# Health and Human Science Matters Season 2, Episode 4: Heather Leach

Heather: I really like being able to use my research for teaching, right? So we use our interventions and programs. I love being able to train my grad students on our protocols, and talk to them about the why. "Why are we using this theory, and how does it work?" So I love that teaching component and they're learning a ton of skills in delivering our programs and interventions.

 And then the service piece, I feel like is a very natural fit for the work we do. We have been running an outreach program called Fit Cancer since 2017, so taking what we know from research evidence-based practice, and providing a service to the community. So we love it. And kind of full circle, we also have IRB approval to collect data as part of the program so our participants can opt into data collection, and most do, because I think they are first curious about it and also want to give back. So then we're also able to use the data collected as part of our service or outreach program, to answer additional research questions. So it's a really cool, like I say, full circle thing for me that I think I will always continue to do.

Avery: 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: 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 fortunate enough to have a friend and colleague from my home department, Health and Exercise Science, Dr. Heather Leach. Heather, welcome.

Heather: Thank you for having me.

Avery: Yes.

Matt: We're tickled to have you here. And I have to brag on Heather a bit. So Heather is one of our young superstars. She's a Lincoln Laureate as a for instance, and if I remember correctly, in the maiden class of Lincoln Laureate, which is a CSU wide designation for rising stars. And she's funded by every institution on planet earth, has a knack. We've talked about this when we're recruiting graduate students that about 80% of our inquiries go to one person for the graduate program. And so Heather's usually got the actually challenging task when you get a lot of inquiries of-

Heather: It is.

Matt: ... I can't say yes to everybody, and how do I vet students so that they're part of my team? But she has been an appealing part of our faculty to external visitors and guests and prospective graduate students for some time. So we're glad to have you.

Heather: Thank you.

Matt: So we're looking forward to having some fun. We want to get to know you better as a person and get to know you better as a scholar as well. So we'll weave a little bit of back and forth about the on CV and off CV kind of questions.

Heather: Sure, yeah.

Matt: We want to start with big ideas and big problems. So if you were to talk to us a little bit about what big problems you pursue with your research group, what would that look like?

Heather: Yeah. I think I'll start big, big. And that is, I think weaving in, as you mentioned, the mission of the college, optimizing human health. And for me that means physical activity or exercise is medicine. And we've all heard it, "If exercise was a pill, everybody would take it." But I think my lab, we sort of live and breathe that, and we really believe that physical activity is, if you could pick one thing to do for your health, that should be it. I'm sure some of the nutrition and sleep researchers would argue with that, but we feel like we have pretty good data to back it up.

 So I think that is the big, big problem is how do we get more people to be active, and not just during an intervention, but lifelong physical activity? And I think weaving down a little more to my scholarship, big problem. We focus particularly on cancer survivors. So how do we get that particular population to buy into exercises medicine? We're getting really good at treating cancer. People are living longer, but they're also living with a lot of side effects from treatment. And turns out physical activity can even help with that.

Matt: It's the magic bullet.

Heather: Exactly.

Matt: So we want to talk about journeys.

Heather: Sure.

Matt: So you're here, and you're rising star, you got a big research team. You're on the American Cancer Society's radar screen, National Institutes of Health and others. But where did it all start? And this journey, for many of our conversations, we've heard stories about first grade teachers, and family influences we're really interested in. Because again, it's easy particularly for students to see us as just that person that's in the classroom, or just the scholar who's busy, and writing grants all the time. And there's so much more to life to who we are-

Heather: Absolutely.

Matt: ... we want to hear a mix of all of that as we talk, and I'll nudge if I have particular questions.

Heather: Yeah. Yeah. I think my journey toward academia and research I think was winding for sure, and maybe not as direct as others, but I played soccer my whole life. I started playing soccer when I was four, played college soccer. And so the whole time loved being active. And when I went to university to play, I didn't pick a major yet. And finally our academic advisor sat us down and they're like, "Okay. It's your sophomore year, you have to pick a major." And I said, "Well, I'm in this building all the time, what can I do here?" And they said, "Well, exercise science, that's a thing." And I'm like, "Oh cool, that sounds great." So I started doing some of those classes, human physiology, and exercise prescription, and just absolutely loved it. I would nerd out, I'd be running sprints at practice, and thinking about which energy systems I was using.

