

Episode 7 transcript

Hello, hello, hello and welcome to this episode of the SciComm Toolkit podcast. This is the show for those who want to start doing science communication, or those who are already doing it, so they can gain more tools to level up their scicomm confidence. I'm Soph and I am your host. I am a scientist turned science communicator and I am passionate about giving everyone the skills they need to be confident scicommers, as well as always learning more myself so I can improve too.

I always feel I should record this opening to the podcast, so I can drop it into each episode so it is the same and would save me repeating myself each time, but I never do. I kinda like the variety though. Keeps me on my toes and keeps you on your toes.

Well here we are. We are more than half way through the first season of the podcast, and today is a special episode because it is the start of the interviews that I wanted to incorporate into the podcast. When I was planning out what this podcast might look like, I wanted to share some solo episodes. I wanted to share more about the things I use in scicomm, what I have learnt in my scicomm career so far and other thoughts and opinions of mine. But I am very much still learning about the field too and also my experience is definitely not the same as everyone else's. So to make this the ultimate toolkit that I aspire for it to be, I needed to bring in the expertise and experiences of a whole host of other wonderful communicators, both in science and out of science, to see what we can learn from them. And today is the first one - so not only do you get to listen to my dulcet tones but those of my fabulous first guest Erin Winick.

Erin is a mechanical engineer by background who now does science communications for the International Space Station. Does it get any cooler? I think not. In this episode, we talk to her about her current role, but the previous science writing roles she has had. We talk to her about scicomm internships, using fashion for scicomm and also a few insights into TikTok. Yes we are diving straight in there with TikTok. Oh and bonus - we get to learn a few little snippets about some of the awesome research going on onboard the ISS. So without further ado, I am thrilled to introduce you to Erin Winick.

Sophie 3:30

I'm so thrilled that you can give up your time and chat to me today. I am so excited to talk to you. And I think you're actually the very first guest on the podcast as well when I put all these things together. Exciting. That's exciting. Yeah, so welcome to the podcast.

Erin 3:47

Yeah. Thanks for having me.

Sophie 3:49

It's an absolute pleasure. I think it's actually the first time we've spoken in person rather than just kind of odd messages on Instagram over over the years. So it's great to finally actually be chatting to you.

Erin 4:04

I know it feels like you know someone so well, when you've like had a connection online for so long. And the scicomm community has some pretty great opportunities to be able to do that. But yeah, it's awesome to be able to talk.

Sophie 4:17

Because I think you are one of the first science communicators that I started following on Instagram when I started this whole scicomm journey of mine back in 2016, or 2017, whatever it was, and I have always loved following the cool things that you have and are still very much doing and the style that you bring to all your science communication. But then when I was doing the a bit of like prep and background research for this, I was discovering more and more really incredible things that you have done. So now I'm even more totally in awe of what you're doing. Then kind of like fangirling here a little bit and especially that I finally get to chat to you as we've mentioned, together many many things I would love to chat to you about so I'm going to stop rabbiting on, and also get to it. So you currently have what is probably one of my dream jobs. And it's a shame that I am live in the UK, and be that I'm also a biologist by background, but you work at the Johnson Space Centre as a science communication specialist for the International Space Station, which sounds freaking awesome.

Erin 5:25

So the heck of a title. I know, it's,

Sophie 5:27

it's a long one, but it sounds pretty incredible. And maybe you can start by telling us a little bit more about your role there. And what that involves.

Erin 5:36

Yeah, so, you know, first of all, I'll say, biologists could definitely do this job too. But so basically, what all of that means is I am a storyteller for all of the sciences conducted aboard the International Space Station. So a lot of people think of the space station kind of just as this outpost where people go live. But it's really an orbiting laboratory, where 1000s of experiments have been conducted over the 20 years that people have been living aboard it continuously. More than 3000 experiments, actually. And during every like given increment, or expedition, which is about six months, hundreds of experiments are conducted. So our job me and my team that I work with, is to try to share as much of that as we can, with the public and the benefits of having this orbiting laboratory up there. And all the amazing things that both the astronauts are doing, as well as some of the autonomous experiments that are housed up there and provide awesome data on things like astrophysics and earth science.

Sophie 6:35

Yeah, I don't know how much you can say. But maybe you can tell us about some of the coolest science that has been happening on there recently.

Erin 6:42

Yeah, so many things. We just recently had a crew one return and crew to launch. And so that was basically different sets of astronauts swapping. And with that some new science goes up, some new science comes down with the different samples and things that are returning. But some of the things that they've been doing really recently, because of that is

when some astronauts first get up there, there's a lot of human related research samples and things that are conducted and kind of like baselines for right before they launch right when they get up there. So there's some cool ones that actually use virtual reality, or they put these headsets on. And they're able to use that to take measurements of like how they perceive their motion, how they're able to kind of respond to for cues, how their senses pick up different things. And how that in microgravity, of course, so now that they're in this new condition, basically, how does this affect them as people. And so we can be able to use this information to be able to understand better how our bodies will behave when we're going to places like the moon or Mars over a long duration mission, because that's going to take years. So basically, the space station is kind like a testing ground for all of that as well as providing us this microgravity platform performing for helping us back on Earth. So, for example, some of the recent stuff that's been happening for benefits on earth is there's a lot of protein crystal growth experiments that happen, which are really important for drug development. So basically, in microgravity, we can form these higher quality crystals without gravity affecting them, the crystalline structures can be much more refined. And this can help scientists with getting higher quality drug treatments and better understanding these different proteins, which we have many, many proteins in our bodies. And the more we can understand those, the better we can understand how to help treat different things that might be wrong with us. So we've actually had some cool things have come out of that we've actually developed even things like artificial dog and cat blood based on research. Yeah, there's even the treatment and clinical trials for Duchenne muscular dystrophy. So there's some really cool stuff that happens up there. And like I said, there's 1000s. So so many things that have happened, but those have been some really cool interesting ones that I've been following. And I'm interested to see kind of where how they play out in the future, too.

