Sarah:
Welcome to vitamin Ph.D. My name is Sarah Hokinson and I am assistant provost of professional development and postdoctoral affairs here at Boston University. And today we are navigating careers in science policy with Ronit Prawer who works at the British consulate general Boston and we'll be learning all about her role in the UK science and innovation network and the ways in which she builds partnerships between the United Kingdom and the United States. So thanks very much for joining me today. So I think I have to admit. So I have to full disclosure, I once had this job, so this is really fun because not only do I get to kind of hear about my old stomping grounds, but I can say coming at it from that lens that it's a bit of a back box, both science policy and then this particular job working for a foreign government in the United States. So I think can you demystify this job a little bit for our listeners? What is the UK science and innovation network and what role do you have within the consulate?

Ronit:
That is a very good question and I'm glad you did the full disclosure because we were just saying that if I get something wrong, you're going to be able to correct me about this job. So if you kind of cast your mind back to the way ambassadorship used to look, the way that people used to send them abroad was with a group of attaché. Attaché is French for ambassador. My other title would be science attaché and the way that, the reason that we do that is you just used to send out an ambassador with like a core team of people who were responsible for different policy portfolios. So you would send your attaché to another that you would send your ambassador to another country with a political attaché who looked after the bilateral political relationship and a military attaché if there was a military relationship, a cultural attaché, an economic attaché, and since the late nineties the UK has been adding to that sort of Kadra of policy professionals who join ambassador. They've been adding a science attaché which is incredibly refreshing and required. Many countries have their economic attaché cover the bilateral science relationship. I always find that the more specialized a team you can have, the better. you need someone who understands, PIs and IPs and things that are not necessarily kind of trade-oriented. So you want someone who is sort of deeply enmeshed in the research and academic relationships between two countries. So obviously we're not in that world where the ambassador set out on a voyage with his core team but we still have those titles.

So as the director for the Eastern US of science and innovation, my job is to be that person for the UK government and to look after the sort of bilateral scientific relationship from that perspective. The UK science and innovation network is now 150 officers around the world. We are in place in consulates and embassies and, and government offices.

Sarah:
Well, and I think it's so interesting because it sort of, for me anyway, serves two purposes, right? There's the ability to help, in this case, the foreign government be the UK because we're here in the US, understand the opportunity that exists within our country, and to have that conversation. But I think, more importantly, there's an opportunity for both countries to contribute collaboration on these global challenges that I think can sometimes get lost when you're a Ph.D. student and you're working in a very niche thesis environment to go into a position where you have the opportunity to think about things like

food security or climate change in a way that's much bigger than your bench or what you're writing about. I'm curious from your perspective, how did you make that translation? So you had your doctoral dissertation in a very specific area and now as the science of attaché, you're a generalist, you could be on projects on a range of things that could be in and outside of that direct, disciplinary expertise that you have. So how do you navigate that? What skills do you bring into it from either your doctoral training or what you've learned at the consulate to get up to speed on all of these different areas? That might not be what you were reading about as a doctoral student.

Ronit:
Oh, there's so much in that question. I love it. Let me sort of start with the personal story and then I'll say a bit about this question of the kind of going from specific to general skills.

Sarah:
Yeah. It would be great to hear more about your training.

Ronit:
Sure. Well, everyone always looks at me with kind of slightly raised eyebrows. They're like, wait for a second, you're an Australian in America working for Britain? And yeah, I mean that's me. So I grew up in Melbourne, in Australia to my degree at the University of Melbourne. My transition was to go from working in a laboratory setting to working in a policy setting. I think like many people who kind of start out in science, I thought, Oh, I'm going to be a professor. But I very quickly in the lab realized that I was, I could have been an average scientist. I could have been okay. It could have gotten by but I was a better-than-average science communicator. I was constantly as an undergraduate I was already the person helping my lab where I was working to write ethics proposals, to write fundraising proposals, to talk to potential funders, to talk to people in other departments to explain not just sort of what we were trying to do, but also why it was important why we were best placed to do it. Why, for example, we might need permission to use 40 mice to do it. So you don't just, you're not just explaining what your end goals are, but you're explaining the importance of the process to people who may or may not have had any experience in the lab.

