# Health and Human Science Matters Season 2, Episode 5: Gloria Luong

Gloria Luong: We've been really, in my lab, disentangling, not only the method by which we've been studying stress, so in the lab, in daily life, and whether these are big traumatic things that happen to us or just the day to day things like getting stuck in traffic or getting into an argument with a person. We're looking at all these components. We're trying to mesh that with real time assessments. So people will wear these wrist worn, they're like Fitbit type things where we're getting assessments of what they're like in daily life in terms of their physical activity, what's their sleep quality like? And they're able to push this button on these devices so they can tell us, "Hey, I just experienced a stressor." And now we can look at all these different components of what's really happening.

Avery Martin: Welcome to Health and Human Science Matters, a podcast by Colorado State University's College of Health and Human Sciences. I'm your co-host and digital media strategist, Avery Martin.

Matt Hickey: And I'm Matt Hickey, associate Dean for research and graduate studies. In our college, we make it our mission to optimize human health and wellbeing through discovery and innovation. Don't just take our word for it. Each episode, we sit down with people who fulfill that mission, our college faculty and staff. And today we're lucky enough to have a colleague from Human Development and Family Studies, Dr. Gloria Luong. Gloria, welcome.

Gloria Luong: Thanks for having me. I'm excited to be here.

Matt Hickey: Well, we're glad to have you. These have been such fun, and we're looking forward to our conversation today. And again, we want to emphasize that word fun. We'll get to know you. You're going to share some things that will no doubt surprise us. And that's been part of the fun of this journey is the oh wow factor. So we're going to do a little bit of this mix of Gloria the scholar and Gloria the person, the human being who's much more than just the scholar, and that's really important to us. I'm going to start on the scholarly piece by asking you to talk to us about what big problem or problems you are pursuing in your research endeavors. I tend to use the word lab too often, and that's just a placeholder of course, but talk to us about big problems.

Gloria Luong: Sure. Yeah. So broadly speaking, I study aging and what happens as we get older, and I think it's a hot topic given-

Matt Hickey: I get more and more interested in that every year.

Gloria Luong: Yeah, right. Me too. It's funny because when I teach undergrads, they dread this topic. They're like, "I don't even want to think about that part." But honestly, if we're lucky, we get to age. We get to live long enough where we become older adults. So I study what happens as we get older and what are the things that we can do as we're aging to kind of just, I don't want to say optimize, but to really enhance the things that make life better, our mental health, our physical health. There are some things we think about as when we think about aging that really go downhill, cognitive health, physical health, but there are some things that are maintained, like our social and emotional wellbeing. And so I'm studying those components and how we can really try to hang onto them or even improve them as we get older.

Matt Hickey: That's a big problem.

Avery Martin: Yes, it is.

Matt Hickey: Because again, the demographics are part of this story that we may wish for much of our lives to not think about it, but we're obliged to. And I think part of the demographic too, speaking personally, is we will be afforded increasing opportunities to be caregivers to elderly members of our family.

Gloria Luong: That's right. Yeah. And sometimes we think about these things a little too late, like when they hit us, rather than preparing for it when we're younger. So, when I try to teach my undergrad students I'm like, "Now is the time to really already start thinking about some of these things."

Matt Hickey: I want to talk a little bit about your sort of pathway. And here's where we kind of move off of campus, and it's going to be this mix of early life influences, and this could be family, it could be educational mentors, but some broad sense of this funnel of what got Gloria into the academy and pursuing this question and this really important problem of healthy aging.

Gloria Luong: Yeah, absolutely. So one thing I didn't tell you about the research problem I'm really interested in is one lens I'm taking is understanding stress. We tend to think of stress as it's overwhelming, overpowering. It's the kind of thing that topples our health and really just has this negative impact. We know that. And I'm also focusing on what are the upsides to stress? Are there aspects in which we can flourish, and grow resilience? And learn to gain some lessons from those experiences. I think part of what helped me to really be motivated here is that my family comes from Vietnam, and my parents were Vietnam War refugees. And so they lived through this really traumatic time. I mean, hearing the stories of what our family members and family friends went through to really just get here or to just escape the country is just really just a different world, just generations away.

