

Graduate School Primer Series: Understanding and Overcoming the Impostor Experience (aka- You Belong in Grad School)

SARAH DAY: Now that we're kind of getting going, my name-- I didn't do this part. I am Sarah Day. I am the Professional Development Program Coordinator at the Graduate School here at Cornell. I'm joined by some of my graduate school colleagues, Heidi Marshall. And today's session will be led by Jessamyn Perlus, who is-- oh, Jess, I lost your title. I'm so sorry—the Senior Associate Director of Cornell Career Services. And we're so pleased that Jessamyn can be here today to present on understanding and overcoming the imposter experience. So I am very quickly-- we're going to record this session today, folks, just so everybody knows that we are recording. And I think that is it. I'm going to turn it over to Jess. If you guys have any questions, please feel free to post them in the chat. If you want to private message them to me, Sarah Day, feel free to do that as well. JESSAMYN PERLUS: Awesome. Thank you so much, Sarah. Excited to be here. I'm going to switch to screen sharing here. Thumbs up if you can see the proper view, not the presenter view. OK, good. Thank you. So I'm going to do a really brief overview of Cornell Career Services just to plant some ideas for you. And then we will dive into the imposter experience for the next 90 minutes or so. So thank you so much for coming. So as Sarah said, my name is Jessamyn. I go by Jess as well. I'm the Senior Associate Director and manager of the career exploration unit in our central office of Career Services. And I studied the topic of imposter phenomenon for my dissertation. So that is one of the key reasons why I would like to talk to you today about what it is, what it isn't, what can we do about it. But as I said briefly, there's multiple career resources that you could tap into as a graduate student here at Cornell. So there is the future faculty side of the house. There's also careers beyond academia led by Suzy. And then Cornell Career Services, my office, we're located in a totally separate building right next to the Cornell Store. So you're welcome to come meet with us. We all support you in different ways. But it's really great to know about all the options available to you. And this is the career development cycle wheel that we use for all our presentations. So a lot of folks just think about career when it comes to that red part. I need to write an application, or a cover letter, or a resume, or an interview. Really two thirds of our time is spent helping folks better understand yourself, your interest, value, skills, how is that all related. So I'll give you just a brief overview of how we in the central office tackle some of those things. So we do one-on-one appointments, where you just get to let us know what's going on with you, how can we support you, what are some resources you want to know about. We do workshops such as this one. We do virtual and in-person workshops. We bring employers to campus and things like that. And we also offer career assessments that you're able to sign up for if that's something of interest to you. When it comes to that middle piece, that exploring options field, again, we do one-on-one appointments, workshops, info sessions. We have a lot of resources. I'm going to show you a few of them. But if you can imagine it, chances are there's some way to tap into more detail about a career path or field you're excited about. We help you arrange internships or shadowing experiences, and of course, networking, which I'll talk about. And in the last take action phase, again, you can have an appointment for that. We'll sit down and review your LinkedIn profile, or a cover letter, or a resume together and give you some ideas of how you might tweak things.

We can help you prep for an interview. We can do kind of a simulated mock interview. There's different types of interviews such as a case interview if you're going into consulting. So we can kind of tailor what that interview practice might look like, depending on what you're specifically applying for. And again, in that take action phase we also can connect you with employers. So carrying on, I want to make sure you know about some cool web tools for career success. So get your phones ready because there's about to be a lot of QR codes on the screen. First up we've got our main career services website, career.cornell.edu. This is where you can find of a jumping-off point to a lot of those other resources. There's a big red button for Make an Appointment. All of our events are along the bottom of the website, our social media pages. You can see from the menu bar that we have a lot about graduate and professional study. Under the Audiences tab, we have more for international students specifically, so good one to bookmark during your time here at Cornell. We also have our very amazing resource called the Career Development Toolkit. It is located in Canvas, which is what you'll be using for all of your coursework or TAing. But it's just a series of modules that you can do in any order, whatever seems relevant to you. But we do have ones for current graduate students on the topics of, is academia right for me? What is the benefit of joining professional organizations? There's a whole page in here on, what if I feel like an imposter? So if you want to get the follow-up readings and links from today, the toolkit is where you'll want to be so you can join the career development toolkit on Canvas, and then maintain access to it even after you graduate. So tips about negotiating and offers. I know you're only just thinking about arriving here and already we're talking about the next steps. But this can give you a lot of clues about how to leverage your time here at Cornell and balance it, and explore, so you're feeling really great about the next steps. We also have a media library where we record all of our workshops. It's got kind of a long URL. But if you go to our main website and go to the presentations section, you can watch recorded videos on a lot of different topics. So we know a lot of grad students' timing isn't always convenient for when we choose to offer something. So that's a way to check things after the fact. And CUeLINK, sometimes we say it's like LinkedIn just for Cornell. This is an online tool where you make a profile. And you get to interact with other Cornell folks, alumni, and students who are there for the purposes of helping