computing and technology, things like that. And I didn't feel like we had a similar kind of ecosystem in the data science world. So that's kind of how I got started *Not So Standard Deviations*, you know, in terms of a podcast, that's like a talking podcast where we just talk about kind of whatever's going on in the world of data science.

**Donna:** Glen, please tell us about *Data and Science*, which actually underwent a name change. So that's kind of cool.

**Glen:** We changed it to *Data and Science* because that's what we were talking about a lot – just data and science in general. So, we were previously a healthcare data science focus, and then we changed to just data in science to make it super on the nose about what we were discussing. And yeah, so I guess sort of the impetus for my podcast was that I was having a lot of these like one-on-one conversations and small group conversations - in-person, and it was either someone else helping me, another expert, technical expert where I was helping somebody else, maybe a post doc or a doctoral student. And it seemed a real shame that essentially, we were having these small group benefits, but a lot of other people could have really benefited from hearing those. So, the easiest way is to sort of try to broadcast those and curate those conversations so that more people could benefit.

So, I think that was the main motivation for me just to try and make sure that we aren't hoarding this knowledge in just one-off conversations but try to produce it so that a lot of people can listen in and start better vetting their own data science ideas and getting ideas from other places. And I think that is it's the dialectic aspect of it. It has a huge learning benefit compared to, for example, reading publications and things like that. But I think that that dialogue and that conversational element is a very good way at arriving at better strategies and better scientific truths.

**Donna:** So, thanks, Roger, and Glen. Can I swing over to John and then Richard, to ask you how you decide on topics for your podcasts?

**John:** Well, there are a couple of dimensions on which we think about doing this. One is on the *Stats + Stories* podcast, we'll think about whether we want something that's evergreen versus timely. So, a topic that might be able to reference something that's happening right now is the component of the timely part. And the other would be just the general topic that could be listened to a year or two later that might still be relevant. Some of the timely topics could be things like side effects of the pandemic vaccines. The more general stuff could be anything from how drugs get registered to what's going on in journalism and data journalism.

We think about calendar index topics, like something for Valentine's Day or back to school. We work with people at *Significance* and *CHANCE* magazines to think about recent stories that are coming up and how they might be featured as guests. Generally, there's also topics that are of interest to me and the cohosts. And lastly, we'll listen to topics that are suggested by listeners. So, that's the spectrum of options.

**Richard:** In terms of topics, so the *Biopharm* podcast may be quite a bit more focused than the other podcasts and the topics that people talk about. But I think a lot of it has to do with where the section is at any given time. So, I identify a lot of the topics based on what's going on in particular meetings. And this can be topics that are of great importance that can really use a deep dive. So, the one that's coming most to mind recently is a topic on estimations and talking about how that's impacting what we do in the pharmaceutical realm; but also looking at our conferences and topics that may not necessarily get that bandwidth. So, this can be anything from vaccines that may not have a lot of sessions devoted to it.

So, we had a conversation once upon a time with the Center of Veterinary Medicine so that we could better understand how drug products are developed in animals. So, a lot of it is trying to educate, but also inform people about different aspects about what goes on in medical product development and the regulatory environment. So those are topics that are probably to use John's words, "a bit more evergreen." But we also have topics that focus on what's specific to the time of year. So, I try to have a conversation with the newly elected chair of the Biopharmaceutical Section every year to kind of hear what their vision is for the section and what they hope to accomplish during the year.

And we also have a conversation with the co-chairs of our Regulatory Industry Statistics Workshop to hear about the meeting and all the different topics that are going to take place and all the new features of the workshop. So, this is our annual conference, our flagship conference that we have every year that's attended by roughly a thousand people. And I hope that talking about the meeting generates some excitement about it. And I guess finally, I am ignorant about a lot of topics. So, I think part of it too, is just trying to educate myself.

And if there's a topic that I know very little about, I can just dig into a bunch of articles or I can have a conversation with people who are experts in this field and hopefully other people can benefit from that as well.

**Donna:** So, I must admit that I am a complete fan of all these podcasts. And so, this is really a lot of fun for me to have this opportunity to talk with you. I'm kind of curious, John and Roger, how much do you prepare for each episode? I feel like I have a little bit of insight in that because I'm a listener, but I'd love to hear you tell us more. So, John, why don't we start with you?

