Paul: Winner of an astounding seven Academy Awards, Gary Rydstrom, film director and sound designer with Skywalker Sound, has built a career of using innovation, imagination, and technology to help bring to life some of the most beloved cinematic stories of the last 40 years. Gary has worked with some [00:00:30] of Hollywood's biggest directors including Steven Spielberg, George Lucas, Ron Howard, and James Cameron, and his career encompasses a wide range of films including Saving Private Ryan, Toy Story, Monsters, Inc., Titanic, Mrs. Doubtfire, and a host of films in the Star Wars, Terminator, and Indiana Jones franchises.

               Hello. I'm your host, Paul [Tice 00:01:13], and recently had the good fortune to sit down with Gary who just finished working on his latest project, Spielberg's retelling [00:01:00] of the classic West Side Story. We discuss Gary's career and the lessons he's learned as an innovator, the role of playfulness and the creative process, and what keeps him motivated to continue delivering superior results.

               Well, Gary, thank you so much for joining me today and I know you're really busy, you've got a lot of projects. I think you're working on West Side Story right now. Is that correct?

Gary: We've just finished West Side Story. It comes out in theaters in December [00:01:30] and it's one of the many movies that have been delayed coming out to the world because of the pandemic, but our part's done and, I'm not talking out of turn, it's really great.

Paul: Oh, well, yeah.

Gary: I can't wait for it to be on the big screen, literally big screens and seen the way it should be seen.

Paul: Wow. Yeah. It's amazing. And it must have been somewhat of a surreal process too. It's one of the iconic films of the cinematic history and [00:02:00] then you throw in Steven Spielberg and professionals such as yourself. I mean, I'm sure it's just going to be amazing, but it must have been somewhat surreal to be involved in a project like that.

Gary: Yeah. And it's such a beautiful... I mean, there's some worries about remaking something that people remember fondly, but the West Side Story as a piece of art itself is such a beautiful piece of work. It deserves additional treatment and it deserves someone like Spielberg who, if you think [00:02:30] about it, has never directed a musical before. And I think most people aware of his work would say "he's probably going to be really good at it." And he is.

Paul: Yeah, for sure. I think the closest he ever came was probably Indiana Jones in the Temple of Doom with that the whole nightclub scenario at temple Obi Wan or Club Obi Wan.

So thank you for joining me. Just kind of jumping in, thinking about the creative process, are [00:03:00] there design principles that you are drawn to that could be potentially applicable to other disciplines beyond sound design?

Gary: Well, I don't know if maybe this is applicable. Sound work has the potential to take you down the road of doing things with technology more, because technology is so much a part of what we do in sound. And so you can lean on that too much. Maybe this is applicable to other designer artistic endeavors, but my approach [00:03:30] to sound design is to find interesting sounds from the real world and manipulate them, sure, but as little as possible because the organic nature of the real sounds that we're surrounded with are amazing. And technology sometimes gets in the way.

I find the technology for its own sake starts to sound like technology as opposed to something real. And so that's my philosophy for sound. As much as I love technology, I love reality. [00:04:00] That's fun. And to make that work and sound, you have to explore. If I'm going to say I'm going to try to find interesting real sounds, I've got to find ways to find those sounds wherever they might be. So that exploration part of the job is really important, to sort of let yourself be open to listening to things and finding things out in the real world. So I find that to be exploring, using real sounds and using technology as like a spice, not the be all and end all.

Paul: [00:04:30] It's amazing the way that you take those real sounds and you blend them together. So one thing I had seen and people can see this for themselves, there's a video on YouTube where you discussed how you made the dinosaur sounds from Jurassic Park. And it's combination of animals such as tortoise and goose and dog and walrus and dolphin. And so the question is, what spirit of exploration [00:05:00] leads you to think this dinosaur should sound like eight different animals. How do you get there?

Gary: I remember the first thing I did in Jurassic Park was I bought one book on animal vocalizations. I figured I should learn something about what scientists know about animal vocalization. So I learned a couple of really simple facts about animals when they are aggressive versus being passive, if they're dangerous versus being friendly or communicative. [00:05:30] Whether it's full range, a lion roars [inaudible 00:05:34] noise, that those kind of sounds are aggressive, and more pure sounds are more communicative and friendly really. So in Jurassic Park, the brachiosaurus sound like singing because they're gentle. And then the T-Rex sounds like a lion. So I started up by doing at least that kind of research. And I took Ben Burtt, who sort of led to Skywalker Sound through his sound design of Star Wars. I remember when [00:06:00] he started, he had a 4-track tape machine and he would layer sounds. Take a sound, put it on, put another sound, put another sound and then layer and blend these sounds into something new. So he made lightsabers and space ships and things.

So with this digital technology, I was able to layer sounds so I would layer animal sounds. So the first step is record a bunch of animal sounds and then play. Just sit with, in this case, a Synclavier and call up geese and donkeys [00:06:30] and lions and alligators and start blending them together. And my approach was to orchestrate it like music would orchestrate so that the layers would occupy different frequency ranges.