fellow Cornellians. So there's a lot of things built in there such as requesting meetings, or sending messages, or a discussion board. So this is a lower stakes way to get to know other people and see where they've gone. You can do all sorts of searches based on people who can talk about being a woman in STEM, or navigating work-life balance, or designing about industry, lots of topics like that you can search for. So CUeLINK is another really great platform to kind of sign up and bookmark. OK, I'll pause there for a second. Any questions about any of our resources? I know it went kind of fast. Any clarification I can put in? All righty, so we're going to talk about imposter phenomenon. What is it? How is it related to some things we may have heard of? Hear each other stories. Discuss potential consequences. And learn strategies to combat it. So it's a lot to pack into a short amount of time. So we're going to do our best as far as exploring some of this stuff. But first, I just really love PHD Comics. So this is a fun one. It's really common among graduate students just this feeling of, oh, it's me. I'm the one who somehow fooled everybody. So I want you to take a minute and just think to yourself. You don't have to type it anywhere or say anything. But I just want you to read the quote which says, "I've only gotten to where I am because." And I just want you to think for a second about how easy it is for you to finish that sentence, or not. For a lot of folks, they might

say, I was at the right place at the right time. I got lucky. Nobody else applied. And so sometimes we're just naturally trained to downplay our successes or not take full ownership for them. So this is just an initial thought exercise to get us thinking about, what is our gut reaction to seeing a statement like this? Another way of thinking about impostor phenomenon is this sports metaphor. Some people are born on third base, but convinced they hit a triple. But with impostor phenomenon, person consistently hits triples, but attributes their being on third base to anomalous gusts of wind and getting lucky with the pitches. So it's all these external factors that are contributing to how I've gotten to be at this level of success. So it can be helpful to think about the fact that we are storytellers. We're telling stories about ourselves, how we fit in the world, what, and why, and how things are happening in the world. And we can be impacted by stories from others, whether or not we want to be. From people who are important to us, that really shape us, and from external people who we don't even know, sometimes the stories that they're crafting impact us. And they can impact us in positive ways or some more negative ways. So you don't have to literally share your story just yet. But people have told me examples of, I'm the eldest child. And I was always known as the smart one. My sibling got to run around and do all sorts of stuff. And I was expected to always have things done in my family of origin. One person told me a story that-- his name was Matt. And so he was told he was good at math. And so he just kept on doing more math. So sometimes it can be a little bit humorous. But a lot of times, stories do influence who we are, where we're going. So here is our official definition situation. So impostor phenomenon is an internal experience of intellectual and professional incapability despite objective evidence to the contrary. So let's take it piece by piece. , Internal meaning we're not always talking about it a lot. It's related to intellectual and professional successes. You might feel like an imposter in a hobby that you have. I don't know, pickleball or whatever one is talking about right now. But if we're thinking about the definition of the phenomenon, we're thinking about work or academics. Despite objective evidence to the contrary, so to be by definition experiencing impostor phenomenon, you got into Cornell. You're going to do this great, amazing thing. You have racked up successes in your life. So as we put it all together, it's just this feeling of, I just didn't fully earn what it might be. On the other side we have a picture here of the iceberg illusion. So I don't know if you've seen it before. But on the top, we can see other people's successes. But we don't know what they sacrificed or had to go through, all that hard work they put in, good habits, bad habits that got them where they are. So that happens a lot. In graduate school, for example, you see someone got a publication. But you don't know that it was rejected by four other journals. And they had to revise and resubmit six times, or something like that. You just say, wow, they have a publication. I don't have one. They're amazing. So that is one way in which this can show up in your setting. I'm going to tell you a little bit more. Then we're going to have an interactive Poll Everywhere activity. So this is another part of the definition. It's called the impostor cycle. And it's this idea that let's say you're starting a new project or a new program. And it's natural that there would be a little bit of worry, or doubt, anxiety. What's it going to be like? How is it going to go? People tend to have two strategies, intentional or unintentional-- I don't know if they'd call it a strategy-- two modes they'll go into. Sometimes they'll overprepare. Those are folks who reread the entire textbook night before the exam or hand rewrite the notes just to keep encoding it. Maybe they're reviewing the PowerPoint and adjusting the fonts up until 3:00 AM. So folks who are just drilling, drilling, drilling in anticipation of the new thing. Other things folks tend to do is