But to just also see the resilience they had in coming here. And my siblings and I were born in this country, and so sometimes we don't speak same language literally, but also just in terms of experiences, but also to see there is growth that's possible and in some ways we can thrive after experiencing something like that. So that's really helped me to gain this perspective that stress isn't always bad, and what are the ways that we can really build on opportunities and coping strategies to really help people move past it. Because stress is inevitable, not always trauma and not only in these kinds of ways, but the day-to-day stressors, and we saw that with the pandemic too, can be unavoidable. So what are the things that we can do to channel that?

And I think also my parents gave up a lot to come to this country and they weren't able to pursue a college career. So we are first generation college students, so I really take education seriously. And the idea of being a college professor and being able to mentor the next generation and passing on these experiences was just something that really resonated with me. So this was kind of why I wanted to pursue this career pathway. So it was very much about mentorship and teaching far before it became a research thing for me. But I certainly love the idea that I can do both with this job.

Matt Hickey: You're here. So I want to push this conversation further. As a first generation student, the very idea even of going to an undergraduate institution was a step into the unknown to some extent. How did that happen and what did it feel like?

Gloria Luong: It was overwhelming in a lot of ways, yeah. I think my parents had some vague notion of like, "We think you need to go to college to succeed in this country." But they really had no firsthand idea. They had these kind of ideas. And luckily, I went to school at the University of California Riverside, and this is a university with a lot of first generation students. So it was very easy to find others who were struggling with similar ideas. And I was also very lucky that I had faculty mentors who just felt very invested in me as a person, but also in my educational and career path. I tell this story to my students, just to let them know that if you ever feel silly approaching a professor, you cannot top this story that I have.

But I remember thinking, I want to be a college professor. It just seems so cool. It just seems like a great job. And I remembered one of my graduate teaching assistants said, "Well, if you want to pursue this career pathway, you're going to need strong letters of recommendation from faculty, and you don't want to be just one of hundreds of students in their class. They're going to not be able to say anything really specific about you, so you should join a research lab, and that way you're going to really get to know the faculty mentor a lot better. They're going to really get to know you."

And I was like, "Great. This sounds good." And so I wander the hallways of the psychology building and there's a flyer, and it's really old, it's like two years old, but the flyer says, "I'm looking for research assistants." I contact this professor. And he's like, "All right. Let's set up an interview." And he asks me, "So, why do you want to work in my lab?"

And I said, "Well, I'd like to get a letter of recommendation so I can go to grad school." And he was really trying hard. He's like, "I mean, why do you want to work with me?" And I was like, "I don't know. I saw a flyer in this hallway and someone told me I should apply." And he was just like, "Oh my goodness, she does not know what she's getting into."

Luckily though, he was very forgiving, very understanding, and I think he saw some kind of potential in me, which I'm so grateful for because honestly, I bombed that interview. There was no reason I should have gotten a research assistant position, but here I am today. So there's a possibility. And I think, again, faculty seem kind of scary to students, especially if you're a first generation student and you're not used to interacting with people who seem just so highly educated and knowledgeable. But there are those gems out there who really are invested in their students, and that makes a world of difference.

Matt Hickey: That's a classic story. I love it, in many ways. But there also is an element of a gem, because had he been dismissive, one wonders, would you have been ready to tee it up and knock on somebody else's door? That persistence matters. You don't get anywhere without being persistent. But boy, sometimes to be able to just say, and ultimately sometimes it's not me, but let me listen. Let's help you get your feet on the ground a little bit, even if it means my buddy's lab down the hall or somebody in another department as opposed to the, I don't have time for this.

Gloria Luong: That's right.

Matt Hickey: So yeah, thank goodness for professors like that.

Gloria Luong: That's right, yeah. And it's so interesting because like I said, I got into it because I love the idea of teaching and mentoring, but I was not privy to the idea that when professors are not behind the podium or lectern, they're doing all kinds of stuff in their labs or with their research teams. And as an undergrad, you're not privy to that all the time. And so I had no idea that this is a very big part of what they do. And it was just fascinating to me that now you get to be part of the active experience of generating that knowledge and really pursuing your own research questions. That's exciting.

Matt Hickey: And so you got to peek behind the curtain a little bit.

Gloria Luong: That's right, yeah. Instead of just reading things in textbooks, now you're getting to discover things on your own. Yeah, absolutely.