Sophie 8:57

Yeah, that's pretty awesome. I think a lot of people don't even realise that all these experiments go on on the station. They're probably just thinking there's, it's this really cool thing that's floating up in space and astronauts get to go there. Yeah. So it must be the coolest thing getting to share that with everyone. And like, ultimately, again, like you've said show the importance of why we have this station.

Erin 9:21

Yeah. And, you know, our first step is always to tell people, it's up there, because there's a lot of people that still don't know. So like, that's kind of our first milestone kind of as a communicator is just to be like, this is there. And we've been doing this for more than 20 years now. And the next step is in this place is the laboratory. And here's why it's important. So it's kind of like we have to always, if people aren't familiar with it, we kind of have to walk them through that journey of thinking about five communication audiences. That's one like audience that we're communicating to. And then the other is kind of the research and academic community to be able to inform about the different results that have happened and talk about some of the Open Data Source opportunities that are available to scientists for participating. This, and then as well as our like legislature, and for since it's the International Space Station, we have lots of different international partners like JAXA and Isa, Japan and Roscosmos in Russia. So we kept a lot of different audiences in mind to kind of like show the value of this, and how this is really benefiting you.

Sophie 10:18

So how do you tailor different things to all those different audiences, like someone who just wants to know what's going on up there? Or then the the more academic audiences, as you mentioned?

Erin 10:30

Yeah, it often depends on which platform we're creating content for. So for example, if I'm creating something for LinkedIn, that's probably the place I would more likely share some of our researchers guides and stuff that's for people that are interested opportunities for doing research on station, maybe I'll write a little bit more technical wording in my post about some results that have come about, but on Twitter, I'll probably keep it a little bit more high level. And if people want to dive in, often provide links for you know, more detail, Instagram, obviously. So these are really great, general public platform for us, because there's some pretty cool visuals, not everything, I mean, some of the some of the best science Honestly, it just looks like a silver box. And then we have to really get people excited, because we don't have some cool worms crawling around to get people interested or something like Yeah, yeah. But the the biggest thing that kind of works for all of them is what benefit is, is providing to that group of people. And if it's the quote unquote, general public, you know, there's a we talk a lot about disease research or spin off technologies, basically saying like, how is this helped, in relation to maybe something like old Alzheimer's or Parkinson's or cancer research or surgery, something that people can say, Oh, I have a family member that has had this I can relate to and understand why this is important. And then you know, when we're talking about to a legislative audience, maybe what amount of jobs This is provided, what type of value is providing commercially for different businesses? How is this benefiting businesses, specifically in your state, if we're talking to us? And if we're going academic, again, like where what opportunities This is providing to you? What can you learn from this? How is this contributing to your field? So it's a lot of just tailoring that messaging to the benefits to that person, and then just the overall all of it, you know, like, how, how amazing is this? as humanity, we've had a pretty amazing engineering marvel to be able to accomplish this and talking a bit about that camaraderie and international aspect of collaboration.

Sophie 12:31

And, of course, all the people that are out there as well, cuz I think people's stories resonate.

Erin 12:36

Yeah, so Well, absolutely. The astronauts are some of our best storytellers, and advocates. And so part of our job, too, is even helping them be better storytellers. One of my co workers more directly works a lot with this, you know, astronauts can't be an expert in every single one of those. But we want to be able to equip them with the right tools to be able to talk intelligently about these and give good examples of the science that's conducted while they are up there. So there's a lot of helping them be better advocates or better communicators, in addition to being better communicators ourselves.

Sophie 13:06

So just jumping back a little bit, you mentioned that you kind of have this feel for which audiences that you have on which different social media platforms. So for a science communicator who's maybe trying to do that, themselves, or even if they're working for a company trying to do that, what can they start to do to really understand what type of audience they have on what platform

Erin 13:30

more than anything, I'd say with this is a lot of experimentation and seeing what your audience responds to. Because sometimes you can also even if something doesn't get a tonne of likes on a specific platform, you can see a tremendous feedback to a specific type of content. So maybe 10, people get a huge value out of something on one platform. And then but then you post something else, and it gets, you know, 500 likes, you don't really get much feedback on it. So it's doing a lot of experimentation to see what people respond to on each one, you can definitely look at some of your analytics, depending on if you have some type of additional software or just what is provided by the platform itself. And I sometimes you can just straight ask people, you know, especially if you're doing a personal branding stuff, just like making a post and saying like, you know, can you tell me a little bit more about yourself or ask a very direct question. Twitter polls are a great way to do that. People love talking about themselves. So you'll definitely get some responses. If you put those type of questions out there.

Sophie 14:29

You obviously look after all these social media accounts as part of a company or a brand. And then you also have your own personal accounts as well. So how do you find looking after the social media accounts for those different kind of aims? Like what are the key things that you think about differently from your own to looking at one for a company?