procrastinate or ignore the problem. So sometimes it's big and scary. You just don't want to deal with it. Some people do both or depending on what the exact task is they might jump back and forth between them. But that's what those are about. And so then more often than not, it happens, it's a success. You pass the class. You get through the first day. You finish the paper, whatever it might be. And a lot of times in the impostor cycle we ignore that positive feedback. We don't really own like, oh yeah, I worked really hard on that. I put in the work. And there, look at the outcome, that's great. So you're kind of back at square one with the next project. It's like, oh no, we got to go through this all over again. And you start to craft that story about yourself like, oh, I'm one of those people that always procrastinates. That's the only way that I've been making it so far. That's going to continue to be my approach to things, which for some people can work and for some people can be damaging or impact other parts of their life or their work-life balance. So again, this is the impostor cycle. So let's learn a little bit more about, what is this IP? Clance and Imes are the ones who kind of identified it in the '70s. And they identify these pieces, including needing to be special. Or you want to be the best. That feels nice. Fear of failure, that makes sense. Failure doesn't feel very good. We don't want to kind of crash and burn. Fear, feeling like a fraud. I don't belong here for whatever reason. Again, we're talking about feelings and perceptions. We're not talking about objective truth of the feelings. Attributing success to luck. That getting lucky with the pitches kind of thing. Denying competence and discounting praise. So you get a compliment. You might get uncomfortable right away and don't know how to take it. Or maybe it came natural to you. A lot of language learners say, oh, well, you know, I just studied. I got better at it. So it doesn't count because it was easier than it is for other people. This next one is an interesting one. It's fear of and guilt about success. So fear of failure, that one makes sense. We don't love that one. Success draws more attention to you. So some people fear success because they're no longer flying under the radar so to speak. More people are critiquing them, or what they did, or the achievement. Or in some cases, folks experience guilt because well, if I got the award, someone else doesn't get the award. So now I feel bad. So I'm going to not put my best foot forward because I don't want that additional higher level of success right now. So those are some of the characteristics. And here are some other key points that I like to emphasize. It was first identified in high achieving women who were in academia by Clance and Imes in the '70s. But it's not just for women or people who might identify as a minority in their situation. It's pretty common for a lot of folks. It's also OK if you don't identify with it or it's not something that's come up for you yet. I can't give it to you just by talking about it. But it's helpful to know because chances are you're going to encounter someone who might be going through this even if you yourself are not. It is not a syndrome. You've noticed up until this point I haven't said impostor syndrome. That's what a lot of people know it as. It's out there in the world. A lot of celebrities talk about impostor syndrome is real, that kind of thing. So it is not diagnosable. The DSM stands for the Diagnostic and Statistical Manual, which is what we use in the US for diagnoses as a psychologist. So it's not something that you can be labeled as. Clance said that if she could rename it, she would call it the impostor experience because it's common and normal. It's not stigmatizing in the way that it's become. And two especially vulnerable times for folks that they identified are when you're trying something new or when you're being evaluated. So if you think about the point of graduate education, that's kind of what you're doing constantly. You're always pushing the limits of knowledge and trying something that's new to you, or a new experiment, or a new design.

And maybe formally or informally you're being evaluated or you have this looming decision-making power over you as to whether or not you're going to continue succeeding. So it's understandable that for some folks, these impostor feelings might arise. So we have our first Poll Everywhere activity. So there will be-- most of you should be able to do this if you have a phone available or a browser in your other window. And so you can go to pollev.com/jperlus404. Or you can text jperlus404 to 22333. And it is asking you, have you ever experienced impostor feelings? Definitely, sure, maybe, not me, not now. That's OK. Oh, thank you, Sarah. Sarah put it in the chat too. So we are starting to see some response. You can see the responses, right? Is it populating? Or do I have to push something? SARAH DAY: We can see them. JESSAMYN PERLUS: OK, good. Thank you. So let's see. It might max out at 40 participants. But we should have room for a few more folks if you're still trying here. As we can see, it is common. It is something that we've experienced, or we've heard of, or it's not coming out of nowhere. And then sure, maybe a lot of folks hesitate to maybe label themselves that way or think, oh, many of those criteria we looked at apply to me, but some don't at all. And that's normal too. We'll talk a little bit more about this. But it's really about how your perceptions impact how you're operating in the world when it comes to these feelings of belongingness. So great. Thank you so much for participating. I'm going to keep going here. There'll be more polls. So don't forget the link. People are talking about it. On the left, we have just a funny graphic, Impasta Syndrome. I'm filled with cheese and self-doubt. The bow is all just for show. I feel hollow and fake. And on the right are headlines from The Chronicle of Higher Ed, New York Times, Nature, Science, Harvard Business Review. These are reputable sources, where this topic comes up pretty regularly, pretty periodically. You can see from the titles it is a thing. How can we deal with it? You are one. No, you are not one. The Harvard Business Review one is really good, Stop Telling Women They Have Impostor Syndrome. So again to be clear, today we're not telling anybody you have it, you have to have it, you don't. It's about when we get to it, equipping you with the tools to overcome feelings of self-doubt and some of the other challenges that come along with it without, again, stigmatizing or labeling folks. Here is some other examples. This top one is a screenshot from Reddit that I took last year, the Cornell subreddit. Impostor syndrome here is brutal. I promise I didn't plant that. Some people feel it. I don't know if that was an undergrad or grad. But again, we understand how competition or comparison might appear in a college setting. Here are just two other examples. Jodie Foster said it was a fluke she got into Yale and that she got an Academy Award. I thought everybody would find out and they'd take the Oscar back. They'd come to my house and say, sorry, that was for Meryl Streep. And then the