Matt Hickey: So was there a moment where you had, aha, grad school is next for me? Or was that sort of sewn into you by GTAs or mentors?

Gloria Luong: I know. It's almost like I worked a little backwards and that I had this certain vague goal and then really slowly started to discover what it means to be a professor, especially at a research intensive university. Yeah, I think I learned what it was like to do research, and then I realized as much as I love the mentoring part, this part is pretty cool too. I had no idea that the PhD program was going to be so research intensive either. My idea was it's just going to be advanced undergrad, a lot of coursework, a lot of memorization, a lot of exams, and it's really nothing like that.

Matt Hickey: It's a different animal altogether.

Gloria Luong: It really is. And it's hard to prepare someone for that if they have no idea what they're getting into.

Matt Hickey: So you started, was it a master's and then doc or straight into doc.

Gloria Luong: I went from undergrad to a PhD program.

Matt Hickey: And then where was that?

Gloria Luong: So my PhD was at the University of California Irvine. So I just jumped to a different Californian school.

Matt Hickey: Okay, great. And your PhD mentor was somebody you went looking for? Was it a cohort based admissions process?

Gloria Luong: So again, it's like you learn about all these different intricacies in academia. So my undergrad honors thesis advisor and co-advisor knew this professor at Irvine.

Matt Hickey: Networks.

Gloria Luong: Exactly. And they were like, "Everything that you're doing is kind of lining up with this faculty mentor. Really think you should look into working with her." And I hadn't even heard of her or thought about her, but then that's how we got linked up, and it worked out perfectly. She ended up being just a wonderful mentor and now a lifelong friend. So I'm very grateful for all the mentorship that I've had throughout my life.

Matt Hickey: I love the lifelong friend thing. It's so good. And that's the way it should be. It doesn't always work out that way, admittedly, but it's the way it should be. I have to ask you about conversations with mom and dad when you're, "I'm going to get my PhD." What was that like?

Gloria Luong: In some ways, almost a stereotypical response in that with their generation, they were looking for financial security and stability. They didn't have the luxury of exploring some topic that's just interesting, and you just happen to want to research it, and this isn't the most lucrative career. So I think for them, it was very risky. And when I was trying to describe, again, this is grad student me, but my conception of what it's like to get a job and how challenging that is, and then to try to get tenure and all the different hoops, they're like, "Why are you doing this to yourself? Wouldn't it have just been easier to be a medical doctor or a lawyer." I was like, "I can't argue with that reasoning. I totally see where you're coming from. But something about this, it sparks a passion in me. I have to do it."

But when I talk to them, I do realize that they gave up their passions and they weren't able to really pursue that. That just wasn't in the cards for them. But I think even if they stayed in Vietnam and somehow educationally things worked out, they still would've chosen a more stable kind of secure sort pathway. And so personalitywise, I think they're also a little bit different from me as well. And this sounded very scary, but after I got tenure, they were like, "Okay, it worked out. I think this pathway seems like it was fine for you." They also see how happy I am as well. So I think now they can look back and say they're really proud. But I think for a long time they were very confused about what I was doing with my life and why as a grad student, I was on the borderline of being in poverty and what are you doing with your life? But I think they see it now.

Matt Hickey: That's so interesting. They must be immensely proud of you, of course, which is neat to see. This is another lesson too, and we forget this at our peril. It seems to me your horizon of opportunity was so different than it was for your folks. The range of I could do this, I could do this was almost without limits. It was a matter of where do I find my flourishing or where do my passions lead me?

Gloria Luong: That's right. Yeah. I think so. When I think about if I were a woman growing up in Vietnam, in this climate and in the situation with all the political and social economic things happening versus a woman here in the United States, the opportunities are just so different. And also in California versus in others.

Matt Hickey: It's a good point.

Gloria Luong: So many different things. And I do think where I grew up, because it was such a diverse place, lots of different groups of people working together, I think there was much more of an eye toward diversity and understanding this underrepresented experience and that isn't always just one traditional pathway to get somewhere. I think that helped my mentor understand that I'm not always going to say the right things, but that doesn't mean we don't have potential.