Erin 14:54

Yeah, so the one that I directly run for the space station is at ISS underscore research on Twitter. But then I write may create content for a lot of the other space station accounts and NASA accounts but the ones that's what I have direct control over and then on my own personally I do mainly Instagram, Tik Tok and Twitter. I have some other accounts on there too. For me personally since, to be honest, since I've been running, doing more social media as part of my full time job, I definitely have dialled back my personal social media a little bit just for my own personal sanity. Yeah, understand. When you're when you're on Twitter all day as part of your job at writing Instagram posts, maybe not are, you're not as inspired in your free time to be able to go do that. But that's part of what made me inspired to go do tic toc. Because it was a an area of just being able to be creatively free and have fun with it. Because I wasn't doing any of that with my regular job. And also, I will add, though, what you asked about, like my different approaches. For my personal social media now I have freed myself of the burden of consistency. Because I had been doing a lot of when I didn't do social media is part of my full time job, it was building my brand and like wanting to kind of basically build up my credentials to get a job like I have now. And I was it was a little bit stressful when I was starting this to be able to keep up my consistency all the platforms and do all of the right things perfectly. And now I've freed myself of that and just do things when I'm creatively inspired on my personal stuff. But so now when I but for my actual the spacestation accounts of stuff that I run, there's a lot more planning ahead. within NASA, I have one person that reviews some of my posts for me, luckily, she can do it on a pretty quick turnaround basis. So if there's something that needs to happen faster through social media, sometimes it does, she's able to do that. There's a lot of balancing of content and for running for a brand coordination with other accounts within the NASA brand. Because NASA has a lot of news coming out all the time. Yeah, so many centres. So many things like we don't want to compete with each other on stuff. So there's a lot of pre planning, and we have

something huge coming out, making sure it can be amplified by other NASA accounts. But if it's something medium, you know, we might coordinate with just one other centre, something where it's relevant to so NASA is this interesting, like network of a tonne of social media accounts. So even when you have your one area in one account that you own, there's a lot of working with people who run all of the other ones around as well, that just being on the platform and consuming content is important to to be able to just maintain your understanding of them and what works and what doesn't work. And for me, that's like a great value for my job too. Because I might not be able to be as necessarily experimental with like the space station and NASA stuff. But I can do that with my own and kind of see how something performs, tried a new tool like, you know, Instagram released reels relatively recently. And I can test it out on my own and like, see how that performs? And then take that knowledge and apply it to the other stuff that I do.

Sophie 17:52

So before your

current role you worked at MIT Technology Review. So what kind of stuff Did you get up to there? And does it differ to what you're doing now, obviously, apart from the topics and things like that?

Erin 18:06

Yeah, so that was a science journalism role. Where this is a little bit more when you're internal to an organisation doing science communication, there's a little bit less of the the journalism aspect of it, I still doing writing and editing and stuff, but the type of the stories that you're chasing after, and the cadence at which you're producing content is a little bit different. So they're my actual jobs were first I was the Associate Editor, the future of work, which means I covered a lot of automation and manufacturing, and like future workplace type stuff. And then I transitioned to be being a space writer during the rest of my time there. And I did a lot on newsletters when I was there. So I started up two different newsletters and helped run another another one while I was there. So that was a really interesting experience to be able to kind of learn about what does well in a newsletter context and getting subscribers to a newsletter, that sort of thing. And that was my first real like, outside of internships, full time, likes science communication role. Because I had run my own business a little bit, I did a lot of freelance work. But that was the first time like working in a newsroom and like producing things at a certain cadence. It's a little bit different than within NASA, cuz I'm kind of doing a lot more high level strategy. There's a lot more level of reviews, we're often the first people putting out something rather so rather than finding a story, I kind of like there's certain levels of things that I have to cover, for example, like stuff to be launching on one of the upcoming commercial resupply launches. We need to cover a certain amount of those things. You know, we're in journalism, you don't have those, that same level of you're trying to get the information out there at NASA and he there you're like trying to find the stories and things that are most relevant to cover. in journalism, you also have to come in at with a pretty critical eye, you know, and it's a little bit different of finding the stories. I the way I context, I put it as as a political journalist. You're not always covering the past. Other things about politics, as a science journalist, you're definitely don't want to just be covering all of the positive things about about science, you want to be finding the things that need to be improved and helping report that and bring it to light. Well, in my current job, it's a little bit more of a PR role. I'm not, I'm not going to put out something

negative about death, you know, so there's a little bit of a different context there, to how you're approaching those different topics.

Sophie 20:26

So what is the process of writing more of a feature article in that kind of journalistic space? How do you get from start to finish?

Erin 20:38

Yeah, I starts out usually with an idea and just kind of doing some digging and research to make sure it is the story you want to tell, and to kind of see what you think the storyline needs to be. And then it usually goes into interviews, sometimes those are over the phone. So that's in person, obviously, current world conditions a little bit more over the phone. But, and finding, sometimes the character that you want to tell the story about comes first, like there's a person that's gonna be the centre of the story. Sometimes you kind of find that through your research. And of course, some of the more newsy stories don't always have a more human centric character, those are feature stories typically have that more of a focus. And then it's usually just kind of doing a lot of the information gathering, whether it's doing those different interviews, or reading all the different papers, around certain things, be able to get a good grasp on this topic to be able to represent it appropriately. Personally, I usually would then go through interviews and pick out the parts that were most relevant to the story to me and kind of like lay them out in a Word doc, and kind of put the puzzle together, you know, and like, start to have all the pieces land in place. And write the bridges between that and and laid out. And then it's kinda whatever your personal writing process is, the piece evolves, and your first draft is not going to be good. Yeah. Yeah, there's a lot of revision and removing things around. And then if you have a good editor, which oftentimes if you're at a publication like that you hopefully do, it's asking them questions, letting them put a critical eye on it. And for reference, a lot of editors will put a lot of edits on your story that was like a lot of red there. Don't feel like that's a bad thing. This is the first person looking at something from the outside. And to me, it always felt better to have an editor that I knew was going to really go through it and help improve a piece, then make me feel better and be like, looks good. publish it.

Sophie 22:32

Yeah, I completely agree. Completely agree. Yeah.

Erin 22:35

So editors are a huge part of the process.

Sophie 22:38

So where did you get your stories from? Was it mainly from press releases? Or where do you get them?