other quote here is from Justice Sonia Sotomayor. So she's talking about her experience at Princeton and says, quote, "A visitor landing in an alien country." And for her first year she was too embarrassed and too intimidated to ask questions, looking over your shoulder, wondering if you measure up. And you can imagine whether or not you've had an experience like that, that that can really take a toll on your health, your mental health, and the choices that you make. So the goals are really to understand when it's happening, understand what we can and can't do about it, and hopefully over time reduce the impact that those feelings might be having on us. OK, this one is about these bidirectional relationships. And it comes from Bronfenbrenner's ecological model from Cornell, if we have any human development folks visiting today. But you can see if you look at the graphic, we've got in the center the individual. So you've got characteristics, your sex, your age, your height,

your health. And then there's things immediately around that, maybe your family, religious, peers, school. And then the blue we've got even wider influences such as neighbors, mass media, politics, social services, industry. And then the biggest green one is attitudes and ideologies of the culture. So in the past, these impostor experience have been criticized for putting the blame on an individual. You feel like and impostor. Just get over it. Just stop feeling that way. And that's very unfair because all of these historical cultural contexts are influencing whether or not you're feeling that way. If there was no concept that you don't belong in XYZ space, then you wouldn't have that feeling of I don't fit in this space. So tackling cultures and belonging is really critical work that has to be done. It's beyond the scope of this presentation. But I just like to name it and make it clear for folks that there's all these influences that are going in multiple directions, shaping things. So there is a way to measure it. I use the scale in my dissertation, the Clance Impostor Phenomenon Scale. And it's 20 questions. It ranges from not at all true to five very true. It asks questions like, I rarely do a project or task as well as I'd like to. If I receive a great deal of praise and recognition, I tend to discount the importance of what I've done. So we're starting to see those indicators of some of those core characteristics that we talked about before. I don't give you the CIPS because, again, I don't think it's helpful. The cutoff score is arbitrary. And in my study, people would score really high on it, but then mark no, I don't feel like one to just a generic, do you identify this way? So there's a lot of back and forth about it. But if you want to Google it later, you can. But I want to get us ready to go into breakout rooms for a minute. So I'm going to switch the order of one of these slides. But how can we engage today? So comfort zone is nice. It's a safe place to reflect and to be. Gross zone allows us to stretch and learn. That's where I'm hoping we get to today. Panic zone or danger zone, that is too much. That's too much to ask. That's a lot of stress to put on you. So think about where you are, where you're willing to be today as far as participation. I'm going to jump ahead one slide. We have another poll that I'd like you to think about. Same place. Same link, pollev.com/jperlus404. And this question is, if you're aware of it, what activates your impostor feelings? For some people, it's obvious. I've heard some pretty disappointing stories about professors saying, you only got in because. I really hate that. But sometimes it's as small as seeing someone post something on LinkedIn. Accomplished, insecure. It's making a cloud. But it's hard to see sentences. That's OK. I'm going to make a couple guesses here about how some of the words fit together. When you're coming to a place like Cornell, you're around a lot of really high achieving people. And so you become aware of their achievements. We get an email every day at 4:00 from the university of who's invented the newest thing and things like that. And research often by definition is slow and systematic and can take a while. So it can be challenging to work literally more than a year and not have anything to show for it. I put show in quotes because I know that you're working really hard doing all the groundwork that's necessary for that next step or reading all the literature before you can synthesize it into a book of your own or something like that. Being told things. Discussing things. Sometimes studying together. Shyness or ability to go outside our comfort zone. Overthinking. Oh, for sure. That can definitely get in the way. I relate to that one. I'm not seeing it on here. But sometimes cultural differences or language barriers. Oh, I can explain this so well in my native tongue. But I'm struggling here a little bit to explain it in this context when people are looking at me, or I'm in a lab meeting, or I'm the newbie and there's 18 other people who are much more vocal about the things they know and they're doing. So this was great. Thank you so much for participating. And

that looks good. So Sarah is going to help me put you into breakout groups. But I want to explain things first. So I'd like for you to chat with each other because that's actually the most powerful part of this presentation is realizing that we saw that first poll. Most of you in this room are feeling it to some degree or could at least speak about it. But it can be hard to be vulnerable. That's why I showed the comfort zone [? reach ?] zone. So when Sarah hits the button, you'll go into groups of four or five. And if you're one of those people who indicated shyness or you know today's not the day that I can participate in this kind of thing, I'm not able to challenge myself, you can come back to the main room and just hang out with me until the time is over. But stay in the groups. If you're willing to push yourself and chat, you can take turns just sharing about a recent and/or less recent time you've felt like an impostor in quotes. And so then we'll come all back together after five minutes. And I'll invite two to three people to share with the larger group. I'll share my own. That's only fair. And then we'll kind of keep going with the consequences, and then the good news. That's kind of what's coming next. Sarah, how are we doing? SARAH DAY: Are we ready? All right, I'm going to