**John:** Sure. We do prepare Donna. I mean, it can range from reviewing several papers that people have written to reading books. I mean, Tim Hartford had a recent book coming up that was just released as a data detective in the states. And so, it could be reading a book, could be looking at posts that they've written, what they are blogging on, and there could be articles that they've contributed. So, there's a spectrum of things we do in terms of background reading and just looking at their presence on social media as well. The other part of it is in terms of preparation is sketching out a series of questions or more discussion prompts than questions. And lastly, there are some guests that like to have conversations in advance of the recording, so that with some guests I'll end up having a 15-to-30-minute conversation about the flow of the episode or the flow of how we do recordings and what kind of things might be asked.

**Ron:** That's great. Thank you. And Roger, feel free to talk about both podcasts if you would like.

**Roger:** One of the things that I thought about a lot when I started both podcasts is the kind of sustainability of the effort. Cause I've had a little experience on other kind of content platforms, whether it's blogging or a YouTube videos and things like that. And one of the things I found is that it can be very hard to sustain if it's a lot of effort to do, of course, on top of all our regular jobs. And perhaps to the opposite of John here, I think one of the things I tried to do is set it up so that we didn't have to prepare that much. And so, one of the ways that we do that for example, is that both of my podcasts, we don't have guests. Each one has a regular co-host, and we can kind of talk to each other.

The other one is that I was just mentioning this to Hilary Parker, my cohost of the *Not So Standard Deviations* podcast, I write out a brief outline, but I'd never send it to her. And so, she kind of does improv while I read from the script, essentially. It's worked out pretty well for us. We just recorded the 134th episode for *Not So Standard Deviations*. And obviously it's a very different format. And I think there are opportunities that perhaps we give up by doing it this way, but even now after five or six years, it's still fun. It's still manageable and I can fit it in with all the other things that I'm working on. That's great. Thanks so much. I shouldn't be surprised, right, that with statistical podcast there'd be all this variation of content and style, but it's also really worth noting.

**Ron:** And I know this is something that Donna cares a lot about is that these podcasts make a collection of almost unlimited professional development opportunities for statisticians everywhere, especially for our oral learners out there. And it occurred to me that another kind of professional development opportunity related to a podcast is hosting a podcast. You've all learned a lot from hosting your podcasts. And so, I'm going to ask Glen and Richard for our listeners, give us please the best advice you received or that you would like to share for someone who's thinking about starting a podcast.

**Glen:** Yeah. Cool. So, this is probably a good question to follow up off of what Roger said because one of the most important things is make sure that it's a sustainable effort, make sure that you don't burn out because obviously no one likes to look like a quitter, but also because if you don't enjoy it, if you don't feel like you'll have actually gained something from it, that's no good way to spend your time. And statisticians and data scientists have such a large opportunity cost on their time.

Then you do need to be sure that doing something like a podcast is worth that time. So, on the issue of riffing off what Roger said, just to make things are sustainable. I'd honestly say always work off a topic that you're very interested in. You know, one of my things is you don't play to the audience, you play to

your own interests, and you will find other people who are interested in that thing, but it's a lot more sustainable if you are really covering a topic that you're passionate about.

Even if it's not as broadly interesting, you're better off having a dedicated, small fan base, than sort of this generic, but more lukewarm fan base. Another bit is to just be yourself. If you're going to be on talking for several hours at a time on air that's not where you can wear a mask and, or really cover up who you are. You are going to have to be yourself and, your personality is going to come through. So, I think that's one of the things where it's just like, don't worry. People will like you. Statisticians, data scientists – were a forgiving bunch, just being yourself and having your personality come through. Another quick thing I'd say is just for pass it on to Richard is just if you're, for example, a graduate student, who's concerned doing a podcast, don't wait until you're done with your doctorate.

Just jump in and start doing it. And one of the main reasons is because while you're in that university setting, you have nearly an infinite amount of access to guests who everyone wants to listen to. And so, I think that's something that's very important that while you have that huge access to guests, you can even go and see them in person, and that is a huge opportunity because a lot of where your time goes is to acquiring guests and vetting guests and things like that. So, I would say even if you're very early in your career, just jump in and start growing them and you'll get better at it with time. If you are in a university setting, definitely take advantage of that, especially if you're early career.

**Richard:** Yeah. That's really good advice. And if I had to sum up my advice in one way, I'd say it just to do you have to keep it personal, definitely try to set up your podcast in a way that's comfortable for you since you're going to be the one who's doing it over time. And, and sort of along with that, don't be afraid to change how things started out. Initially, I think over time, as you're trying to get your voice and figure out the format of how you want to do things, things are naturally going to change over time until you get this rhythm of, well, this is how things are going to be in the podcast and the conversations from week to week or month to month, depending on when you do it. But I think in terms of the discussions, don't be afraid to also get into some of the personal aspects of individual's experience.