Erin 22:45

Yeah, usually not press releases, honestly, except for like, really, really big news. A lot of times, there's, there's, there's a lot of digging that has to be done, and then connection to the network that you build up to be able to help you find the stories that you want to tell rather than the stories that companies want you to tell. Yeah. And you know, not to say that all press releases are bad, they're an important way to be able to get information. But

oftentimes, it would more come from having a really good understanding of your beat or your area. And kind of tracking the trending things and the topics. And like I said, the more you build out that network of sources, the more you're gonna have incoming stories to you from those people that help you better cover that your area of expertise.

Sophie 23:35

So as a writer, what are you looking for in a good pitch? Or a good press release? What is going to make you say yes, and pitch that one to your editor?

Erin 23:49

It's a good question.

When there's, when it's something I haven't seen before, and when it's something that I feel like, is is an important and important step forward for an area of science, if it's an area that I have a decent amount of knowledge in, when I was, for example, the future of work editor, I would see a lot of similar pitches about people claiming some, for example, new AI that's removing bias from hiring, and it's like, okay, it's not what AI does. ai ai is biased, you know, like, there's certain things like that. So I think being able to pitch what's new about a thing, having good imagery and imagery assets is always helpful. And I think being if there is a human element to it, like we've talked about a lot more. And also if I could just see the obvious story to it. Because there's differences also between writing a news story and writing a feature story. And I will say though, a decent amount of if you're if you're trying to pitch to me to write a story about something, it's different than if you're trying to pitch your story for me to write about so if you're a comic somebody that's writing a press release, there's something different. I'm looking for that then if like, you know, you freelance writer coming to me to pitch a story that you want to write, because if you're pitching me like that, as a writer, I'm more looking also for like, what type of stuff Have you written in the past? And what's something new you're gonna bring to this topic?

Sophie 25:19

You mentioned that you might have editors to send work to but if you had to edit yourself, like when when you're writing, you can almost get too close to it and not really see the big picture. So how do you take a step back from it to be able to edit your work more critically?

Erin 25:38

You know, the, it's definitely hard when you don't have the that outside input. I think that one of the things that a lot of writers do is they you tend to, if you, when you file to an editor, usually they end up cutting out a third of your story, usually people tend to file too long. So I think that taking a critical eye it, whether something needs to be there, or whether it's actually just slowing the pace of the story down is something really good to take a look at. And, you know, taking time away from a pieces is really impactful. Because you can give it a fresh perspective, if you've slept on it and taking time away from eggs, people can get really attached to a story and just at least give yourself a few, like 24 hours to sleep on something and then come back and look at it. If you have someone you trust, that's even if they're not a writer, and have them look at it and say, Hey, is this understandable to you? Send it their way. That can be really helpful, because sometimes you'll be like, Oh, this is perfectly clear. Yeah, this description of this specific scientific thing that I've worked on for a long time, then

they go, I don't know what you're talking about, like, Well, what does this mean? That can be really helpful too

Sophie 26:46

What would you say? Let's say are your three top tips for writing about science that isn't your own?

Erin 26:55

Writing a science that isn't your own? Um, well, I think that, let's say number one would be before you talk to the experts, read whatever papers they've written, you know, so you have like a good starting point. But don't feel like you need to sound like an expert when you are interviewing them. I think sometimes people feel like intimidated. They want to seem like smart in front of the scientist that has written this thing. It's okay to ask the quote unquote, dumb questions, because that's going to get you the quotes, the simple quote, yeah, you don't just need to ask the questions about these really technical aspects of these, like, these papers, even if you have a good understanding of it, ask them to explain, like, what does this mean?

Then I'd say, try to read and stay up to date about the news in that area. So for example, if you're just saying I want to write a lot about mechanical engineering, in the next year, consume a lot of other content related to that sort of stuff, because your writing will improve you as you read other good writers that write about that specific thing. And then, I mean, I think number three, out that human story, you know, like, writing about science becomes more accessible when there's a human involved. And when there's emotion, and when there's a story, you know, like, rather than just news, the science becomes a lot more accessible when people have a thing that they can relate to. And often that thing is the person, whether it's the struggle, the success, what they're passionate about, even a sense of humour, I mean, sometimes you talk to some scientists that are just absolutely hilarious, and it would be able to get that across, in in a feature story and like, you know, get that emotion and that relatability is really great.

Sophie 28:41

So I think one thing you have kind of sort of come to be known about is like science communication, internships, you have created a blog post with lots of different opportunities that are available. And you had an internship yourself at the economist in London. So how valuable was that internship experience for you in deciding your future scicomm career path?

Erin 29:06

Yeah, the reason I become so passionate about this is because while I only had one sitecom internship, I had five total internships. While I was in college, I had four engineering internships, which were hugely important for me realising what I wanted my path to be and I'm super glad I had those experiences because it gave me the opportunity to work at like engineering companies. But the I those all those internships were really meaningful to me and I'm a huge advocate for trying to make internships more accessible all you know, of course, paid and that's why all of my lists that I put out there are at least paid and I try to find well paying ones too and grants will help support people to be able to go do this, because one of the worst things is having inaccessible internships, which you know, absolutely

worsens. Yeah, yeah. So for me, having an internship at the economist was both a really great life experience. And also a really great transition between stem and communication. And honestly, I'm still working in the science field. But I'm talking about rather than doing a nine to five working at John Deere, which is one of the places to intern and transitioning then over into someone who's working in a newsroom. And I think that being able to give people the ability to try it out, and on a short term basis, and know figure out whether this is for them, whether it's moving in the right direction, is just a really, really great opportunity. I think a lot of people also just don't know what science communication is, like, period. It's, it's, you know, growing in popularity, but it gives people more exposure to the field as a whole.