open the rooms. JESSAMYN PERLUS: OK, if you need to come back, just click rejoin main room. Don't leave all together. There's more to gain from here. Thank you for participating and trying. I really appreciate that. I'm trying to think of which one I want to share. There have been plenty of times in my life where I felt like an impostor, or this must be a mistake, or something like that. Let's see. I was really intimidated to apply directly to PhD programs. Those are for really smart people. I wasn't so sure if I could cut it. And that would be good. I've been invited to review articles in my discipline as a graduate student. And I was like, but I don't know enough yet. I couldn't possibly review an article for a journal, or things like that. I published a paper. And I was like, well, that was a fluke that it got through. And then they wanted to do some press on it. And I was really scared. I tried to cancel that because I don't want to talk about the paper that's out there. What if there's a mistake? You can see these examples of that fear of success, of more and more accomplishments leads to a little bit more spotlight. And that can be uncomfortable for some people. So I'm hoping that two or three people are willing to share their own story. So if you're willing to share it with the group maybe about something you talked about in the breakout room, please feel free to do that. And you touched on a lot of things that are going to come up in our next kind of slide, some of the negative consequences or [? correlates, ?] some of the things that we can try. I appreciate your honesty with there were some ups and downs, or it was cyclical, or it felt like things were going better and then this set me back. So those are really good things to share and be aware of. And I know for a lot of folks, this might be your first time in the US or certainly living in Ithaca, New York, which is its own culture and subculture. So great job at kicking us off. Paige, thank you for sharing. The Ivy League is a mystery. And Cornell has its own kind of complexities because we're part private and part public New York State land grant institution. So a lot of times we find that we're larger, more diverse than some of the other Ivies, and experience some similarities, but some others. But especially when we're communicating with parents, or friends, or peers, or folks back home, they might not know all those nuances or jump to some assumptions about what it's like to be here at this institution. So thank you for sharing. I appreciate your being willing to do that. I did get a message too. Someone shared that because they feel younger than their peers, it leads to a sense of feeling behind, just haven't been alive as long to accomplish as much or catch up. So feelings of kind of not deserving come up. I want to speak to that because that's something that came up in my dissertation. I surveyed

graduate student women in master's and PhD programs in every single discipline. But a trend was the people who had gone directly from undergrad felt that they were impostors. And the people who had taken some time off, maybe they worked for a little bit or did various other-- some people had a gap of one to two years. Some had 10, 20 years of gap before returning for continuing graduate education. And they felt like impostors because they had been out of the game for a little while. They don't know the latest library searching techniques. They feel out of the loop. They haven't been in a classroom in a while. Whereas the younger folks who were just continuing straight through, they felt, I haven't gone out and lived as much. I don't have many life stories compared to this. School is all I've known. So no matter what side of the coin you are falling on, you are looking at the other group and kind of finding these comparisons to make. So thank you. Did anyone else want to share that didn't get a chance to share? There will be another sharing opportunity, unless I talk too much. But this slide afterwards, meta-impostor syndrome, when you know a lot of people have it. But you witnessed how competent they are. So they're not like you, the real imposter. It's easy to cognitively understand this concept. But sometimes to own it, or feel it, or dissuade our own mental habits can be hard. So why does it matter? It matters because self-declared impostors aren't achieving everything they're capable of. And they're not enjoying their successes. It's just you're constantly looking over your shoulder, like that quote. And there can be career and mental health consequences for high achievers that are often overlooked because you are achieving. You're not flunking. You're passing all the classes, or you're coming to lab meetings, or whatever it might be. So you're not really drawing the attention of folks because you're doing OK. And these impostor feelings are so internalized and isolating. That's why it's so important to share and hear other people's stories and experiences, which is why I make you share. Here are some of the things that it's related to. So each of these boxes represents a correlational study. So it's not causation. But these are just some things that tend to co-occur. So the more impostor feelings you have, you might be more likely to make comparisons with other people. You might experience higher degrees of perfectionism or really high standards and distress when your performance isn't meeting those high standards that you have. Lowered self esteem and lowered self-efficacy, that's this belief that I can do something. I can be efficacious. You might have self-efficacy for math, or for navigating Cornell, or an institution. But that tends to go down. If you have higher impostor feelings. It's related to higher symptoms of anxiety, or depression, or isolation. We heard an example of that. Again, not causation. Also, locus of control, so that means whether or not you feel you have control over your world. Like things are just happening to me. I get blown around with the wind. I don't have a say in what my day to day looks like or big decisions that affect me. It's also related to stereotype threat. This is this idea of the risk of confirming negative stereotypes about someone's racial, ethnic, gender, cultural group. So it came out of Steele and Aaronson psychologists that were showing that Black college students were performing worse on standardized tests than their White peers. But if they were reminded before the tests that their racial group tends to do poorly on exams. But when race wasn't emphasized, this difference went away. So it was kind of a foundational shocking study. And there's stereotype boost as well. There's ways to overcome it. But if we're just looking at things that are related and some studies that have been done, this concept of I'm not good enough is also related to this concept of people from my group are not good enough at something. And these are some quotes from my dissertation. Like I said, I surveyed and interviewed in focus