You can talk very generically about their professional experience, but it's interesting the times that people share their personal stories in terms of how they grew up or their experiences at work that were either very successful or very devastating that sort of shaped how they were as statisticians makes for very interesting listening. So of course, you may need to tread delicately in those areas, but I think it makes for interesting topics. And I think finally, the one interesting thing about is and Glen was talking about reaching out to all these individuals with whom you can have conversations with, I think at a certain aspect, trying to abandon fear.

So certainly, I don't know lots of people and there's key people in the field that I'd love to have conversations with. Then, at the end of the day, you may try to get an introduction, but sometimes it's as easy as just sending an email and reaching out and say, "Hey, are you interested in talking about what you do?" And oftentimes people are more than happy to do that. So, you may have this fear about trying to reach out to key people, but just put that aside and do it.

**Glen:** Just to build off what Richard said, as far as the point, I'll first say, reach out to people. And when some of them inevitably say, "no," just dust yourself off and keep going because those emails are private. So, no one knows how many guests are saying "no" to you. They only see the podcasts that actually come out. And, as far as going from those more generic statistical and data science experiences

to personal experiences, one thing I've found really successful is I actually started doing some episodes just on my own personal "face plants" in data science and people really like those episodes because that is where most of the learning comes in. You know, you don't learn from your successes as viscerally as you learn from your failures and mistakes and things like that.

The idea that you try to make as many mistakes as possible quickly, you can learn quickly. And so, I think that one of the strategies that I've tried to employ is if I can highlight my own mistakes and obviously no one else must feel uncomfortable by having their own weaknesses exposed. So, I'm happy to be sort of the punching bag or the crash dummy for other people, so they can see what went wrong and it provides a very good learning opportunity for people without having to worry about making the guests uncomfortable.

I brought in a guest, Kristen Morgan from the University of Connecticut, and she provided the sort of the running commentary on my mistakes, which I thought was a very good dynamic. And that creates a more trusting dynamic while still going through mistakes, which is of extremely good learning value.

**Ron:** So, Glen and Richard, that's good advice and, I sir am already quite experienced at rejection. So, it's not as big a deal for those of us like that! And, speaking about the personal aspect or getting to know the people, I think that's one of the reasons that I'm drawn to podcasts is that I start to feel like I have all these new friends at least virtual friends. And so, it goes without saying that the podcast represented here are some of my favorites, but I'm always looking to add to my subscribe list. So, I'd like to hear from all of you what your favorites are, and I'll start with Roger.

**Roger:** It's hard to pick just one. I hope I can cheat and maybe give two: The Casual Inference podcast with the Lucy D'Agostino McGowan and the Ellie Marie. So, Lucy is a statistician, and Ellie is an epidemiologist. They talk about causal inference, but they also talk about other things too. So that's a great podcast. They have a great dynamic and I really like it.

Another one that's kind of not in this area that I really encourage other people listen to is the *Script Notes* podcast, which is a podcast about making movies. It's two screenwriters. And I would say not just enjoyable, but I've gotten a lot out of it just for my own work and just because of the common creative nature of both being an academic and being a screenwriter. There's quite a bit that they share. So, it's a great podcast. Also, if you love movies, it's a great podcast. So those are just two as I'm scrolling through my phone right now, those are at the top of my list.

**Ron:** Oh, that's great. Thank you. And John, I know that I've gotten a lot of great reads from your annual book list. So now add to my podcast list.

**John:** Thanks. And, you know, Roger, I saw that they said that your "favorites," so I didn't feel any constraints. A couple that I would mention just as there were inspirations for us early on - *Freakonomics*, where there was both an economist and journalists that were featured on it. One of the things that we thought a lot about launched ours. That was a collaboration between statisticians and journalists.

*Science Friday* has been an inspiration and just as brilliantly done, and Tim Harford's work on *More or Less* and *Cautionary Tales* are a couple that I would recommend considering. And some that are different from some of the things we've mentioned in our scope include things like *Clear Plus Vivid* with Alan Alda; *10% Happier* with Dan Harris and *Boot Camp for the Brain* with Darren Brown are three others that I find are really interesting and engaging.

**Ron:** Oh, that's great. I'm definitely going to check out those three because they are all new to me, which is really exciting. Richard, how about you?

**Richard:** I have to say most of my other podcast listening is focused on entertainment or things to get me to stop thinking about all those voices in my head related to statistics. I would have to say the podcast I listened to the longest is, the *WTF* podcast with Mark Marin. This is more of an entertainment show. He talks one-on-one with different celebrities, whether they're writers or actors, and you know, they just sit down without a script and have a conversation for 60 to 90 minutes. And I'm always amazed at how he can get into all these interesting stories and backgrounds of people and how they've sort of, address challenges in their life or engaged in their work. Probably one that does touch on statistics a bit, is the *Pod Save the People* podcast. It's a podcast that's done with *Pod Save America*.