So I found that I was effective at the infrastructure and the ecosystem surrounding the science. And to me, it seemed that I could do a better network for progress by supporting truly excellent scientists to do what they do with complete focus because I could take away so many of the things that would divert their attention from their science. So to be able to put together papers that would help them get funding that would help them get ethics approval, all those sorts of things so they could focus on the thing that they did best. There's a saying from the Israeli kibbutz where they would say every person would work, in the things that they did best and that their phrase was from each according to his ability to each according to his needs. And I thought, well, my ability, the place where I can be most effective is in the science ecosystem. So that's where I sort of drifted off to quite happily.

Sarah:

For me, what I liked about the job that you don't have, and what I like about the job that I now have is the impact that you can have on people and whether it's their understanding of science as you described by being able to be that translator from the very deep disciplinary expertise to a more generalized understanding to just the human connections that you can have in fields like policy and administration. The ways in which I connect with people in these types of jobs have been really powerful for me

Ronit:
No, it is definitely fantastic, and I think that people from exact sciences who transition into policy or journalism or science communication, There are, there are lots of things that sort of niggle at you a little bit and one of them is kind of what if I'd stayed in the lab. I don't kind of, that happens pretty rarely. But the other one that I think people find really difficult in these kinds of roles is the ability to be conversant and happy to be only conversant in a whole lot of different areas that you work in because you are used to being the expert on your particular protein and all of a sudden you are the dumbest person in the room and you're supposed to be, right? You are supposed to create policy by leveraging the expertise of the people who are much better than you. Me, for example, I was a geneticist, I worked on male infertility, I need to talk about international wildlife trafficking and the deep underground neutrino experiment that is so far from my comfort zone. I need to be okay with not taking every policy issue that I deal with and trying to dive in and know all of the details. If you try to be the expert you will be kind of paralyzed and not be able to get anything done. And I think as scientists our instinct is I must understand it all and have to understand it properly and I can't really talk about this unless I've got my facts straight and I know everything that there is to know. And you really have to kind of resist that instinct that you have as a scientist. You need to know enough to be dangerous, but you need to rely on the people who really have that expertise as well. That is why they work with us.

Sarah:
I'm so glad you said that because I think that was my biggest challenge when I first joined the consulate was knowing when to speak and when to contribute in meetings where I was facilitating conversations with experts and when it was most effective for me to hang back and listen and take notes and synthesize and not need to prove that I'm the expert. And in fact in a lot of cases, because I was so not the expert, it was detrimental. In fact when I put my hand up and I have something to say cause they're like, why do you have something to say? So I think that is a transition in the policy of getting used to the convening and synthesizing aspect of expertise as opposed to being reliant on yourself to generate the expertise.

Ronit:
Yeah, 100%. And I think there are lots of people who work in very specific science policy areas and we work with a lot of those people. So we might have someone who works specifically on AMR policy but we work in bilateral science and so I'm pretty specific about our policy objectives in a given year, they will be pretty broad. Just to give you an example, like in the past year, our team has worked on everything from kind of innovation policy to IP to international wildlife trafficking, to AMR to a hydrogen economy. I mean, just the scope and the scale is so huge. But I think one of the skills that you come away from science with that is really important is humility and curiosity. I think when you have both of those qualities the ability to ask people and recognize that you don't have the answers, they do. And to sort of work with them to get to the optimal policy solutions those two things will serve anyone well.

