

Striking a SciDEAL: At the Interface of Diplomacy and Science Policy with Amrita Banerjee, PhD

Naira: [00:00:00] Welcome to another episode of Politics Under the Microscope! Today, we will be discussing the National Science Policy Network Science Diplomacy Exchange and Learning program, namely SciDEAL, as a supplement to our previous episode. Science diplomats to use their science and technology expertise and work with policymakers to build constructive international partnerships that address national and global challenges. The SciDEAL program gives early career scientists the opportunity to join a science diplomacy project in its initial stages, and develop it under the guidance of a science diplomacy expert.

[00:00:39] Today we have with us, Dr. Amrita Banerjee who currently serves as a AAAS Congressional Fellow, and is the Vice President of the Science Diplomacy Committee at the National Science Policy Network. And you are also an alumnus of Duke [00:01:00] university and you earned your PhD at Vanderbilt and your work interestingly focused on the host microbiome interactions and gastrointestinal disorders. Welcome to Politics Under the Microscope! We are so glad to have you! So, we wanted to start off our episode by hearing a little bit from you about how your passion for science diplomacy developed.

Amrita: [00:01:26] Yeah, thank you so much for having me! I'm really glad to be here. So absolutely thrilled to be talking to you and hopefully your listeners. Back at Duke, I was really interested in biology and I've always been interested in that as a subject and I chose to pursue my PhD in microbiome research at Vanderbilt and my thesis work was published not that long ago. So, I'm really excited about that too. I think you guys can all appreciate the number of years really that it takes for that to finally be totally out the gate. But besides [00:02:00] the basic science aspect of things, I've always just been interested in the intersection of science and society.

[00:02:06] That started at Duke that really furthered at Vanderbilt and really culminated in pursuing the AAAS Congressional Fellow. I'd done advocacy work in grad school and I certainly couldn't pass up the opportunity to work in a Congressional Office for a year, and really build up, not just talking about science policy, but how does science get translated to policy? How does legislation move? How does the process happen? And so that's just something that I've always been interested in to get to work on. It is a really humbling experience.

[00:02:41] And I'm just really thrilled to be able to do this for a year. As for science and diplomacy, I was born in India and I've always just understood how cultural barriers, I had always had an appreciation finding common ground, when in those kinds of situations, and [00:03:00] science I think is a universal language.

[00:03:01] So to be able to marry those two things I think is really right up my alley in a lot of ways. And when I found out that science diplomacy exists, it was like a light bulb went off. And my journey to NSPN was another way where I was able to incorporate some of those passions, grow some of those passions and so to be able to give back through this program through other opportunities has been just a really fantastic experience.

Naira: [00:03:28] Yeah, absolutely. And I definitely relate with you on, being from a different country and as an immigrant and how science is universal and how we can use that to make

an international impact, not just an impact, at the U S. The idea behind your program and behind NSPN, which is a mission, that we share here at Politics Under the Microscope, is that we have early career scientists and engineers vouching for the inclusion of scientific evidence in policymaking.

[00:03:57]It's amazing. Like a lot of people go through engineering [00:04:00] school or they go through their PhD and they don't see that they can make a difference, even though they see all of this happening around them when it comes to politics. What can you tell early career scientists about how they can be a catalyst for change?

Amrita: [00:04:15] I think that's such an important question. And I think it's a question that I grapple with. I think it's a question that I've heard my friends and classmates and colleagues grapple with. I think , a lot of us struggle with the idea of imposter syndrome, " how do we/how can we possibly make a difference"? And I remember first hearing the phrase "imposter syndrome". I thought, "Hey, that's me, that's me right there". I didn't know that there was a term for it. I think it does us a disservice. I think it does science a disservice and to scientists to disservice, to only let those voices echo in our head. And I think if we look around at what happened on Wednesday and then just not just Wednesday, right? It's, what's been happening for years and decades. It all just came to a head. And if it's any indication, [00:05:00] misinformation and rejection of evidence in rejection of science is it's rampant.

[00:05:04] It's not just government; it's society, it's our communities. And I think a strong and resilient democracy and a strong and resilient society, it has to be built on factual information. And an adherence to acceptance of truth and acceptance of evidence. And if we can't have that then really, we're on shifting sands at this point. So, what does that mean for scientists and what does that mean for citizens and citizens scientists? I think it means that we have a responsibility to speak up and say, whether that's at the dinner table or that's the policymaking table to say, "Hey, that's not right".