groups with graduate student women. And here's just a range of some of their statements. One said, "I don't ask questions because I think I should know everything already." I get that. I don't love asking questions myself either. But think about graduate education. Everything is new, right? You need to be asking questions if you're not understanding something. If it's a course, if it's a process, if it's a form, asking questions to make sure you have clarity is a skill that needs to be practiced sometimes. "I feel like I don't want to network with people because I feel like I don't know anything." I hear this one a lot, especially from undergraduate students or people that are still building their careers. Why would someone want to talk to me? So I encourage you to-- you are allowed to feel that way, but push yourself to network anyway. A lot of folks really love networking with emerging scientists, or researchers, or whatever path you might be on. They remember how lost and confused they were. And they like giving invites. So don't just automatically say no to a networking event. This person talks about, "Problem for me was that I've tied so much of my identity to my academic self, any academic failure is a failure at life." So that can feel pretty drastic if that is how you have described your identities. So we'll talk about a technique to get around that. And this person's example is, "I passed up two promotions because I was afraid. It was more comfortable to stay where I am and not take on a huge risk or a huge workload that I may fail at." So it's not inherently bad to pass up a promotion. Sometimes it's the wrong time, or the wrong promotion, or there could be a lot of factors. But it sounds like this is becoming a pattern for this person. And they just wanted to stay comfortable and not take on new risk. And that was potentially harming their career trajectory or their income. These were some other career-specific consequences that emerged from my dissertation. So people gave different examples of applications that they did not submit for everything, jobs, internships, scholarships, fellowships, awards, additions they didn't do, labs that they didn't try to get into, conferences that they didn't want to apply for because of that potential of rejection. And some of the reasons they gave were, I'm not smart enough, capable, good enough, talented. I'm not ready, qualified, worthy. Feels hopeless to apply. Why waste my time? What a terrible idea. I'm just going to fly under the radar. And we'll talk about this. But this can be why it's really helpful to build up a network of trusted advisors and people who can really say, hey, you're a first year. It's July. You're just getting here. Maybe we don't apply for the conference your first year. This is what's going to need to happen over the next year, so you're going to have a really strong application for the following year. That is one appropriate way to handle things. So sometimes you are not, in fact, ready. But taking yourself out of the race entirely without even consulting, without getting a lot of information, again, could be detrimental. Some other things that they said were versions of staying in comfort zone. So people were not asking for raises, won't negotiate, won't speak up if they see a mistake happening, or if they're in a meeting, or if they're in a lecture and they see the professor writing the wrong formula. They're not going to interrupt because what if I'm wrong? Professor knows everything, right? So that could calm the understanding of the rest of the class or the rest of the lab group if you're seeing something and you're not able to speak up. This happened. I was working somewhere. And I realized that my male counterpart was getting paid for the exact same work that I was doing for free. So I asked for money. They were like, OK, sure. We didn't know you wanted to be paid. Of course I wanted to be paid. So sometimes it's kind of engaging in uncomfortable discussions or something like that. Some of the other things were isolating or not collaborating. You don't want to form a study group. I've heard people say, I don't want to

hold others back with my silly question because I don't get it. I don't want to collaborate with other people. Then they'll see how much I really don't know. So you just kind of spin by yourself and isolate. And that can make things worse for you. And in very few cases, were people actually quitting a program or giving up on a paper or something like that. But that's always the fear that they jump to right away. This one mistake I make is going to be a direct line. Do not pass go. Immediately uninvited to continue doing whatever it is that I'm doing. So again, these were some qualitative findings that emerged from my dissertation about some of the consequences. Yeah, we're doing good on time. So we're going to do another breakout room for five minutes. And then we're going to talk about how to overcome all this stuff with the rest of our 25 minutes. So Sarah, if you could, you can put us back in the same rooms if you don't mind for five minutes. SARAH DAY: Sorry, folks, I think the room's changed a little bit. We're going to get you guys out there. JESSAMYN PERLUS: And it would be great if you can discuss either what influenced your choice to enter your field of study or in what ways might impostor feelings interfere with your continued personal or professional growth. But let's get into some of these positive things. So there are studies that find no disadvantage in work outcomes. They looked at medical students with impostor feelings. There was no difference in diagnoses. That's good. Significantly better at bedside manner. They were more empathetic, respectful. They were asking questions in the study. So their conclusion is that impostors might actually be working harder. Maybe they have something to prove. They might be working smarter. If they're able to rethink