Sarah:
And I think that's also an interesting transition point for graduate students were up until this point they may have been trained, go read the paper, go figure it out, go understand it and report back to me in some particular setting, whether it be journal club or group meeting. And I think you're right, that ability to be curious and ask questions and make in the policy world. Cause again it comes back to that human connection piece and, and the word relationship is so much more critical than all the policy briefings you could possibly read on any given subject. So I love that and it's what I loved about the job when I had it. And, what made it really exciting to me. I felt like every day I learned something new that I didn't know before. So this'll be fun. We can trade notes. One of the things that we ask in the navigating career pathways episodes is to describe a typical day, but of course, I know very well a day in the life of a center. So we have this wonderful acronym for the UK Science and Innovation Network of SIN. So the day in the life of a SINner is hard to describe. And so I am going to sit back and let you try to do it. Because people used to ask me this question on career panels all the time and it was the question that I struggled to answer the most because the job is so diverse in terms of the things you do. So you can maybe break it down by the types of things that you do or you can take the harder route, of telling me what a typical day looks like.

Ronit:
Well, I wish that I came to talk to you on a typical day. This is atypical. Okay, so the science and innovation, now I have to do a very good job of this question. You're watching me and taking notes. Probably the best way to describe it is to describe the parentage of sin as a word. So as Sara said, the science and innovation network government is full of what we call TLAs or three-letter acronyms. And we are privileged to have the best one, SIN. And you can imagine we have SINterviews and SINovation and so, and

Sarah:
There's so much fun you can have with it.

Ronit:
Exactly. I'll tell you all about our SINtern program if you like too. SIN is jointly owned by two government departments. The first is the FCO. There's another TLA I hope everybody's practicing. FCO stands for Foreign and Commonwealth Office and that is sort of equivalent to the US state department. On the other side of our parentage, we have a department called BEIS that is a four-letter acronym. BEIS is the department of business energy and industrial strategy. And that is sort of equivalent to commerce and energy combined I guess if you had to sort of find a comparison in analog. Under the foreign and Commonwealth office rubric, what sinners do is basically what you can kind of envision any diplomat doing but the sorts of things that you would really like that diplomat to have a Ph.D. to do.

So we will do some kind of lobbying or policy reporting on issues that our government cares about around the world. So climate, antimicrobial resistance, things like that. And we have kind of two versions of the way that we do that. One is London is very, very good at, and this is something that I love about working for the British government, they do not sort of reinvent the wheel and say, okay, we're going to create a policy. We know best. We're going to just write it. Here we go. Then they do not do that. They

say, all right, we're interested in how governments tax SMEs coming out of universities. Attention: Israel, US, Germany, France, Japan. Find out how your governments do this, how your host governments do this, how does it work? What is the direction of travel, where will it go next? Who is involved? How has the program evolved? They'll use that information to help them build new policies and think about future emerging technologies based on expertise that exists from our partner countries around the world.

And so, a day in the life when we call that a commission and we get lots of those that ask us all sorts of questions. Now, of course, we might not necessarily have expertise in the tax structures that surround early-stage SMEs in Boston or the US, but our job will be to go and get that information and synthesize it in a way that makes sense for politicians, which is its own challenge. So there is a lot of that kind of reporting. That is always really interesting because what I tell my team, and I'm sure you told them your day too, is part of the job of a science diplomat is to, I call it being more than Google. Because if you don't have the kinds of relationships where I can pick up the phone and say, Hey Sarah, I've got this really hard question from the UK government, who are the right people to help me navigate it? Where's the expertise? Who can I have a coffee with and pick their brain really and ask them their opinions on things like this? If I can't do that, I am no better than Google and we may as well have someone employed in the white hold to sit there and Google. Go type into the Google, as my grandmother would say. What did Tinder, the Google, what is the way that Japan taxes and at least HSMA in their example? So part of our job is policy reporting back to London and is more than Google.