[00:05:40] And I'm not saying get into a confrontation. I'm not saying, get aggressive about it. But I think to be firm about it too. To say, "this matters, truth matters, honesty, and evidence matter". And they're important to the process. They're not just ancillary. They're not just, Oh, it would be nice. "If science was [00:06:00] include"--no science has to be included. It has to be a part of the conversation. It's not the only thing, but it is important. So that's really where I come from as a scientist and a citizen. And I think that's where an NSPN comes from. I think science is, at its core, a pursuit of truth and a pursuit of knowledge. And we as citizen scientists need to be a part of that conversation. And if we're a part of that conversation, I think it's better for society. I think it's better for government. I think it's better for this world. It's not just that we're in the midst of a global pandemic. It's that there is a climate crisis happening right now. Not theoretical, not in the future. No, it's happening right now. It's been happening for a while. And if we don't adhere to that acceptance of truth and evidence, then it doesn't matter how many, pie in the sky type of wishes and goals or proposals we create. If we don't work on it, accept it and move forward from that [00:07:00] then, you know, we're in a much worse shape societally.

Nina: [00:07:05] One quick note: when Dr. Banerjee says "Wednesday", she's specifically referring to the events that occurred at the United States Capitol building on January 6th,

2021. This date marks the first time that the Capitol was stormed since the War of 1812, when British forces invaded Washington DC.

Naira: [00:07:23] We heard and read online that you and your colleagues at NSPN essentially spearheaded this SciDEAL program, which we're super excited about. And to our knowledge, at least we think that this is one of the first virtual project-based initiatives that brings together early career scientists and experienced science diplomacy professionals on this high impact mission. And those that are apply are and selected for the program can work on projects at the Diplomacy Foundation, established by the governments of Switzerland and Malta SciDIP global and other institutes. So, can you tell us a little bit more about the collaborations between these [00:08:00] diplomacy institutes and NSPN and how these partnerships are accelerating the pace of policy changes at the international level?

Amrita: [00:08:08] Absolutely. I think first of all, these partnerships are kind of the first phase, I guess, of establishing a bridge between our group of early career scientists and these external public and science diplomacy organizations. And I will say that there it's one thing to be enthusiastic about these topics. And I think we are, we have the enthusiasm. It's the other thing to be able to know what it is or what our science policy and diplomacy professionals doing. I think one of the first questions I asked whenever I was in a webinar or a panel before I had my current role is, "well, what is an average day like", or "what is it that you actually do"? Because there is that level of opaqueness, you know, like, what papers are you pushing? Who are you [00:09:00] talking to? What are you talking about? And I think these kinds of partnerships help to, or will hopefully help break those barriers down so that early career scientists can say, okay, so this is the kind of work they do. So that's more of a tangible, experiential learning opportunities.

[00:09:17] The other thing I think is a little bit more all-encompassing, maybe. It's we don't just want to train ourselves or further our careers or build our resume. But we also, I think, want to be at that intersection of science and society. We want to make a difference and make an impact. And so, a lot of these projects what's really great. Is that they're front facing projects. They're projects with wide audiences, and working around the UN sustainable development goals.

[00:09:49] It's funding ministries from foreign countries who are interested in scientists networks. These are decision makers and policymakers. And if we want to have an [00:10:00] impact, those are the people that we need to be able to speak to and know how to speak to them. So, I think, again, this is an amazing opportunity for NSPN members to use science and to use their scientific knowledge or expertise, or just the soft skills that they've developed in their career for the betterment of science and decision-making. And I will say that to the point of accelerating policy changes at the international level, because it's such a new program, it's a little premature to say that we're doing that just yet. But hey, nothing ventured, nothing gained.

[00:10:33] So we're optimistic that with our eventual audience that we are going to be able to contribute our voice and expertise to accelerate change and one of the great things that I'm already hearing is the folks that I've been able to speak to who are professionals or practitioners, they said, "I wish this was something like this existed when I was a trainee". "And that's so great because you want to be able to provide something new, something that [00:11:00] benefits so that you can look back and say, "Yeah, I didn't have that opportunity

when I was coming up, but I provided something like that", so that you are providing more opportunities for people, more junior to yourself.