 And so it turned out I was like, "Oh, this is really cool. This is really interesting." So I loved that, but to be honest, I wasn't sure where that would lead career wise. You know, research wasn't really part of our undergraduate program where I went, we were more focused on pedagogy, so P.E.

Matt: Sure.

Heather: Teaching, coaching, athletic training, physical therapy, and none of that really resonated with me. And so kind of on a whim, my dad sent me this application for an internship, a summer internship at Johnson Space Center in the exercise physiology lab. He's like, "This is cool, you should do this." I was like, "Dad, I play soccer at South Alabama. There's no way I'm getting into NASA." He's like, "Oh, just apply."

 So sure enough, I was accepted, and did a summer internship in the exercise physiology lab there. And I think that's where I realized, "Oh, there is sort this other career in exercise, and sort of the health world." I worked on the advanced resistive exercise device, so we were testing out the device that was going to go to space. I worked on bedrest testing, so they did earth models of microgravity, and it was just all so interesting. So it was really after that I was like, "Okay, I think I'm going to apply to graduate school."

Avery: That's cool.

Heather: And that was kind of where it started for me, I think.

Matt: Thank Dad for that.

Avery: Yes.

Matt: And you know, who would have thought, right?

Heather: Never would have thought.

Avery: That's pretty cool.

Matt: Now I have to ask you just at a personal curiosity, who did you work with when you were in Johnson?

Heather: Yeah. So my primary mentor was Dan Feedak.

Matt: Okay.

Heather: So I think he might have been a Ball State guy.

Matt: They're everywhere. Under every rock, you're going to find a Ball Stater.

Heather: And then I worked with actually fewer PIs. They called them Acers, so astronaut strength and conditioning coaches, and more of the rehab folks. So like strength and conditioning and training backgrounds, but Dan was my official assigned mentor-

Avery: That's great.

Heather: ... and I think Lori Plout-Snyder got there-

Matt: Oh sure, yeah.

Heather: ... when I was there. I'm trying to remember who else, I mean, there's a whole crew of people that I overlapped with.

Matt: So you had this formative experience at Johnson, right?

Heather: Yep.

Matt: That probably more than your undergrad in some ways opened your eyes to, "There's more to this major than meets the eye."

Heather: For sure. Yeah.

Matt: So the transition into graduate school then from Johnson, how did that work out?

Heather: Yeah. So applying to graduate schools, I didn't really know what I was doing. Just doing the online thing, took the GRE, applied to a couple different schools that the program looked good, and they were in places I wanted to live. And I got into a couple programs, but ultimately decided on the University of Texas at Arlington, they had a really awesome clinical track, so where you were doing a lot of clinical hours in cardiopulmonary rehab, and that was very appealing to me. As well as delving deeper into physiology and a little bit of research.

 So I did my masters there, and when was finishing up my masters, I did all of my clinical hours and back to exercises medicine, it was just even more powerful for me then. I'm in cardiac rehab watching sort of the magic of exercise after this major cardiac event. And I'm like, "What I want to know is why don't people do this? I don't get it." I'm like, "We know this is good, why don't people do this?" So this question kept kind of eating at me. I want to understand why people don't do that. And so ultimately that drove me to be like, "I think I need to get a PhD to answer this question." And so I ended up looking for PhD programs where I would be working with someone to study and understand physical activity behavior.