London doesn't necessarily know what to ask me. I'm sitting in, I cover the East coast, but I sit in Kendall square and the innovation that happens here is phenomenal. London might not know what to ask me to tell them about. So we do a lot of proactive policy reporting back to London from all over the world. We'll say things like, “Hey, did you know that the government in Israel has more startups per capita than anywhere else in the world but the US? These are interesting things they have done to encourage that. Here are some things we might learn from.” London might not have known to ask that, but we would know to say, here are interesting things that are happening. So a good example of that is just the other week we did some reporting on quantum and the way that the ecosystem is evolving here in Massachusetts on what different structures are doing to encourage that evolution.

So that sort of fits under our foreign and Commonwealth office, sort of state department type work. So this policy reporting and there's kind of relationship building on that side of things. Sometimes there's lobbying, there are things that the UK government cares deeply about as you know. We will talk to our host governments about those things. Antimicrobial resistance is a really interesting one. You know the UK government is a world leader in trying to prevent superbugs and we talk to a lot of different countries about how we can help them learn from what we know about policies that will basically help us do that.

So that was the one off FCO foreign Commonwealth office side. And on the BEIS side, we focus on things that are more prosperity-oriented rather than policy-oriented. So we'll do things that encourage all sorts of collaborations that we think will benefit UK science. Those can be, we are a delightfully agile piece of a government. We have a healthy risk appetite, a wonderfully high failure rate. A healthy failure rate, which is great. We don't do business as usual. The job of SIN is to be at the cutting edge, to try things that are different and new.

Sarah:
And that's the science piece of it, right? I mean, if you took failure out of science, you'd in fact, only have so many of the innovations and discoveries that exist in mankind, and humankind we'll say. and so just by that definition, if you took the failure out of this piece of government and played it really safe and only bet on the collaborations that will lead to some sort of result that may be less impactful than if you gamble a little larger and you try to create the that could create the next big thing. Right?

Ronit:
Yeah, exactly. And we really tried to sort of move the needle. I mean, we're surrounded by lots of other really helpful teams. So, once something becomes business as usual, it would become something that our trade team would do or something that we didn't really need government involvement to move the needle or to kind of change the status quo. We try to intervene in places where we think we can make a difference where we think there is sort of market failure as it were. Or the sort of research equivalent of market failure and we try to catalyze those collaborations. We were quite innovative with the way that we do that. We'd do everything from the hackathons, symposia, workshops, delegations, Halloween parties. Now I'm joking about the last one. I'm going to get in trouble for that.

We have a small pot of funding that we use to catalyze collaborations. We're quite creative about the way that we employ that funding. Collaborations that are long-lasting; institution to institution memorandums of understanding, exchange of researchers, exchange of research. All of those things for us are things that we think the reason that we do that is because the US has brilliant science and we think UK scientists can really benefit from working with their American colleagues and vice versa. So I like to think that we work with global science because in the US and the UK, what we do together is where we're stronger together than we are separate. And I think our joint contributions to global science it's why we do what we do.

Sarah:
I think it's really interesting to think about the partnerships that SIN can create is almost intellectual capital. So it's not to discount the fact that commerce needs to happen. It needs to happen across borders. And there are all sorts of prosperity metrics associated with money and company building and FTEs that are important and valuable and a demonstration of success. But what I always liked about SIN is that there was a piece of success around the intellectual capital that can happen when you get incredibly clever people in the room to discuss really big ideas. And that I think contributes to the creativity that you speak of in terms of how you can construct the projects in the way that you work because you're not necessarily confined to some dollar amount that has to be generated on that day or signed in a contract somewhere. But there can be this long-term evolution of how this intellectual capital leads you to an advancement that will then lead. So down the line, these financial successes are attributed to other aspects of the UK government. So I liked that flexibility to think about the scientific piece of it earlier than some of the quantitative metrics.