Naira: [00:11:13] Yeah. We believe this might be one of the first virtual, like science diplomacy initiatives, which is so cool. So, how do you believe that the current pandemic it's going to shape the structure and the purpose of the program? Was its initiation at all related to the pandemic ?

Amrita: [00:11:29] In a year where I feel like everything felt impacted by the pandemic, I don't think that this program actually was. I think always this program had intended to be virtual. And we want to make sure that these kinds of opportunities are not restricted for people who are based in DC or based in New York or based in the East Coast or the West Coast. We hope that in an in-person world, we can have our members come and meet the actual professionals in person, tour their places of work , talk to [00:12:00] other professionals, and present their work. But as for the project duration, that was always intended to be virtual.

Naira: [00:12:07] Yeah. In light of the pandemic, being virtual has improved access in some ways, for some people where they wouldn't have had the opportunity to do certain things otherwise. We're so glad that you thought of that, and we're super excited to tell our listeners more about the nitty gritty of getting involved with the program and applying. I'm going to hand it over to Ellie , and she's going to ask you a little bit more about the application process.

Ellie: [00:12:29] Thank you so much Naira. Besides becoming an NSPN member, if a rising graduate student who's listening to this episode, wanted to participate in this program, what would you recommend they start doing to strengthen their application? What experiences do you believe can prepare candidates, especially if they have no prior experience in policy analysis and science policy. You know, for example, I'm a graduate student and I'm just joining NSPN and I have no course experience with science policy whatsoever. What could someone like me do to strengthen my application and partake in this program ?

Amrita: [00:12:57] Well, first of all, welcome to NSPN [00:13:00] and I hope that all your listeners join NSPN! And for your listeners, if you are interested in science diplomacy, and you don't know what that is, and you just want to, figure out what it is, then join NSPN and join the Science Diplomacy Committee. The other thing that we want to highlight is that nobody needs to come to this program with science policy or diplomacy experience, and you don't have to even come with course experience. It'd be great if you did, and if you do have that, please highlight it in your application. But the whole point of these kinds of programs is to get you experience is to get you a foot in the door. This is really an opportunity to start building some skills and start building some experiences. Our mentors have categorically stated that if all you bring to the table is enthusiasm, a desire to learn and a desire to contribute that too is a qualification, perhaps the most important qualification. Most of the applicants will be graduate students or [00:14:00] post-docs. You have communicated science in some way, shape or form --highlight that. It's important and it's valuable.

Ellie: [00:14:07] It seems like you've brought up a lot of things that a lot of scientists are interested in. I know that a lot of scientists in the lab that I'm rotating in, they're really engaged with the current political arena, and they're very passionate about the issues that

are currently raging on in our society. That being said, who would you recommend this program to? Is it specifically people who are interested in science policy or more science communications, scientific outreach, maybe just mentorship and what careers will this program help develop?

Amrita: [00:14:36] You mentioned the milieu that you're in: the folks who are working on science, doing science, and are engaged in or at least politically aware. I think that's really the target audience. I don't think the target audience is necessarily or solely restricted to people who want to do science policy or diplomacy as a career. It's people who are again, engaged as scientists and [00:15:00] engaged in the world, engaged in their community. I think if you want to do a science policy or diplomacy career, I hope that you will apply because we hope that this program will start introducing you to some of the language, some of the skills, some of the environments that will make you successful in those, or prepare you for those kinds of careers.

[00:15:20] But it's also, if you want to stay at the bench or if you want to continue computational work, if you bring back some of those values and some of those ideas, or if it makes you better informed, I think it's always a good thing to have better informed scientists. In my opinion. I think if that's all we achieve; I chalk that in the win column.

Ellie: [00:15:41] I personally think that every scientist should be a part of this program, considering that being able to communicate your science is a very important part of being a scientist and who assigns it should be, especially in finding their place in our society and political landscape. For those of our listeners who are currently NSPN members, where I've just become an NSPN members, could you tell us how they can become [00:16:00] part of this ideal program and what they should be able to contribute?

Amrita: [00:16:04] Yeah, any NSPN member who is an early career scientist is welcome to apply to the program. All you need to do is go into the application, take a look at our project, take a look at our materials. We've been doing some Q and A sessions with our project hosts. So maybe check those out, and just take a look at what projects may be aligned with your interests, aligned with your time, the time commitment that you feel you can give, and then submit.