their strategy, they can pivot more easily potentially. And they might learn through asking questions of other people, if they can overcome that barrier. So I liked that spin on it. Is feeling like an impostor good or bad? There are some other hidden superpowers I like to call them. You're not at risk of being overly arrogant, where your confidence is exceeding your competence, also known as humility, which was just mentioned. Being grounded, recognizing that we're flawed as fellow human beings, those are important skills. And some are even more important, depending on the culture that you're coming from. And you might be really tuned into information that's contradictory. So you're less likely to fall prey to your blindspots. That can be really helpful when doing an experimental design, for example, thinking through all the areas where it could be fallible. So our goal here really is just to align your confidence with reality, that there is high competence. You're achieving. You got here. It wasn't a mistake. Admissions doesn't really pride themselves on making mistakes, right? That's not a thing that happens. They saw you. They were really interested in bringing you here to be part of the group of people that are going to interact and make each other even better. So my study asked for advice. I said, what advice would you give to someone trying to overcome feeling like an impostor? I got over 300 tips, including 20 people who told me they were not qualified to give advice. That's not what I was looking for. But here is a word cloud showcasing the advice that they gave to each other. Some of it might be faint. But you can see some of the phrases. Everybody has their own journey. Don't be afraid to ask questions. Stop comparing yourself to others. You're here for a reason. Take a deep breath. So we'll talk a little bit more about what that can look like. I'm going to skip this one in the interest of time, I think. We're going to talk about thought and behavior strategies to combat impostor feelings. These are just some thought strategies. There's some research behind them. But think about how to make it your own. So one thing to do is just remember how common this experience is and how sensitive this time is in your life, where it potentially can come up more. Notice when doubts are arising,

self doubts, but don't buy into them. They're not true. Oh, I'm having that thought that I don't belong here again. It doesn't mean I don't belong here. Those are two separate ideas. Reframe your failures. Cultivate a growth mindset. That comes from the work of Carol Dweck, this idea of growth mindset. I'm capable of learning. No, I don't know how to do xyz technique yet. But I'm capable of learning. Or if that failed, I can imagine what to tweak in order to try again. Explore your values and how they motivate you. Values are really helpful for sustaining our attention and energy towards this long-term goal. A lot of you are in for a PhD program that's going to take years and years and years. So the more you can tie that to your values and your long-term goals-- for example, if you want to change an industry, like you're seeing some barriers with it, small change is hard. Big change is going to take even longer. But if you connect it to your values, that's how you're going to sustain momentum. Easier said than done, but focus on your path, not someone else's. Memorize a supportive statement, so some of those things from the cloud. Maybe one of these speaks to you. You want to save it as your phone screen. You want to write it down. Sometimes people have a phrase tattooed on them that helps them stay motivated. So just think about what might make sense for you in your circumstance. Remind yourself of your other identities. The phrase that we want to avoid is putting all your eggs in one basket. So you're not just graduate student, period. You are a son, a daughter, a spouse, a parent, a sister, a brother, a teacher, all of these other things, so that if you have a bad day in one domain, it doesn't ruin your day in every other thing that you're doing. Learning how to get that self-worth from multiple sources can be a really great long-term skill. I'm going to skip cognitive distortions too. And here are some behavioral strategies. Again, the idea here is that I'm giving you a lot of tools in your toolbox. Some of these are going to resonate for you. Some won't. But the idea is to have one to two to three takeaways that you're able to try right away. So we've got behavioral strategies. Talk openly about IP feelings. So if you find spaces to do that and name it, again, that can be a powerful intervention. Seek trusted mentors. Not every mentor is going to be able to have a nuanced conversation with you about what you're feeling. But be on the lookout for that. A lot of faculty experience impostor feelings. They were a graduate student once. There's actually one study hypothesizing that faculty are less likely to submit to conferences, are less likely to meet with students, are less likely to-- there's one other thing-- because they don't want to be discovered as a faculty person that really shouldn't have gotten that far. So it can perpetuate, which is so tragic. But go from a place of maybe they have heard of this thing. Maybe they know what I'm talking about. Make and protect time for self care. It's going to be really important as you embark on graduate school. I know you have some upcoming trainings that are going to give you some structured skills for that time management. So do take advantage. Try it. Figure out what works for you. Own, share, celebrate your successes. It can feel really uncomfortable to brag, especially the person who gave us the example about that's not normal in my culture to have these lists ready to go and really be shouting about all my achievements. So find ways to do that in a way that's OK for you. A lot of folks in my study found they called it a brag buddy, someone in a totally different discipline, organic chemistry and musical theater. And they could brag to each other because there's no sense of competition. I got that audition I was looking for. I'm going to be on stage. The other person's like, great, great job. That sounds really important for you. I'm really happy for you. But there's no inner turmoil about, it should have been me or anything like that, hopefully. So think about how you can share your successes, or practice that, or at least keep a record of them.