Ronit:
Yeah. And it's funny that you say that because flexibility is not a word people normally associate with, the behemoth that is government. But it really does exist within the science network. I'm so impressed by the commitment to the longevity of science projects, as you say. So governments love having these

little soundbites where you say, we created, we brought X amount of money and Y amount of time. But the government really has patient metrics where science is concerned. They know that when we run a symposium that is not going to lead to the discovery of a drug tomorrow and they have the time and the flexibility to sort of ride the wave between. You wait for changes of administration. So the government that funded the given project is not necessarily the government that will see the benefits of that project. But I think that's really the mark of a really stable and forward-thinking civil service. Planting the seed now and waiting for the benefits that will come.

Sarah:
Next time I'm on a career panel, I'm just going to bring out this recording and when they ask me about the typical day I'll just be like I have a recording for this.

Ronit:
Yay.

Sarah:
I think one of the interesting things also about working for the consulate, and I guess for me, someone from the United States working for a foreign government, in particular, is how much the overall brand of the country that you're working for comes into play in the way in which you work. And so I always get caught in the trap, when I'm on these sorts of panels describing things like when the big red bus came to Boston. , because it's a very visceral and visual memory and I think the UK consulate here, in particular, has been very good about capturing our fascination as Americans with British culture and being able to use that to then create a broader conversation. So I do have a few of these moments that stand out, the red bus being the primary one because I've just never been so excited in my life than to ride a red bus down Newbury street. But I'm curious what are some, I mean there's a really fun side to it too. The kind of British cultural piece that also exists and is also a way of communicating to an audience. And so do you have any favorite memories of ways in which you all have thrown events that play on that and they don't have to be science-related. That's the other cool part about working on this team as you described. There are attaches in politics and there are attaches in business and so the events that you do aren't always just about science.

Ronit:
That is such a good question spoken by only someone who knows what the inside looks like. One of the things I find difficult is moving past that UK is the Great British baking show and Downton Abbey and the Royals of course. And more trying to focus on the UK as the powerhouse of global science and innovation that it is. I mean, for me that is more exciting. My favorite events are absolutely going to be sciencey ones and futuristic ones. A couple of weeks ago when the red arrows, who are the UK's aerobatics team, came to do a flyover in Boston. Then they landed their planes and we got to go and have a look at the planes and chat with the engineers. We did it on the tarmac, which was super exciting. One of the really exciting things about that for me was not just seeing the red arrows across the Boston skyline, which was just fantastic, but it was also the partnerships that were involved in around that event. The Red Arrows are still in the US by the way, if you're listening to this from somewhere across this great continent, just find out where they're going next. You should try and see one of the aerobatics shows. They are absolutely phenomenal.

Sarah:
By the way, I just want to say that it was effortless how you just did that.
Ronit: A plug for my red arrows friends. I actually did that event together with this amazing group in Boston called Silver Linings Mentoring, which is a mentoring organization devoted to supporting kids impacted by the foster care system. It was amazing to go with young people and talk about science and engineering and careers adjacent to science and engineering. I have to tell you my favorite line of the day, which is probably a little bit, may or may not get me in trouble. When we were on the tarmac with these kids, one of the kids that I brought looked at me. And so the red arrows wear these bright red jumpsuits that match their bright red planes with the Union Jack. The engineers all wear blue and obviously, it takes a lot of brilliant engineers to support this phenomenal team. This 11-year old that I came to the tarmac with and just sort of looking wide-eyed at the planes said to me, “The pilots, they’re just stuntmen, the engineers are amazing.” And I went, yep, that's a win.

Sarah:
The broader impacts piece of, the thing I love about writing the science and national science foundation grants is that they force you to think about the broader impacts to the society. And that can look like a lot of different things. But a big focus of that is outreach. And that's exactly it. To get that 11-year-old to not look at the driver of the plane, who has a very important job, as being the only hero of the story.

Ronit:
Yeah. And for him, the hero is absolutely the team in blue. He just wanted to understand how they could deconstruct the magic of these airplanes and look at the inside of them and understand all the equipment and that. So that was just fantastic. Felt sorry for the pilot, though.