Sophie 30:42

Yeah, well, I think knowing what science communication is as a career, because when I was doing it as part of my PhD, compared to what I do now, as a day job, yes, they're, they're almost worlds apart. Like, there's obviously elements that are similar. But yeah, completely different worlds.

Erin 31:00

Yeah, I didn't know that I could do this as a career when I entered college, you know, I, I was debating between going into journalism or mechanical engineering. But I chose mechanical engineering, because I love making things and I knew I could always go back to journalism, but it would be a lot harder to go back to mechanical engineer. And, but I thought of like, oh, if I'm going to be able to combine these two, I'm gonna have to be like a technical writer and like, help write manuals or something like that. And I looked into that for a little while. And I thought that was, Oh, this is what I'm gonna have to do. And then I kind of realised, okay, like, this outreach, and like education and communication thing is important. And then your first thought is, oh, it's the Bill Nye and Neil deGrasse, Tyson's and Mythbusters. You got to be on TV. That's like the only option. And then you realise that they're science communicators, that work at hospitals, that universities and government organisations as journalists, outreach coordinator, it's like, there's a lot of aspects to all of this. And being able to also just put together an internship list that demonstrates that breadth, I think, is really helpful to people.

Sophie 31:59

Is it really important for you now, then, when you do like outreach events, about careers in STEM that you showcase that you are a science communicator, and there's all those options? Not just being in a lab or working in engineering and so on?

Erin 32:15

Yeah, absolutely. And because if I had known that earlier, I mean, who knows where I would have ended at this point, I'm glad that I've taken the path that I have. But I think that just making that more clear to people earlier on is, is really important. And I one of the things I emphasise now that I work in the space industry, is that a lot of times people when they think space, they think I have to be an aerospace engineer, or a pilot to be able to work here. And I'm like, No, we have I work both with PhDs in biology, as well as videographers and former teachers, journalists, people who work in accounting, you know, like, SpaceX needs accountants to like all that sort of thing. So like, no matter what your passion is, you can find a place in that industry. So I think it's the same for all of science. And

I've really tried to emphasise that for people who love communication, because science needs good communicators. Absolutely.

Sophie

So I think I've asked you a lot already about the science communication you've done in more about like professional capacity, but there's so much you have done in like a personal capacity as well. So firstly, I wanted to ask about about fashion and cosplay for science communication. And the place I have to start is with the perseverance parachute skirt, which is absolutely incredible. So maybe you can start by telling the listeners all about how that came to exist.

Erin:

Sure. So for the past like for about five years, I ran my own business Sci chic that made 3d printed science and engineering inspired jewellery. And I started this while I was in college, it was honestly one of the really great gateway points to me becoming more involved in the science communication outreach community and discovering more of the people on Instagram, that's when I got involved and made a lot of those connections from that area. But although I absolutely loved doing it, I decided I wanted to move on to new projects at the end of 2020 and just kind of make stuff for myself. And one of those first things I made just happened to go viral after I did my business, which was the Mars perseverance rover, which landed relatively recently on Mars when it landed and the big parachute open to to allow it to come down because this was amazing video. Everyone saw this pattern on the parachute looked kind of strange. We were like what but it wasn't really consistent. You normally think of like every other you know block is a different colour type thing. But this was a little bit different and people realised that the people who created the parachute had encoded in binary dare mighty things which is the Jet Propulsion Laboratory slogan, all within the colours in the inner ring and then the outer ring with like the GPS coordinates of JPL. So, this kind of caught on, and people were really excited about it. And I was like I looked at this and what, that'd make a good skirt. I worked with my husband, I know more about 3d design, he does some graphic design just for fun. So I worked with him. And we made a our own version of that parachute pattern and put it on to a circle skirt, which I just ordered for myself, because again, I was just making stuff myself for fun. Yeah. And it started to take off and go viral. And everyone was like, I want to buy this. So I worked with Startorialist, which is an awesome woman owned science and space fashion brand that I worked with a lot. When I was at Sci chic, there's super cool, and they listed it for me and I just sold the design. And then we had a portion of the proceeds going to charity and the rest of it just to go to support their business. But it was really cool to be able to spread this knowledge about this perseverance, landing, as well as what I always say is like space fashion, it's just a great conversation starter. Like there's not a lot of things that will just get people talking about science just in a room and be able to wear a piece of science and space is a cool way to be able to bridge that gap and start that conversation in a more accessible way.

Sophie 36:18

So why and how is fashion and accessories? such a powerful way for you to share those science stories? Like why? Why did you start doing this?

Erin 36:28

Yeah, it's funny because when I was younger, I wasn't really like I'm not like a hugely into fashion person. I think Project Runway with the reality show is kind of my gateway. Still good. And I'm making the cut, which is like the new version on Amazon absolutely love that show. And the reason I went into mechanical engineering in the first place was really, I love making stuff. And that goes beyond just like, Oh, I love making robots. Like I've always loved Sewing with my mom growing up, I always sewed my Halloween costumes and things like that. And it's always something that I've really enjoyed and loved, even if I wasn't like, you know, super into going shopping or stuff like that when I was younger. But now that I'm like I've moved into the more science communication area, it I've just seen that it's one of the ways that people can like light up and get so excited when they just see you in like, you know, when it's sometimes you just have to get people on board with the science. And this is just like a visual way of having that from like, right off the bat. People are like, Oh, that's so cool. what is that? Why is that pattern that way? or What does that mean? And it's a surprisingly easy gateway into those conversations into also engaging a group of people that might not typically be into space or science, I often put a lot of style hashtags on my posts that are related to science because of the fashion angle. And my hope is that that engages and brings in people that might be more there for this fashion, but then they'll also engage with the science element of it. Because it's sometimes in the sitcom world, sometimes we can kind of live in this echo bubble of talking to other scientists. And it's just one of those ways you can help break out of that bubble.

