

Q&A with Sascha Paladino

Interviewed by Joelle Seligson

A seven-year-old boy, his tech-savvy big sister, and their scientist parents take on the universe in *Miles from Tomorrowland*, an animated series set in outer space. Creator and Executive Producer Sascha Paladino pitched the show to Disney in 2010, shortly after learning that he and his wife were expecting twins. Fearing that he might never take another adventure, *Miles* was Paladino's way of asserting that the entire family can continue to explore together. The show also immerses kids in space and science, and encourages them to take part. Paladino chatted with *Dimensions* about blending science facts and fiction, as well as what he'll share at this year's ASTC Annual Conference in Tampa, Florida, in September (conference.astc.org).

Sascha, tell me just a little bit about *Miles from Tomorrowland*.

Sure. *Miles from Tomorrowland* is about a family in the future who lives and works in outer space. And we see their adventures through the eyes of the kids, Miles, who's about 7 years old, and his sister, Loretta, who's 11. And their parents and the kids work for the Tomorrowland Transit Authority, which has a mission of connecting the universe. So that means both creating the transportation infrastructure for outer space but also connecting with various alien cultures. We follow their adventures as they travel the universe and try to make connections.

I know the forthcoming birth of your twins sort of inspired you to move forward with the show. How did they—

Definitely. When I found out I was going to be the father of twins, I kind of freaked out. I had a bit of a panic attack. And my first fear was, what if I never have another adventure again? I had been working in children's television for a while, making documentary films, and I traveled a lot, went to a lot of different places, and I worried that I wouldn't be able to do that anymore. And I started daydreaming, and I thought, what's the best adventure you could go on with your family if you could go anywhere? And since I've always been interested in outer space, I wanted to be an astronaut when I was a kid, to me that answer immediately was outer space; you'd go to outer space with your family. And that led to the concept of *Miles from Tomorrowland*, a family in outer space. And I pitched it to Disney, and they liked it.

Do your kids watch it now?

They do, yeah. My kids were actually three months old when I pitched it, and they turned five right when the series started airing, and now they're six. I have twins.

A perfect audience.

Yeah, and it's great because they have been very helpful with coming up with ideas for the show and being a test audience, as you can imagine. We've definitely used some things directly inspired by them. For example, they were going through a big firetruck and police car phase, and I asked them what would they really like to see in outer space, and they said, "Oh, it'd be really cool to see like fire trucks and rescue vehicles and police cars," and I thought, you know what, that actually makes a lot of sense. Since we're creating this transportation infrastructure for outer space, let's create a police force in outer space. So they get credit for that.

It's like Sim City Space, almost.

Yeah, exactly.

You weave in STEM concepts at the same time that you have this fantasy going on in the show. So, how do you collaborate with members of the science field when you're coming up with each episode?

We're really lucky that we have a number of consultants from various aspects of the sciences who help us with the show. We have a consultant from NASA's Jet Propulsion Lab, Dr. Randii Wessen, who's an engineer there, who—he will look at every script through pretty much every stage of the writing and give us feedback on what we can do to add science facts. If we tried to put some science facts in there that we got wrong, he'll help us with that. We really try to have a mix of science fact and science fiction on the show. We want our stories to be very imaginative and exciting and fun, and we also want the science to be good science. So, for example, if the characters are going to Mars, we want to make sure that the gravity is 38% of what it would be on Earth, and Randii will help make sure that we're getting that right.

At the same time, we also go to planets that we made up, like a planet—we have a planet made of diamonds, which actually was inspired by a science fact. Sometimes we'll just sit with Randii and say, "Tell us the weirdest stuff you can think of that would be really possible in outer space." He'd say, "Well, it's possible that on a planet it could rain really slowly." And that was like, wow, that's a really cool image, we could build something out of that. And he gave us this idea that, well, it's possible that the atmospheric conditions could create a planet out there that's made of diamonds and where it could even rain diamonds. And all the writers in the

room were like, “Yep, the story writes itself, we got it.” So it’s a real back-and-forth, give-and-take with Randii.

We also work with Dr. Yvonne Cagle, who’s a NASA astronaut, and she’s shared her experiences with us just about what training is like and what are the important things to know and think about when you’re going into outer space, and that’s been really useful. We also have a partnership with Google to promote and encourage girls and computer coding. They have a big initiative to get more girls interested in computer programming, and that really fit well with the series. We have a character Loretta, Miles’s sister, who’s sort of this tech genius; she knows all sorts of things about technology. And when I heard what Google was doing, it really was a great fit because they sort of opened our eyes to this whole movement to try to get more girls into STEM [science, technology, engineering, and math] and specifically computer science. They had told me this statistic that I thought was really interesting, that only 18% of undergraduates in computer science are women right now, and they’re working really hard to change that. So we made Loretta into a really positive computer science role model.

That’s fantastic.

Yeah, we were lucky enough to actually send scripts to them as well, and we have some female engineers from Google give us feedback on episodes where Loretta does coding that sort of helps save the day.

That’s great. And you know science center and museums are also doing a lot to try to increase STEM access among girls, among underserved youth, among kids in general. So do you have any tips for them from working on the show as to how they might better reach those audiences?

Well, from my perspective as someone who makes up stories, I really believe in the power of storytelling. And the science centers—since I do have six-year-olds, I go to a lot of science centers and I love science centers, and the things that really catch my and my kids’ attention are the exhibits that really tell a story, that snag kids with some narrative, whether it’s about the journey of an idea or something that has a beginning, middle, and end. Obviously, the stuff that’s really hands-on works for them as well, where they get to get in there. There’s this thing I love that I recently saw at a science center, where it was like a harpsichord but all the strings were made of light, and you can play it just moving your fingers through the air, through these lights, and change the sound. It was just such a great way to get kids thinking about sound and light and technology.

What do you think, if you have a sense at this point, that you’ll address at ASTC’s Annual Conference this fall?

I think probably that idea of how do you snag kids? How do you get their attention, and how do you keep their attention? I mean obviously having, making a TV show is very different from working to create exhibits that work in science centers in a hands-on way. But one of the things that's been really interesting is lately we've been doing a lot of screenings of *Miles* where myself and Dr. Cagle, the astronaut, will go into—we've done one at Johnson Space Center, this last week we did one at Kennedy Space Center. And we'll show a couple episodes, and then we'll talk to the kids who come about the show and about outer space, just engaging with them and seeing how much interest there is naturally. To me, I want to talk a little about that, about how it just takes this one little spark to get them going, and then it can just hopefully turn into something bigger.

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