Push yourself to go outside your comfort zone when you're able. Use the resources such as career services, academic advisors, graduate student advisors. You've got a great team of folks in the graduate school, counseling services. Those can all be really vital for your success here. Work with your peers to decrease competition. The more you see the bottom half of that iceberg about what people are really going through, the more humanizing it's going to be. Identify some role models. Maybe it's faculty. There's a lot of celebrities out there that talk about this. Maybe you have a favorite musician, or actor, or something like that. Politician, a lot of people like Michelle Obama, Tina Fey have talked about impostor feelings. So that can help normalize it for you sometimes. The only other one here that I'm going to highlight is treat yourself as you would treat a good friend. It's really easy to remember a lot of times our inner monologue or narrative is pretty harsh. Would we say that out loud? Would we say that to another human being? Are there ways we can tweak that narrative? Man, I didn't do as well as I hoped. That was way harder. I embarrassed myself. And I know I can do better next time. What would my best friend say to me about what just happened? How can I give that comfort to myself? My friend isn't available. Great. So we're wrapping up here. I want to emphasize your brain is adapting. Changing your thoughts and behaviors takes time, takes effort. You're unlearning negative patterns. And you're replacing them with more adaptive patterns. Literally the myelination of those neurons is a part of this process. So it's going to take time. So we have to be patient when we're trying these things. So when you think about these impostor tendencies, these impostor feelings are linked to your emotions, and your thoughts, and your behavior. So it's pretty intertwined. So one, we just want to recognize when it's happening. We truly cannot do anything about it at all if we're not even noticing that-- it came up five times today. And I only notice just one of the times. Then we're going to just try to add to the story positives. My first meeting with my advisor, he didn't like my idea. And I know I can come up with two other ideas. Or I know I can retell my idea in a more compelling way, so that I can get them on board. You have more and more strategies to kind of quote "talk yourself out of it". From all those thoughts strategies, all those cognitive and behavioral strategies. I'm going to try something. Or I've got this. My big first exam is coming up. I'm really nervous. I'm going to put things in place to help reduce my anxiety before and after. I'm going to think about studying with people. I've got strategies that I can try. I've got things in my pocket. The idea is going to come up less often. It's going to turn into background noise. Does it ever truly go away? It depends on the person. For some people, it doesn't. Or it does for decades. And then a new career or work thing comes up. All of a sudden, those feelings are back. But we're just trying to control what we can control when it comes to how we're coping and reacting to situations and circumstances. And I just want to emphasize again, you're just one tiny piece of this equation. Society and culture need to change too. If you're in a toxic or harmful situation, that's a terrible case. But even just a feeling like you belong in a setting like the library or something like that, those are also going to play into your impostor feelings sometimes. So don't put all the burden on yourself to just get over something. That's not the takeaway message here. It's just to help better understand, what are the things happening and impact the way I'm thinking and feeling? But even by participating today, you're helping reshape that culture. You came. You thought. You shared your example. So that's really, really great. So here are just some concrete examples. Suppose-- oh, these are in a weird order. You see a grant opportunity. But maybe it's a reach. Don't skip it. Pause. That's just my IP talking. I know people pass on things. I might not get it.

But it's worth my time to try this application. I'm going to work with people. I'm going to try it. You get a compliment on a project. Don't immediately downplay it. You can say thank you. You can take credit. You can acknowledge that there was assistance. It was a group project. But it's OK to say I put in a lot of hard work. Maybe your friend announces that she is defending early and going to go graduate. Before you doubt your entire plan, again, recognize she has her own path. Try to focus on the present moment and not getting distracted by your negative thought spiral. So the takeaways from today are notice one it might be showing up for you. Find someone you admire that talks about their impostor experiences. And look for an inspirational phrase or quote. So our very last Poll Everywhere activity-- again, pollev.com/jpurlus404-- is to tell me once one step you're going to take today. What is one thing you're going to try based on what we learned? First thing in your pocket if these feelings come up over the next weeks. That's great. Thank you for sharing. Yeah, one day at a time is a great phrase. That's a pretty common one. Understand I'm here for a reason. Being easy on myself. These are really, really great ones. If you need to brag, you can always email me. I work here at Cornell. I'm available for appointments. So if you need to talk about these impostor feelings you're having, I'm not a mental health counselor. I mean, I am. But I'm not licensed in New York. So I'm just a career counselor here. So if you want to chat about the career related academic pressures you're experiencing and what's going on for you, that is an example of a resource that you can use here at Cornell. So thank you to those of you who shared those quotes. So here's my contact information. jgp66@cornell.edu. And to meet with me you can go to our online scheduling tool. Our online tool is actually down this week. It's going to be down through August 1. But after August 1, you can use this link to schedule. And it shows calendars up to two weeks in advance. So if that's something you're interested in, continuing the conversation. Tell my story in a more positive way. Love that. This is a book that I recommend too if you enjoyed today's talk and you want to keep learning more about it. Maybe you're totally new to the term, like you just said. And you want to see, well, what else is out there about this topic? This is a good book, not just for women. Anybody can read it. But *The Secret Thoughts of Successful Women* by Valerie Young. And my last thing here is I do like to collect feedback on the presentation. So feel free to scan this QR code, if you don't mind and give me some notes about what I can do differently or better next time. You hung in for a long presentation, 90 minutes. So I hope you got some great ideas out of it and you start thinking positively about how you can go into this new chapter of your life and really kind of be ready to tackle whatever comes.eryone.