Sophie 38:14

then more recently, you have been using Tik Tok to share more about science and communicate different science stories. So what sort of things do you share on there? And how does it differ from the other types of science communication that you do?

Erin 38:29

Yeah, I started with Tik Tok right before like the world shut down into quarantine, which I think is everyone jumped on Tik Tok like a month and a half after I gave it a go.

Yeah, exactly. Oh, it's all just say I was there a full month in advance, you know, but for me, it's just been a really fun platform to play around on. Because it's a very creative platform. And it's one of the first platforms that I think has really grown in popularity after I've been a science communicator. And it's been really fun to be like there from the beginning for this. And to see it grow and to watch the platform change. I'm somebody who really likes to like observe trends and like stuff that's doing really well at the time. And when stuff shifts. For me. It's a really great platform to free myself to experiment and do stuff. And not worry if it gets 300 views or 1.4 million views. Yeah. Which like because I've had I don't know, probably maybe like eight videos go I think will be considered viral like over 100,000 views. I've had a fair few and like the 10s of 1000s. And then I've had many around like the 1000 2000 mark, that sort of thing. And so it's been fun to kind of just see what takes off and put it out there. And when I feel creatively inspired by a trend, go film my own version of that or just like this cool science thing that I really want to share that I think people would be interested in you Set up my phone after work for an hour, edit something together and throw it up. Sometimes the things that I spend, of course, five minutes on getting many more views and the thing that I spent five days on creating, but isn't that the way of social media? Yeah,

Sophie 3:56

Yeah, absolutely. Absolutely.

So do you think you could ever use Tik Tok for like to showcase the ISS research and have like an ISS, maybe brand account? Or do you think it's more of a personal thing? Like do you think companies could use it?

Erin 4:12

Well, first of all, yes, I absolutely think companies can use Tik Tok but you have to use it in less of the typical corporate style. Yeah, I guess it's I would say there's been there's like really successful like companies on there. And for example, I love the Washington Post's Tik Tok, I don't know if you follow them. No, I'll have David Jorgensen. He has done amazing with building up a brand that's kind of centred around. He's like the central face of the Washington Post on Tik Tok, but he's sharing Washington Post news and just news of the world in ways that fit with the platform really well. I will say I have applied some of my knowledge to doing Instagram reels for the space station. You just recently started experimenting with that. Because that's just a platform there's already like a pretty tremendous following for Instagram on this.

For the ISS, and so that's been fun. We haven't done like a tonne yet, but I've we've made a couple science videos and it was really cool that just I think our best one was Kate Rubin's the NASA astronaut when she came back, she we've made like a science highlights video for it. In our awesome video producer put together like a 32nd version of that we work together on making it more, you know, Tik Tok or Instagram reel-sy.

And it got like 1.6 million views. So that was pretty cool to consume a decent amount of tik tok content, and then kind of start putting stuff out there. I also recommend I think one of the things that the platform really does reward is having a similar type of content repeatedly. I'm not a big fan of personally doing that, because I, again, I care a little bit more about just representing myself on the platform rather than growing to like, a million followers on that. Yeah, so I'll post Domino and puzzle related videos in between my, my space stuff in sure it's not going to do as well might hurt me in the long run. But, you know, it's kind of just what I want to do.

Sophie 6:02

Yeah, I really loved your videos about

the space area code and also the testing astronaut viewed one. Yeah, what was your favourite Tik Tok video to make

Erin 6:14

you know the astronaut food was the one that got blew up like crazy the that the area code one was one of those 10 minute videos that I was like, Oh, this is fun, me people like this, and they got like 800,000 views. My personal favourite is one that probably hasn't gotten as many which was actually just talking about the Kennedy Space Centre and the size of the enormous flag on the side of it. Because I had a tonne of fun making it cuz I like green screen myself and like stood on a chair to like, show the size comparison of like my body to the stars. And like, I don't know, I just had a lot of fun with that one.

And so I think I guess I'd have to say that's probably my favourite. The other is, when I've gotten to show a little bit more behind the scenes stuff that I've gotten to do, because of my job, like I got to go to nanoracks is a group that helps to send stuff to the space station. And they invited us over to their headquarters, I guess, their area that they were prepping an airlock to go to the space station, I got to sign a piece of it. And so I made a Tik Tok about like going in the inside of this thing that is now attached to the space agent, and it has my name on it, which is crazy. And sharing some of the behind the scenes things. But I think that was also part of the reason that was so exciting for me is because I've been making Tik Toks only in the time that I've been working from home. And it was one of the few things I actually got to go out of my house and do something and share it with people. So I think that also kind of drove by me liking that one so much.

Sophie 7:38

So what are your top tips for like scientists and science communicators who might want to start experimenting with Tik Tok for scicomm?

Erin 7:47

Yeah, first is just to go follow a tonne of people and just consume content for a few hours, which is not hard on Tik Tok

But partially consume some like science stuff, but also just consume content from the platform as a whole, like look at the comedy videos and like trends and things like that. Because I think some of the ways that science content on the platform can be most successful is when it can break out into groups on the platform that are watching it that might not typically be a science or space interested group of people, you know, again, trying to break out of that little bubble because you'll accumulate a group of followers, I think I have like 37,000 followers on it right now. And so those are all people that are probably interested in science and space. Yeah, but the times I feel like most excited or is when I get one of those videos, it really breaks out. And I have people that are like, there because that for the area code video was I talked about the area code that any number coming down from the space station would have in that area code is Houston area code. And so I was getting a tonne of people on there that Tiktok was obviously targeting people that lived in Houston. And so I was getting tonnes of people that are all like, that's my area code. That's crazy. And they were learning something about the space station because of the place that they lived.