I had to push back on my parents a little bit. And in my culture that's seen as very rude. There's a lot of this filial piety, the idea that you're very loyal to your parents, very obedient, and also looking forward to taking care of those older generations. And I think they saw this as a very selfish pursuit because maybe I'm not going to financially be able to support them in the future if I go down this certain pathway. I think there was, growing up bicultural, I think on the one hand, of course being American, but on the other hand, having this Vietnamese background and being instilled with certain kinds of cultural values, I think sometimes they definitely butted heads and forced me to... It pulls you out of the experience and you realize like, "Oh gosh, this force is pushing at me this way. This force is pushing at me that way. And how does it all work out?" And of course, it worked out, but at the time you don't always know that.

Matt Hickey: I have to ask you, while we're talking about family, what do you do for fun when you're not on campus? What does life away from the academy look like for you?

Gloria Luong: When I was a grad student, I almost never worked out, didn't do any physical activity. And I'm like, okay, it's kind of paradoxical that I study healthy aging and I just have been delaying all of this. So I started playing volleyball and I started rock climbing since moving out here.

Matt Hickey: Good for you.

Gloria Luong: Yeah. And it's really forced me to firsthand experience plasticity. And that's what we call this capacity for growth throughout your lifespan. And our plasticity just diminishes as we get older. And so I'm learning like, oh gosh, my body isn't quite as what it used to be, but I'm learning to gain more efficacy in playing sports and in doing this stuff, and I'm pushing myself in different ways. And that's been a lot of fun. And I've built up a community here, and it's been really great.

Matt Hickey: Do you have favorite spots for rock climbing as a for instance?

Gloria Luong: Yeah, so I just do indoor climbing. Yeah, I'm too scared to fall off a cliff somewhere.

Matt Hickey: Smart.

Avery Martin: You're not alone.

Gloria Luong: So I'm a little risk averse in that way. So mostly indoor climbing, yes. And then volleyball, we'll play outdoors, started competing in some tournaments and had a really great partner last season, and we won our first championship this past summer. So that was really, it's a lot of fun.

Matt Hickey: So this is like a two person beach volleyball tournament.

Gloria Luong: Exactly. So a lot of ground to cover. It's quite the workout. So being at 37, I'm pushing my body in different ways, but it's a lot of fun.

Matt Hickey: Are the Olympics next for you?

Avery Martin: You never know.

Matt Hickey: Not a dream, [inaudible 00:18:30].

Gloria Luong: Maybe we have an academic version or something.

Matt Hickey: There you go.

Avery Martin: We can get that going.

Gloria Luong: That's right.

Matt Hickey: So talk to us about the work you did as a doctoral student.

Gloria Luong: Yeah. My dissertation study was one of my favorite studies, but also one that was just this labor of love. I think it took me three years and I would never recommend it to anyone ever again. It was basically me trying to resolve every confound possible I could think about in the literature. So in our literature, we have a very simple question that is still unresolved, which is, as we get older, do we get better, worse, or do we remain the same or stable in how we are able to deal with stress and we're not able to resolve this issue? Because there are so many problems with that. When you break down the question, it's like, okay, well what is stress? Is it qualitatively different when you're 75 versus 25? Are we talking about the same things? And when we say, how well are you dealing with that or managing that stress, what might be successful for a 75 year old might not be that successful for a 25 year old?

And you start breaking down all these components like physiologically, when you experience stress, your heart is racing, your palms get sweaty. Is that success when you're able to down-regulate that? Or is it that you're not feeling so angry and anxious anymore? Or is it that you're feeling like, oh, okay, I can stop thinking about it. I'm not ruminating anymore. So many different components. So that's what my dissertation was trying to get at, is just disentangling all these different components and pieces of what it means to regulate our emotions and deal with stress and how that differs as we get older. And if you put people in contrived situations where everyone has to deal with the same exact stressor, what does that look like? Versus when people have to deal with stress in their normal daily lives. So we're kind of comparing apples and oranges to. So that was the crux of my work.

Matt Hickey: So we have these sort of constitutive, physiological responses to stress. We tend to think of the fight or flight response you just sort of invoked that. But then we have cognitive strategies for how to deal with stress, and I'm interested in the ladder and if and how that changes as we age.

Gloria Luong: Yeah. Yeah, that's really interesting. So far what we know, or what we think we know is that as we get older, we're not the best in terms of dealing with the physiological components. Once you get worked up physiologically, our systems take more time to return back to baseline levels. That's true if you're running on a treadmill or if you're dealing with a bear that's chasing you, or just an imagined test that's coming up tomorrow. So all of these different things, but you're right, that cognitive strategies also differ as we age.