You'd have a low animal, a mid animal, a high pitched animal, and you just play until they kind of focus into something unique. It was a matter of exploration too. There was exploration in the field and there's exploration in the studio. And that's what that was.

Paul: That's amazing. And then to use a musical instrument like the Synclavier, [00:07:00] there's that element of playfulness to that explorative process. How do you cultivate that? And how would you maybe coach others to kind of cultivate a spirit of playfulness in their innovation process?

Gary: Well, I think playfulness is really, really key. One of the things I try to do is not be hard on myself, because sometimes playfulness means you're doing something stupid. If you're trying to do [00:07:30] something new, you just got to let yourself do something stupid. You got to try something. Or this seems crazy. When I organize for a sound crew to cut sound effects, we separate premixes. So we have AFX premix, BFX, CFX, to cut sounds in different layers. And I always used to have an HFX. HFX, to me, was the premix where I wanted the editor to just do something crazy. Just try something, even if it seems [00:08:00] insane, just try an idea. A sweetener for a punch that you would never expect or a weird sound for the ambience or an offscreen, anything.

So the playfulness, you want to let yourself do it, but you got to let other people do it. And I learned early in my sound design career, I would try to make a sound moment in the movie, I would make the full sound. So it was just, here's the sound, give it to an editor and they would cut it. And after a while it seemed limiting. [00:08:30] They're able to play. So then I went to this approach where I make what I consider a toy box. So different bits of sound. I literally put it into a way for them to pluck out sounds. It's organized in different kind of categories, but it's meant to be a toy box. You pull things out and just see what you find and, and that toy box is meant to be kind of inspiring to let someone feel like it's okay to play. So I changed my approach over the years to not only let myself play, but let [00:09:00] the rest of the sound crew play too.

Paul: And I'm sure, just that freedom to explore and play, added unforeseen moments where texture and something new and beautiful kind of emerge. I would never have paired that sound, for instance, I would never necessarily think goose, tortoise, and walrus, and I'm going to blend them together to make a dinosaur. But you know, just that ability to be unlimited and allowing yourself [00:09:30] to kind of explore the tools at hand.

Gary: And even mistakes! You know, mistakes sometimes are wonderful. I remember we were mixing a movie, we directed by Dennis Hopper years ago and he would make mistakes and sort of throw in the wrong thing or get the faders wrong or be feedback or something crazy. And we'd go back to fix it. And Dennis Hopper being Dennis Hopper would go, "Don't fix it, man. It's great. Leave it." And we'd say, "Just never touch that again." So not only be playful, but allow [00:10:00] mistakes to happen. And if mistakes work, go with them, then take credit later on as much as you can.

Paul: Oh, that's amazing. That's funny. And you reminded me. I guess it's because it's summertime, and this is just off topic, but when Steven Spielberg was shooting Jaws back in '74 or '75 and there's that whole scene with Martin Brody, right? With Roy

Scheider and the little boy. The little boy, his son, is mimicking him at the dinner table. [00:10:30] If you remember that. And it's a minute long sequence that was not scripted and was not intended to be in movie, but they just did it during outtakes. And Roy Scheider was like "Steven, you need to see this and watch this." And Spielberg seeing the beautiful moment of how it really, without words, captures the essence of the Brody family dynamic and just the import of what that family meant in the context of Jaws and everything. It was just [00:11:00] beautiful. But, without that spirit of playing, J.J. Abrams talks about this in TED Talk, but without that ability to just kind of allow yourself to go there, the movie would've just really missed like a key moment of texture that made Jaws such a special film.

Gary: And you could argue that that moment between father and son is the best moment to tell you what the relationship is like better than any of the scripted or planned out moments, right?

Paul: Oh yeah.

Gary: And there again the key is Spielberg being open [00:11:30] to doing it, as opposed to saying this wasn't what we planned on. Let's not do it. So that openness is key to creating.

Paul: So kind of flipping that a little bit, what was a challenge you encountered in your career that was particularly instructive in how you approached future projects?

Gary: Well, very, very early on one of the first sound design jobs I got was Cocoon, the movie. I was just kind of learning how to do sound stuff at [00:12:00] all. And the aliens in that movie had the glow, but they're friendly aliens. In fact, one of the aliens, you kind of fall in love with, so they're happy, friendly aliens. And I was dating Cindy, who became my wife, and she had just graduated from college and I bought her these really nice, more than I could afford champagne glasses. And so I did the glass harmonica trick with putting her finger on the top rim and putting some water and getting [00:12:30] those nice glow sounds. And she also played the flute. I had her play the flute for me and then play it in sort of non-musical but evocative kind of glowing ways.

And it worked great for this alien glow. And what it made me realize is both it is really fun to take sounds from your life in a movie. And then you see them in them and it's still amazing to me. Take a sound, your champagne glass, your dog, or your door creak, and you see it in a movie and you go, "Wow!" You're magical about that.