So I think that that's one of my one of my things is just you know, consume the content, not just from in the science world, so that you can see the stuff that might appeal to people outside of that. And then just experiment, man and just try it out and see, see what happens. And don't be discouraged. If you don't get a viral video in your first like, few it's a it's rare. I mean, I don't know how many videos I've made at this point. Like I said, I've had like, somewhere between like five and eight that have gone like truly blown up. But you're gonna have to get through the levels of the times where you post maybe like 15, and like just a handful of people see it.

But you know, and then also, if you have followers and other platforms, direct them over it so you can take to your Tik Tok when you start it so that you can get just an initial group of people that will hopefully at least be like liking and supporting you and like in giving you

feedback and stuff. Last thing I'll add is be willing to try out the live function on the app. It has the ability for users to go live on it, which again, right at the beginning, you probably won't get a huge number of people that are tuning in

But if you get a video that's blowing up, go live, like while it's happening, because people when you're scrolling through Tik Tok, you can see if a user is live. And if all these people are coming across your video, go live right? Then start talking about the videos or answering q&a questions, you have something you can do, that's awesome. But you're going to capture a tonne of people that are going to jump in and get to know you a little bit more beyond that, that video. And hopefully you'll capture more of a following from that.

Sophie 10:27

That's a really interesting point. I think also, what I find is, we consume so much content when we're scrolling. But we might like things occasionally, or comment on things, but I don't think we ever ask ourselves, why we're liking that or why we were driven to like, comment on it and engage with it. So I often think if you question why you want to do it, then that's going to help you in your creation process as well.

Erin 10:54

Yeah, I completely agree with that. Because I just why did you watch a one minute video all the way through? Like what what kept your interest? Because that's one of the biggest driving factors I think on Tik Tok is watch time be when you retain someone's attention? Like what made you stick past the first three seconds? And that what made you watch all the way to the end? And what made you watch five times? Yeah, he did like, well, well, what was that thing? How long was that video that you watched five times?

Sophie 11:20

So what advice would you have for anyone looking to make scicomm their full time or professional gig and not just a hobby?

Erin 11:29

Yeah, I think that it's, there's a few different ways to do it, you know, and there's ways to that people have gone really hard into building their own brand. And really producing a tonne of that content, like making it really, once their side hustle, like has grown big enough, then they make the transition to doing it full time. I think science, Sam is a really good example of that. She's a freelance site communicator, and she's done a fantastic job in that, then, you know, I think that, as I mentioned, or I've talked about a lot online, it's just you know, internships are a really great transition, to be able to help you make that jump, building up a portfolio yourself while you still have the other your job. And employment is really great. So that you can have evidence of your value and what you can deliver so that when you apply to a full time job, you kind of already have a backlog of stuff, and they're not taking as much of a risk not knowing exactly what you can do.

And then I'll add sometimes you can make your own job, which is like, you know, kind of crazy, but sometimes you the best job can come when you can show someone the value that you can deliver as a science communicator, even if they might have a non have a job listing, like those cold reach outs, whether it's a university, your university department that you can get hired part time with, you know, the engineering department being like, I'm going

to help you communicate the results that are coming out, be surprised or receptive to places people like that might be it's like, there's opportunities to make your own opportunity.

And really just, you know, be okay, if it takes a little bit. I mean, this didn't happen overnight for me. And I think sometimes when I talk about my career journey, it looks like Oh, that's completely obvious, you know, she freelanced. And then she got an internship, and then she worked full time, like, but oh my gosh, every single one of these decisions, like, was so hard. And I just didn't know if I was making the right one at the time, making the decision to leave tech review to come down to NASA was a really hard choice. That was my first like, full time job in this and like, I was like, man, like, do I really want to make that whole move to the choice to not accept a full time engineering job, you know, when I graduated was like a really big choice and did to go into the internship and another area after I'd already graduated, I think sometimes people think down on internships after you've graduated. But be willing to take the steps in the right direction without feeling like you've got the perfect job that you're applying for. I feel like I'm still evolving. And I don't know where I'm going to be in, you know, 10 years as a science communicator. But those those little steps in between are really important and can help you understand the science communicator that you want to be. Yeah, and also kind of steps sideways and also backwards, and just just allowing yourself to go in whatever direction feels right for you. Yeah, exactly. It's, you know, don't worry about other people's judgement. Obviously, you have to do things to take care of yourself and make the money that you need to live like, obviously, but, you know, be willing to just to consider and take a step back and be self aware of like, what do I really want and what's going to make me happy. And take the steps and you know, even outside of communication just in life, take the steps towards the whatever can make you most happy.

Sophie 14:31

So I've interviewed you on my blog before as part of my scientist in the spotlight series. And you may or may not remember from that, that I like to ask everyone the same question at the end of it, completely unrelated to science and scicomm, but another one of my passions, and I thought it would just be nice to pull that same question into these interviews to wrap up in sort of same way. So you all might know what's coming but my final question to you is where

Should I be travelling to on my next adventure when we can do so safely? Of course. So where would you recommend visiting and why?

Erin 15:08

What did I say last time is what I want to know. Again, I'm gonna have to have I have to go look this up now cuz I'm like, Am I gonna recommend the same thing? What was my mindset? I think I did that interview a while ago. Um, let's see, well, so I think it can be partially influenced by where I want to go, which is one of my trips that I really want to take but I can travel again is to go to New Mexico and so see the very larger array like the telescope, radio array stuff. That was one of the trips I was really hoping to take when I first came down to the south and moved down here to Houston cuz I moved down here and eight months before the the pandemic hidden, you know, I haven't been travelling since. And I really want to do that. And then potentially the other one is take a road trip through Utah to all the different national parks around there. So that's what I would recommend to you. Because I did do that on the way back from one of my summer internships, I was out in Santa Rosa, which is just north of San Francisco and drove all the way to Florida from there,

and I hit like eight national parks along the way. And one of my favourite areas was Utah, which is just has this beautiful red rock and you can go on a great road trip and hit like four or five national parks around there. So those were my answer for you very nature focused, but I really love hiking.