Sarah:
There’s room for both. I want to wrap up our conversation in two parts. So one, I want to allow you to shamelessly plug this intern program, which is open to graduate students. Because I think it's such a great opportunity for graduate students to be able to come inside and see what policy looks like and have a project that they can take ownership of and work directly with you. So I want to give you an opportunity to describe that and as you do, I guess I would ask you to think about, to those graduate students that are interested either in your SINterning program or in science policy in general, what advice would you give them? So where should they start?

Ronit:
Oh, well thank you for giving me the platform to shamelessly plug some of our programs. So I think what we were hearing was that people who wanted to move from science to science policy faced a particular roadblock. That was that a lot of science policy jobs are through experience. I know this is replicated in a lot of other careers but I think we found it to be particularly difficult. Our interest is on, I will say unhesitatingly, that we are really keen to get good people into science policy. This is the sort of thing that is absolutely critical for the way that we as societies will cope with some of the challenges that we will be facing in the future. So we're really interested in being able to help people make that transition. That is what our intern or SINtern program is designed to do. You can come and work with us at any stage of your scientific training: at your undergrad and graduate levels. We're incredibly flexible with this

program. SINterns come and work in our office as one of the SINteam and we really try to get you to work on a particular piece of policy reporting so that you can have the experience of building that up. We've had some great sentences in the office. You can follow the UK consulate or me on Twitter and we will obviously publish all of those opportunities, not just for us but around our network. We're very happy to have anyone who is interested come and join us to work probate on that.

That's leading into the second part of your question. I think some of the best things that people can do is, there are lots of science policy opportunities within universities. As a graduate student, you're an expert and people are looking for your expertise. So, accept invitations to sit on boards, think about STEM education to think about ways of improving doctoral training in and of itself in your institution. I think sort of getting involved in the ecosystem that surrounds your lab, even if you know in small ways I think can make a real difference. When you come to an employer and you say, I helped build this training program or I helped change the way that we run seminars for the public or whatever that is. Have a look at the infrastructure that surrounds your lab in your expertise. See what interests you and go and contribute to that particular part of the supporting infrastructure of science. I think very well received by folks in the policy space. And they'll see that. You can see that sort of backstage operation and know what it means and how to get involved in it.

Sarah:
And you can speak the lingo. I mean to your point, not only the acronyms but there is a way of speaking and thinking that happens in the policy space that one can learn on the job. It's far more impressive when you come into the interview and you're able to describe a piece of work that you've, again, taken ownership of and demonstrate an understanding of how things work behind the scenes. I think that's great advice. This internship program is around the country. There are SINners all over the US and it's not just a Boston-based opportunity that we are shamelessly promoting here today but in fact, an opportunity that exists all around the United States. I hope many of our listeners flood your inboxes with requests to become a SINner. I just want to thank you so much. I mean, I loved my time as a SINner. I do miss the trips to London. If you are ever looking for a delegation of academic administrators, sign me up. I'm ready to go.

Ronit:
Excellent. Beautiful. I've got to get you on another red bus.

Sarah: But I miss it. Not just because of the red bus and the fun that we described. I do miss again the opportunity to think about SINthesizing science.

Ronit:
SINthesize. See what you did there?

Sarah: Exactly. There are endless possibilities with that acronym. And that was really exciting. I love the phrase be more than Google. Being able to take information and then put intellectual thinking into advancing that information to the next phase. I get to do that on all sorts of policy issues related to graduate education and postdoctoral training. There's such interesting science and innovation that

sometimes I really miss doing it about climate change or antimicrobial resistance or some of those things that I used to think deeply about. But thank you so much.

Ronit: Thank you for having me. This is so fun.

Sarah: Vitamin Ph.D. is a collaboration between the office of the provost and WTVU and we are very pleased to be one of their sponsored podcasts. Thank you very much for exploring careers in science policy today.