They often talk a lot about policy decisions, and they do bring in research and statistical topics, and the impact of different decisions and the effects on people's lives and I think is pretty interesting. And I think more for my entertainment, there's a podcast series called *Improv Beat by Beat*. So, well before the pandemic, I've been taking improvisation classes to better develop my communications and interactions with people. And this podcast series I think is a pretty interesting way of helping develop those skills.

**Donna:** Oh, that's very cool. And Richard, I'm right there with you with the escape. So, I read mysteries to escape and read or a podcast about mysteries and thrillers is one of my favorites. Yeah. So that's very cool. Okay, Glen, so your favorites.

**Glen:** I'm going to sort of come in like hyper-opinionated and odd. For example, I think the *Lex Fridman* podcast is an example of the gold standard of podcasting that still has this wide appeal and addresses general intellectual curiosity. And I think that that one is really good because I don't think you can really become a good scientist focus on your own bubble. So, I really like having a scientist and particularly someone from the machine learning community inspecting these variety of domains. Also, Julia Galef has a podcast called *Rationally Speaking*. I think it's either sponsored by or associated with the New York Skeptic Society. So, Julia Galef fans, she has a podcast, which I think is really cool.

And I liked some of the ideas that revolve around critical reasoning, because I don't think that you can ever be good enough at critical reasoning. It's such an essential skill, but people take it for granted. So, I like how she can curate some very candid conversations around that for some of these sorts of more entertainment side of things.

There's something called the *Wrongful Conviction: Junk Science* podcast., Josh Dubin and Jason Flom. And so, what I found about these are its junk science, for example, around the forensic community and of the testimony that's used to put people behind bars. Some of these podcasts will get your blood pumping because there are many cases where these like weird cults of personality around really bad science, that's used to put innocent people behind bars. I think it's really telling how these so-called scientists get this unshakable faith in their field when they should be further scrutinizing things, especially when so much is on the line.

And then the other one is *Talking Machines*, with Neil Lawrence and Katherine Gorman. So obviously like I'm a real big Neil Lawrence fan. He's obviously a luminary in the Bayesian Nonparametric area. He's also just a really funny guy and really nice in the number of times I've met him in person. So, I guess maybe there's that interpersonal aspect.

**Ron:** Those are great suggestions. Thank you all. I will add those to my library and then have some more podcasts that I'm behind on and feel guilty about being behind on. So, let's switch back to your podcasts and ask you if you have, I'll call on each of you, if you have a favorite story from your podcast experience and Richard, let's start with you.

**Richard:** Thanks. I don't know that I have a favorite story per se. One of the things that I do ask at the beginning of episodes where there tends to be a small number of people participating, is it for them to sort of describe their statistics journey and how they got into statistics. And oftentimes it goes way back to elementary and high school where people identify their interests. But I think the ones that perhaps are a bit more interesting are all these individuals who went off in different directions and sort of found statistics to their higher education or experienced it through their career and totally changed the direction that they were going in terms of what they were studying and what they ultimately wanted to do. So, they had conversations with people who were studying dentistry, forestry, biology, physics, chemistry, you know, all kinds of different topics and ultimately, they fell in love with statistics along the way and decided to make a career out of it. And I think that's pretty powerful that even if we don't reach people earlier on and trying to encourage them into the discipline, that there's still opportunities for people to find their way into the discipline later on.

Thanks, Richard. I, I love hearing those stories as well. Glen, how about you?

**Glen:** I'm not sure how much of a story this is; actually, I might've been when I was recording with Richard. But one time in my old podcasting area, which was right next to a window, a giant coyote walked by my window as we were recording. And it was a good thing. There was an audio recording at the time because basically I had to edit out probably a five second string of surprise profanity when the giant coyote walked by me, and the guest was sort of wondering what was up. So that's one thing that is the most exciting of my stories, but I'd say probably a better story is this has been a huge learning experience. And one thing that I've noticed is that many of the statisticians and data scientists who have come on the show, it doesn't matter, if they differ in methodology or differed in what their applied field is, they very commonly share a lot of concerns about how they personally can add value to the field.