Sophie 16:23

Yeah, so, then you probably won't be surprised to hear that your answer before was the Yosemite National Park and the Sentinel dome, because you mentioned how much you like to hike.

Erin 16:36

So yeah, there you go. That's hilarious. Yeah, I went there to on some other internships I had out there. That's my my favourite National Park. So not i'm not surprised I said that. But you know, if I'm nothing if not consistent.

Sophie 16:48

I thought it would be good to ask you again without looking beforehand to see if it would be along the same lines, like the same however many years later is for now, thank you for that. I really can't wait to be able to travel again, because I'm really excited to go to the states and travel around different places. So it's on my list.

Erin 17:05

Awesome. Well, if you're down here in Houston, hopefully I can get you out to Johnson Space Centre

Sophie 17:09

that would be amazing. If I'm ever there. I will be banging your door down.

Awesome. So thank you so much for giving up your time to talk to me today. It's been an absolute pleasure to learn more about this icon that you do. And maybe you can remind everyone where they can follow or find you online.

Erin 17:27

Sure. So for my personal accounts, you can find me at Erin Winnick, er I N wi n IC k primarily on Twitter, Instagram, and Tiktok. I'm on Facebook, LinkedIn and medium as well, though. And then if you want to check out some of the awesome stuff that I do with the space station, check out at ISS underscore research. Or check out nasa.gov and all the awesome stuff we put out there.

Sophie 17:51

Yeah, for anyone listening that doesn't follow you already, I would highly recommend it because it is just a joy. And you're incredibly inspiring. So thank you so much for joining me on this episode of the podcast. It's been really, really fascinating to chat to you and finally get to chat to you.

Erin 18:06

Yeah, thanks. So happy to be here.

Sophie 18:07

Now. I feel like there should be some some cool space or astronaut way that we should try and wrap up this interview. I don't know if there's like a saying I don't know if they say like over and out or something when they finish communications or something. But that's what I'm going

Erin 18:23

here's what I'm going to say for you the way the astronauts finish and downlink. They say station we are now resuming operational audio communications.

Sophie 18:36

Yeah, I really wasn't going to try and repeat that. But an interesting little factoid for you. Huge thank you again to Erin for her time and being the first ever guest on the podcast. Now, if you have listened to the pod before, you will know that there is a DIY section. If you are new around here, then the DIY section aims to give you as the listeners an exercise tool or resource that you can add to your scicomm toolkits to help you bring your science stories to life. And that isn't going to change for these interview episodes. So for this episode today, there's not just one tool, but the first one is going to be Erin's science communication internship post. It's full of so many great paid site comm internship opportunities from across the globe. And if you are listening to this, you find there is one that isn't on there that you know of. I would highly recommend that you get in touch with Erin wherever you can find her on social and suggested to her because it's a really useful resource for everyone. Having done some science communication internships myself, I cannot stress how important they were to help guide me in my

In science communication career, so if we can help give the gift of internships and paid internships, to as many other people as possible, then I think that gives us even more hope for the future of science communication. And the second tool for today is more of a task that I want you to do. From our discussions with Erin,

we could see the importance of having an editor or someone who would look over your writing. Now, I'm not asking you to go out there and find a professional editor who's going to give you all the tips and tricks who you might have to pay, I want you to go out there and find an editor buddy, maybe you can do a bit of a partnership where you can send them, whatever science writing you're doing, they can send theirs to you. And you can do a bit of a critique for each other.

I personally would encourage you to find an editor buddy, who, first of all is a scientist. But then I also want you to try and find another editor buddy, who is not a scientist. Now this could be your parents, your siblings, a friend, anyone you can think of. Now, I think it's really important that you have both the scientist and a non scientist, editor, buddy. Because obviously, the scientist has more of a niche knowledge, they understand the world of science more. But the purpose of science communication, is to communicate your science with your target audience. So having that non scientist eye over your video script or your next blog post, they can point out anything to you, they just don't follow. And you can correct that before you publish anything. Or you move to the next stage of the project, whatever it may be that you're working on. So when you finish listening to this episode, please go out and find yourself some editing buddies. Because having that tool and that outside eye,

looking at your work is going to be so so valuable for your science, communication, confidence, and a key tool that you can have in your scicomm toolkit.

That is that for this week's episode. I hope you enjoyed the first interview. I really enjoyed getting to talk to someone else about science communication for a change, so I hope it was just as refreshing for you. And there are plenty more where this interview came from too. I have more fabulous guests lined up just waiting to share their wisdom with you. This podcast is really helping me feel good currently given the current global situation, so I hope you are doing those things that make you feel good. And I'd love to think that this podcast gives you a little bit of joy.

Come and find me on Instagram if you have enjoyed this episode. I'm @soph.talks.science or you can follow the podcast too @scicommtoolkit. This is where you are going to get all the latest announcements about new seasons and new guests in the future, so if you don't want to miss out, give us a little follow on there. Don't forget to like and subscribe to the podcast. Rate and review if you can. Shout out to Fiona S for the podcast's first ever review. Fiona says: **Some helpful tools!**

I had come across science capital before but Sophie has now made me aware of other frameworks and tools available to help you define your audience. A good length of episode and Soph's enthusiasm for sci folk is evident.

Thank you, thank you, thank you. I really do love getting your feedback - positive or negative - so I can make this the resource that everyone can come to, so thanks to everyone who has sent me a cheeky DM so far with some thoughts. I will see you again in the next episode that will be brimming full of more tools and tips to give you some more scicomm confidence. Bye.