Ellie: [00:16:31] Excellent. You also mentioned time commitments. I know that for a lot of scientists, especially those who want to dabble in science policy, maybe they're not sure if they really want to commit to a career that's more policy-based. Could you elaborate on the type of time commitments that this program really entails so that our listeners have an idea of what they would be committing to?

Amrita: [00:16:52] Yeah, great question. Time commitment was definitely an aspect that I really wanted to clarify with our project hosts and [00:17:00] really make sure that expectations are managed on both sides, the project hosts and the team members. The project hosts both understand and encourage these to be part-time projects. I think for most of them we've tabulated like 10 to 15 hours a month. It's low stakes, which is not to say that the project isn't important or that delivery of the project isn't important, but again, it is not supposed to derail your scientific progress.

[00:17:28] In many ways I found when I was doing some sort of science policy activity, it almost made my science better because it energized me to remember, there's this greater

connection between the experiment I'm doing that week or that day. Again, it's a virtual part-time project and there are two reasons why it's team-based. The first reason is of course, because it's part-time, if everybody's giving like 10 to 15 hours a month, that's a lot of man hours being given to the project so that things [00:18:00] are getting done and things are moving forward. Project hosts aren't sitting there at the end of six months saying, "Well, so where is that paper you promised me? Where is that analysis you told me I was going to get?" Work has to get done.

[00:18:12] But then the other reason to keep it team based is science policy-science diplomacy. I'm no expert, but what I've seen and heard, it's a team-based sport. You have to be comfortable working in teams. You have to be comfortable taking a back seat in some conversations and advancing your opinion and viewpoint in others and coming with different experiences and expertise. Your project host for instance, who understands the diplomatic and policy side of things far better than you do. You have certain expertise, your team member has certain expertise and everybody has to work together to push this project forward and make sure that the final deliverables are reached. I think the fact that it is a team-based project manages the time commitment [00:19:00] and also maybe gets you ready for real world careers or policymaking.

Ellie: [00:19:06] For sure. I just wanted to go back to your point about the bigger picture though. During the SciDEAL program creation, did you think that this program would help scientists with grant writing? Because grants often push scientists to explore the bigger picture of their work and to elaborate on that and communicate that bigger picture to people, and communicating that to people would be an important skill. That being said, I wanted to ask if this SciDEAL program would help scientists develop those grant writing skills.

Amrita: [00:19:32] I think that's a really great point. I think again, to be able to communicate your science or the importance of science or the utilization of science for different political or policy-making diplomatic endeavors could be really helpful to grant writing.

Ellie: [00:19:48] Absolutely. And if we really think about this, you're communicating with government officials during the duration of this program. In science, you have to convince government officials to fund your projects. I [00:20:00] feel like this is a very important point and a very valuable skill the SciDEAL program will inevitably develop in its participants.

[00:20:06] As we know, the deadline for the SciDEAL program was January 18th. For our listeners who are interested in the SciDEAL program, could you tell us about future plans that the program has for the next application cycle? When will that be? Is it going to be an annual program or semi-annual? If you could shed some light on that that'd be amazing.

Amrita: [00:20:24] So most of our projects for the time being are six months. That could mean that we'll open up our application cycle in, you know, five months and have it be a twice annual type of project. Between you and I and your listeners it could be that we open up our project cycle in three months because we find this fantastic opportunity that we want to make sure that people can get in on sooner rather than later. The best advice I could give is stay tuned, stay connected. I stay pretty tuned in with folks who make inquiries to this program, this [00:21:00] NSPN community. So just stay with us and we'll make sure that everybody gets the information and the deadlines that they are looking for.

Ellie: [00:21:07] Okay. Perfect. That sounds great. For all prospective and current NSPN members, remember to subscribe to the NSPN newsletter to stay up to date on all things happening within the network, including the SciDEAL program. Getting connected to the NSPN Slack channel is another way to stay in the loop on all things happening and NSPN.

[00:21:25] Thank you so much for being a guest on this pop-up episode of Politics Under the Microscope. Amrita, we really appreciated having you here. You gave us some amazing insights, and this program sounds like something virtually every single scientist should be interested in, simply because they need to be able to communicate their science and to find their bigger picture. Thank you so much for being a guest Amrita! Again, we loved having you !

Amrita: [00:21:46] Thank you so much. This was such a great conversation. I really appreciate the questions, the any opportunity, and in general, if I can be a resource for you guys, for your listeners in any shape or form [00:22:00] definitely, don't hesitate to reach out.