[00:13:00] Looking for sounds from your own life, from sounds of the world, that means something to us as a species and use them in a way that people don't know you're using. In Ad Astra, one of the last movies I did, there is all the subliminal work because Brad Pitt's trying to go after his long lost father, Tommy Lee Jones, and it's a father son's story, very psychological and a lot of the ambiences and the spacecraft on his journey to go see his crazy father were made [00:13:30] from stretched out sounds taken from Tommy Lee Jones' dialogue from the movie. So the ambiences, is almost like he can't

	escape his father. So using subliminal sound, I found to be really effective. And I learned that on Cocoon.
Paul:	Wow. So what is a project you're especially proud of and why?
Gary:	One film that always stuck out to me that I was really proud of, it's okay to be proud I guess of your stuff, is AI, the Spielberg [00:14:00] AI film. It was a way for me to work with Kubrick, I had no other way to work with Kubrick since he was the progenitor of that story. And it had a very sort of Kubrickian feel to it. But I'm proud of it because very often a sound designer would be told on a movie, "So stay away from tones, stay away from tones because it'll interfere with the score". And AI, the tone of the movie felt very fable-like, [00:14:30] felt very magical and child story, not your normal science fiction movie. I did Minority Report around the same time, very different kind of gritty feel from Minority Report, while AI had a magic kind of a just a being told a bedtime story kind of feel to it, in the look of it and the feel of it. So we ended up doing tons of musical sound effects and the trick there is not to interfere, but to work with the John Williams score. So [00:15:00] I was proud of the work that we did that were not staying away from tonalities, but using tonal sound effects and musical rhythms, and then working within the score to give that movie, I think in the end it gives that movie, the soundtrack gives that movie a very unique feel.
Paul:	So how does that work? Is it like the film is shot and then it's scored and then you come in and layer in the sound afterwards then. So you're privy to what John Williams scores [00:15:30] is, how it plays during the scenes or?
Gary:	Usually, and sadly, the score comes in so late that we don't have time to work with it as much as we would like to, comes in around the final mix and we've done our work and there's a bit of a clash and it was scrambled to make them work together. AI, what made it, also made it special was the John Williams score was recorded early for variety of reasons, it had nothing to do with me. So we had it. And what a blessing on that movie to have this, it was a beautiful [00:16:00] score.
Paul:	Yeah.
Gary:	The score, and then we could work with it. It was a matter of both timing, so we had the music early, and then we had, we wanted to take an approach that was a musical approach to the sound effects. So it worked out and I think it fit the film. So I'm very happy how that turned out.
Paul:	Yeah, it was a beautiful film and very different from Minority Report, which was such a cautionary tale. And just amazing too, that both like these [00:16:30] cutting edge science fiction films that Spielberg produced, I think within the same year or within a year of each other or so, but very, very different views of the future, for sure.
	So my last question for you, you have achieved so much in your career. I mean, and this is just kind of mind boggling to me, but 19 Academy Award nominations, seven Oscars, and your resume includes some of the most iconic films of the modern era like Saving

Private Ryan, Jurassic Park, [00:17:00] Toy Story, Terminator 2. Through all of it, how do you stay motivated to continue to work hard, play hard, and deliver superior results?

Gary: Well, I think I've been really lucky. I think the thing that motivates me over time is variety. And those films you mentioned, I mean, I've worked on films that are radically different. From everything Toy Story to Strange Days, there's some broad range [00:17:30] which allowed me to not just get caught in a rut and say, "I do this kind of action adventure and that it's all I'm going to do." I got to do Quiz Show with Robert Redford. And I did a Hulk with Ang Lee and all these radically different films and radically different filmmakers. So that keeps me going, because it gives you this new challenge. Like I got to come up with some way to do this that fits this filmmaker and this style and this film.

So variety is really important to me. And [00:18:00] the person I work with most these days is Spielberg. And he himself is the most variety producing director I can think of. It's amazing if you think about the variety of movies he's made. So even if I did nothing but Steven Spielberg movies from now on, I would have variety baked into my career. So I think that's key. And if you don't feel like you're getting it, you should search it out because it really stirs your creative juices to have this. Keeps you going and keeps you not getting stuck with your old tricks over and over again and you [00:18:30] have to force to get out of them.

The other thing that keeps me going is that as I've gotten along in my career is to mentor people coming along behind me so that I feel like whatever things that I'm passionate about thinking about filmmaking and sound feels like some degree it's passed on or helping other people discover their own way of making sound. I love that. I love seeing what other filmmakers and other sound people are doing and sort of reacting [00:19:00] to it, but helping them get their careers going and seeing what they do and watching that they do things so differently than I do. And I think that's really cool. So mentoring, at this stage of career, mentoring is the thing that keeps you going.

Paul: That's great. Well, Gary, thank you so much for taking the time and sharing your insights on the innovation and the creative process, and just walking through what's going on behind the scenes with some of these great [00:19:30] films that we all love and we've all grown up with. So I really appreciate your time today.

Gary: My pleasure. It was fun talking to you.