And a couple of the ones that differ as we get older is our ability to do something called reappraise the situation, which means that we can change the way that we think about a situation to make it less threatening and maybe even more positive. So if we're thinking about, I don't know, a lecture that we have to prepare for tomorrow, and it seems kind of uncertain, we don't know if our students are going to laugh at our jokes or just kind of throw tomatoes at us, you can think about it in different ways. Well, if it doesn't land, that's okay, next semester I'll try a different joke. So there's different ways that you can do that. And we get better at doing this reappraisal strategy as we get older. And that happens to be one of the strategies that is very effective at helping to down-regulate not only the physiological parts, but also the emotional aspects of stress.

Matt Hickey: That's cool, isn't it?

Avery Martin: Wow, yeah.

Matt Hickey: And then this all gets complicated when we run into manifestations of dementia, of course, because we may not be able to tap into those cognitive resources that we have been training, getting more resilient all our lives.

Gloria Luong: That's right. Yeah. So when we think about dementia, that's a different beast. So many different cognitive systems are going haywire. But what's really fascinating too is that some researchers have had theories that, well, you need to be able to implement these really high ordered executive functioning cognitive strategies. And we know that memory and our cognitive speed goes downhill as we get older. So shouldn't that also mean that we're not able to implement these kind of higher ordered strategies. And that doesn't seem to be the case. What's really interesting is it seems like as we get older, we're more efficient at using our cognitive resources so we don't have to be so effortful in trying to say, "Oh gosh, this lecture's coming up tomorrow and it's so scary, and what do I do?" It just kind of flows and it happens. Whereas a younger person, and I mean someone in their 20s and 30s might have to put more cognitive effort into it, which is interesting. So there's this idea that life experience might really help us in terms of really playing out those strategies over and over again, make them more practiced.

Matt Hickey: That's cool.

Avery Martin: That's fascinating.

Gloria Luong: Yeah.

Matt Hickey: So you get hooded. You're now, Dr. Luong. What comes next for you?

Gloria Luong: Yeah. I'm applying for an R01 research grant to fund the next stage of my career. I've been very fortunate to have what's called a K01. I don't know if that's a familiar lingo for people, but it's a career development grant that's given me time to really get mentored, more mentorship. I've had some wonderful mentors here at CSU, but also other places. And I really want to further this work. So we've been really, in my lab disentangling, not only the method by which we've been studying stress, so in the lab in daily life, and whether these are big traumatic things that happen to us or just the day to day things like getting stuck in traffic or getting into an argument with a person. We're looking at all these components.

We're trying to mesh that with real time assessments. So people will wear these wrist worn, they're like Fitbit type things where we're getting assessments of what they're like in daily life in terms of their physical activity, what's their sleep quality? And they're able to push this button on these devices so they can tell us, "Hey, I just experienced a stressor." And now we can look at all these different components of what's really happening.

Eventually down the road, I think what I'd like to do is not only understand what are people doing when they experience stress, but then to really look at and what are the ones who are thriving doing. What are the lessons we can learn from those people? And are there ways that we can then teach other people those strategies or strategies that fit within the realm of what's comfortable for them? It's not always cognitive. Some of them are just simply avoiding the stressor in the first place, which is huge. Some of us walk into these landmines and you have these friends who constantly have drama going on in their lives, and you're like, "Yeah, you didn't know that when you walked into that situation, this was going to happen." And other ones of us are like, "Yeah, just don't talk to that person or don't put yourself in those situations." And that's another strategy that older adults do really well, is that they avoid those situations in the first place.

So we're trying to figure out what strategies work for people doesn't, and are they age relevant? Some that work great for older adults, but not so great for younger adults and vice versa.

Matt Hickey: So I have to ask you the question, because I think our listeners have been intrigued by this. How did we get on your radar screen as an institution? How is CSU lucky enough to recruit you to come join our team?

Gloria Luong: Well, I'm lucky to be here. A variety of things. One is I was very lucky to have met my current career development mentor, Manfred Diehl, over 10 years ago now. And he had put together this international team of people to train graduate students all across the world to come together in Germany and learn about aging topics from all these experts. And it was all paid for. As a grad student, I said, "Sign me up. I would love to do this." And I got to meet this wonderful network of people and of course, CSU faculty there as well, including Manfred Diehl.