So essentially, they're very, self-conscious in a good way about what they should be doing to maximize the value that they're adding to their scientific or statistical community. And what's interesting is that a lot of their concerns revolve around very similar issues. So maybe that's a bit more of a meta narrative that surprise me. It's been humbling in many ways, because once you start talking to people when you start a podcast. And you're wanting to make sure that it's a good high-quality podcast. You do all your preparation yourself within the questions like will the guests be well-prepared? Will they take this seriously? Things like that. And one thing that I think is really important for me, it was to notice how well these guests did and they didn't need Glen to get it done. I thought that was very important because essentially it helped me put myself in my place as far as better appreciating everything that other perspectives have to offer. I doubt most people who are starting to podcast will be thinking that they're the only person who has something to say, but there's an element where you can appreciate the magnitude of truly how much someone else must share. And I think that's important. And maybe it's a little bit ironic because I think I've gone on too long for this answer talking about what other people must share. So, I'll let other people answer now.

**Ron:** Thanks Glen. And I can imagine how upsetting that coyote was since I think you record on the third floor. Right. So, I could see why that was stressing.

**Glen:** Yeah, this was down in my previous podcast studio in basement. Now I'm three floors up. Perfectly safe from any nearby coyotes.

**Ron:** So, thanks. And Roger, let's turn it over.

**Roger:** One of the things that I've always kind of wondered is like I've never quite figured out what episode is going to be of interest to the audience or like every time I think, oh, this episode has been horrible. Uh, you know, this, or maybe we shouldn't even publish this, uh, you know, it's always been kind of random whether people respond to it or not. It seems to me, or at least I can't explain it. And I just one episode, uh, we recorded a Hilary Parker. My co-host, she actually went back to her childhood home to clean it out because it was being sold and she was going through her shoot, just talking about her entire My Little Pony Collection that she was wanting to save.

We didn't talk about data science or statistics or anything in that episode. And then afterwards, you know, we'd have to republish it. All these people were like asking, "Well, what happened to the ponies?" "Was she able to save them all?" It was all this drama around the My Little Pony Collection. I always find it odd what people respond to, and I can never really predict what it's going to be.

**Ron:** You'll have to tell us the episode number for the My Little Pony Collection episode so we can find out for ourselves what happened. John, let's go to you

**John:** All right. Thank you. Well, we did an episode a while ago here we said we, this was following up a conversation we had with Kerrie Mengersen. And so we were going to do the Better Bayes Competition and we asked people to submit a headline and a lead sentence for a story that would describe Bayes methods and in a general sense. And ultimately, we were expecting a series of entries and we got several really interesting entries, but one that ultimately was the winner was a Haiku.

So, someone had submitted a Haiku. It was brilliant. And we ended up having that guest – was Steven celiac to join us. And just as a quick follow-up, we're coming up to our 200th episode this summer. And so, we were going to do a meme contest. And I just can't wait to see what kind of interest this generates and what kind of things are submitted. So, I'm, I'm anxiously awaiting kind of this next great story.

**Donna:** Oh, that's really fantastic, John. Well, this has just been the most wonderful conversation. I really want to thank Glen, John, Richard, and Roger for sharing with us about their podcasting experience. And I definitely want to encourage all our listeners to listen if you haven't subscribed, to do so and follow them on social media, because you definitely don't want to miss out on the great stories they tell.

And now as is the tradition of *Practical Significance*, I will turn it over to my colleague, Ron for "Ron's Top 10."

**Ron:** Thanks, Donna. We've enjoyed listening today to our statistical podcast enthusiasts and I felt it was important to try to help them along with their work. So, we've collected here at *Practical Significance*, some ideas that they probably should reject for future podcasts. So, Glen, Richard, Roger, John, get your notepads out because *Practical Significance* now brings you the "Top 10 Bad Ideas for a Statistical Podcast."

#10 – "Why Your Probability of Getting a Date Actually is Less Than Zero."

#9 – "The Joys of Convenience Sampling."



#8 – “Building Statistical Tables the Ikea Way.”

#7 – “Computation Free Statistical Tests.”

#6 – “Eye Catching Graphs that Conveyed No Information Whatsoever.”

#5 – “Foolproof Ways to Get the P Value you Want.” Of course, that's my personal favorite!

#4 – “Modern Bayesian Methods for Predicting the Past.”

#3 – “Do What Feels Good. Why Experimental Design is Overrated.”

#2 – “Just Bring Me the Data. Don't Bore Me with How You Collected It!”

#1 – “Stop doing Monte Carlo and Just Go to Monte Carlo.”

So that's a wrap this month's episode of *Practical Significance*. Thank you for joining us. I was going to say, “Goodnight and Good Luck” at this point, but Donna told me that that's already taken. So, I'll just say that we look forward to a new conversation in August right before the Joint Statistical Meetings. Thanks everyone.