And then I ended up going to Germany for my postdoc. And then when I saw this position advertised, of course Manfred Diehl happened to be the committee search chair, everything kind of lined up I felt like. I was like, it would be great to work with him and we have great research interests lined up. But also, the Center for Healthy Aging was starting to come together. It was a great place to study aging. There was just a lot of community support for it, but also academic research support. And of course, I love the idea of this land grant university. We didn't have that growing up, at least where I was from. And so just knowing that people here are very passionate and care about their work being applied to help people and their communities, that really resonated with me too.

Matt Hickey: So you're a faculty member in human development and family studies. You're recruited here by somebody you looked up to in many ways. You fit into this really interesting college of health and human sciences, and I want you to share some reflections on what you like most about the College of Health and Human Sciences.

Gloria Luong: I've used this word three times now, but I really appreciate the passion that people have for the work that they do. And I really love that people are always having that eye out for applied work. There's the Prevention Research Center here, the Columbine Health Systems Center for Healthy Aging is also playing a big role in everything here. And I just love that the second that I landed here, people were like, "Oh, let me connect you to this person. Let me connect you to this community." And it has been so easy to get research participants. It's been so easy to make connections and find mentors because I think it really is this collaborative kind of place. I remember thinking, "I do not want to work in a place that's cutthroat where people just want to step over each other and get ahead rather than have it be a process where it's like when you are successful, I'm successful."

One really tiny thing that seems like nothing but has really been meaningful to me is that in our department and in the college, I've seen places where you just see when somebody gets an award or somebody gets a grant, it's like, isn't this fantastic? Let's all celebrate together. And I just love that energy. I think it's so different than other places I've seen where it doesn't have that same feeling and it just makes you feel more isolated. It makes you feel like, what am I doing in this world that is already kind of challenging as it is?

Matt Hickey: The community piece is not just a cliche, which is kind of neat to see. Right?

Gloria Luong: Yeah.

Matt Hickey: I think it's wonderful. I wonder if you can talk a little bit again about of collaborative opportunities you had within the college, if you can invoke an example or two. I know that for you it'd be a long list, but some favorites in terms of collaborative opportunities.

Gloria Luong: Yeah, absolutely. So one thing that got me outside of my comfort zone is I've always considered myself a basic researcher. So I was a little bit worried about how I might fit in because as much as I love trying to apply my work to help people, a lot of it has been about disentangling these very specific mechanisms and really getting nitty gritty with that. And I was very lucky to get connected to Doug Coatsworth, who was previously a faculty member here, and he would apply mindfulness interventions to various communities. But he hadn't done it yet with older adults. And so he was like, "This would be a great collaboration if you and I worked together." And in the work that we've done over the years, we've been able to then bring mindfulness to Columbine Health Systems in a variety of their different facilities. And we've been teaching that to the staff there, we've been teaching it to the older adult residents, and it's been really great to meld the research side and the applied side together.

Matt Hickey: That's pretty cool.

Avery Martin: That's awesome.

Matt Hickey: I have to ask you very quickly the lessons you have learned as a PI from having navigated the COVID experience thus far, and I keep hoping in one of these conversations, we'll talk about it as being in the rear view mirror, we're not quite there yet, because we wouldn't have predicted this was coming. I don't think even when we started, we would've realized that the magnitude of the impact, and probably still don't fully realize the magnitude and the impact.

Gloria Luong: That's right.

Matt Hickey: But what lessons have you learned from your COVID experience that are going to inform your approach to life?

Gloria Luong: I know, so many things. As a stress researcher, you might think I hit the jackpot because what could be more stressful than this pandemic? Except that it happened in the middle of two big ongoing data collection projects. And so we had to kind of pivot and see it as this is an opportunity where we had data pre COVID and we could understand what was stress like for those people. And now you've got stress, like let's say in the laboratory overlaid with all this pandemic stuff. And as much as I wanted to push forward and study all these different ways of understanding stress during the pandemic, another lesson I learned was to be a human first and to understand that if I was going to put my research team through hell to make them have to do yet another research project so we can understand the pandemic, but then also potentially put them at risk of getting COVID by interacting with participants, that's a problem.

So we try to have this fine line of trying to get as much data as we can and really understand this phenomenon that's unfolding around us, but at the same time, not pushing my team too hard and making them really want to quit research forever. So I think we're trying to leverage the situation a little bit in a tasteful, if that's even possible, a tasteful way and not try to take advantage of the fact that people are stressed out. But honestly, this is a collective, pretty traumatic experience that people have been going through. And like you said, we're still learning more about it. And so this is something that my team is trying to focus on right now.

Matt Hickey: That's great. I love the vision of not having stress researchers that are too stressed-

Gloria Luong: That's right.

Matt Hickey: Let's practice what we preach, I think is an important lesson for all of us.

Avery Martin: Yeah.

Gloria Luong: Yes, my partner, whenever I get stressed out, he likes to say to me, "Don't you study stress? Shouldn't you be better at dealing with it?" And I'm like, "We're allowed to be stressed out too. Just because we study it doesn't mean we can't have those moments where we don't handle it our very best."

Matt Hickey: It's common to the human condition.

Gloria Luong: That's right. Yeah.

Avery Martin: As a researcher, I am wondering, to echo your partner, what is it like to know all of these things and to closely study these things and be a PI, but then also experience some of the individuals that you're researching experience? What exactly is that like?

Gloria Luong: Yeah. I teach a research methods class, a grad level course, and I tell them we're humans studying other humans. So we come in with certain biases and preconceived notions, and we're not immune to that. To your first point, what I was laughing because there are some strategies that we can use coping strategies or how we deal with our emotions that operate best when they're outside of our awareness. And of course, me studying emotions and how to deal with them, I know when I'm doing something. And then it's like the illusion of the magic trick is over because now I can't trick myself into being like, "Oh, I feel suddenly better." I'm like, "No, I did that cognitive illusion so that I would feel better, but I'm not really feeling better." So I think I overthink things sometimes and I should just kind of go with the flow when it comes to dealing with my own stress.

But I think we can't ever get around the idea that we are humans doing research on other humans. And I think just being open to the experience that people have something to teach us always. I think that's what makes this work so magical, is that I find I'm discovering new things all the time and just being open to those observations and the data really has helped our team discover things that I think other people might have had preconceived notions about. And it's allowed us to say, "Wait a minute. I think things might not work the way we thought they did," and that's also really exciting too about this work.

Avery Martin: That's awesome. Fantastic.

Matt Hickey: I'm tempted to end there, but I'm going to follow up a little bit and ask you to unpack something you hinted at just a few minutes ago. So when we talk about this land grant notion, this idea, we've interviewed guests who have been nowhere but land grants for their entire, even as undergraduates and graduate students, others who came to CSU and didn't even realize until they got here. And to the credit of this institution, they do a pretty good job of fronting that notion of this is central to our ethos. And so having been here for a while, I want you to, again, just to unpack a little bit more, the notion of where does that fit into how you see yourself as a citizen scholar?

Gloria Luong: I think it has made me a lot more mindful of the connections I make to the community. When we have these academic community partnerships and we've been very fortunate to get some funding through the CCTSI to establish those partnerships. If you asked me 10 years ago, I would just think of people in the community as research participants, it's a one-way street where they give us the data, we come up with something and that's it. And coming here has really helped me to understand that it's a two-way street, that they're buying into this process because there's a lot of trust that CSU has built with this community.

And in turn, they're kind of expecting that we disseminate that work, that we share those results, that we help them. And I think that has really helped me to think about these partnerships in very different ways. Also, these partnerships have lasted over years, and that's very different than me just advertising one time trying to get a bunch of participants. It's like, I can go back to this partnership because we built up such a great collaboration here. It's been beneficial in different ways. And it's helped me also to think about the community needs are sometimes different than what the academic needs are. And so really listening to that and paying attention to what those things could be.

Matt Hickey: Perfect. I love it. Thank you so much for coming and joining us today. We really do appreciate it.

Gloria Luong: Yeah, thanks for having me. This was fun.

Avery Martin: Thank you.

Another great interview is in the books. Thank you for listening to this episode of Health and Human Science Matters.

Matt Hickey: Be sure to check out the rest of season two as well as season one. If you want to learn more about the college, go to www.chhs.colostate.edu.