Matt: And were these people that were within the network of friends of people in the master's program, or were you really flying solo here in terms of-

Heather: Not at all. Totally flying solo. So in my masters, learned what PubMed was, so I was able to put people's names in, and use my Boolean terms, like, "Physical activity and behavior." And I ultimately stumbled upon these two researchers, and it was one paper in particular, and it was this idea of a social ecological approach to studying physical activity. And by that, it's really that there's not just one reason. And that really resonated with me. It's not just someone's not motivated. It's not just that they don't have gyms near their house, it's all of these things. And how do we understand how these things work together, or against each other to either serve as barriers or facilitators to people being active. So it was two authors of the paper, I contacted both of them. One of them happened to be from the University of Alberta, John Spence. And Alberta's where I grew up, so that was kind of exciting.

 I was like, "Oh, maybe I'll end up back home." And the other one was Rebecca Lee who was in Houston, which is where I was working at the time. So it was kind of really fun to be like, "Well, I'm either going back home, or staying where I'm at." And I ended up getting into the University of Houston and finished off my PhD there.

Matt: And so talk to us about what you did as a PhD student. What were you working on at that time?

Heather: Oh gosh. You going to make me relive all of my graduate student days, man. Yeah. So during my PhD, the primary work that we were doing was with African American and Hispanic Latina women in Houston and Austin, Texas. And we were trying to understand how the build environment contributed to their physical activity behaviors. So I came in sort of at the midpoint of an R01 that Rebecca had. So I wasn't on the ground floor with the data collection, but I sort of came in really as we were starting to clean the data, and manage the data, and analyze the data. So it was a really good time in terms of learning to do all of that. And then I ended up doing some data collection. So for part of my dissertation, we wanted to know years later, what were some of the things that contributed to long-term physical activity, behavior change. So I invited a lot of these women to come back. I think it was anywhere from three to five years after they completed their intervention to come back. And I did a bunch of measures, and questionnaires, and things like that.

Matt: So you wrap up this degree, it's now Dr. Leach, and what comes next in this long and winding road?

Heather: Yeah. So I'm finishing up, learned a lot about social ecological influences on physical activity. And part of me though missed the clinical space. I think one of my favorite things in my masters, was looking at how exercise impacted disease states. So if you have some sort of physiologic issue, let's say, how exercise could potentially lessen the effect of it, or even in some cases reverse it. And so I kind of missed that space. And at the time, so this was like 2012, 2013, exercise oncology was really this up and coming field. You know, by then exercise for management of cardiovascular disease was pretty well established. And exercise oncology was sort of this new path where people were like, "Are you seriously asking people who are on chemo to exercise? That seems crazy." But the evidence was building for how impactful exercise could be in this population. So between missing the clinical space in this sort of newish area, I started seeking out a postdoc in exercise oncology.

Matt: And where was that?

Heather: So same thing, I approached two different mentors who were doing what I thought was exactly what I wanted to do. And one was in Houston where I was at, Dr. Karen Basen Engquist at MD Anderson, and the other was Dr. Nicole Culos-Reed in Calgary, Alberta. And so I applied to both and both looked fantastic, and ultimately I just hadn't been home in 10 years. And so the prospect of getting to go back to Calgary for a couple years and see my family, and hang out with my friends, was too enticing, that I had to bypass MD Anderson and go back to the University of Calgary.

Matt: But nice to have multiple opportunities to pick from.

Heather: Really, really awesome.

Matt: When that happens, we count our blessings for sure. I'm going to show my northern latitude chops here by asking did you grow up a Calgary Flames fan, or Winnipeg Jets, or Edmonton Oilers or-

Heather: I mean-

Matt: ... you know old schools?

Heather: ... just mentioning the Oilers is blasphemy to me, so-

Avery: Oh, okay.

Matt: I'll have to walk that one back.

Heather: ... definitely Calgary Flames. I have actually at home a 1989 Calgary Flames coffee mug. But if there's any Oilers fans listening, they're probably making jokes about how that is the only year that we have a coffee mug.

Matt: You know, I often talk about Lanny McDonald. Do you remember Lanny, of course? He had the world class epic mustache. I've always wanted to have a mustache like that, so I won't talk about [inaudible 00:14:54] and the other guys, we'll just leave that. So a postdoc, where you're again, gathering new skills, so formative lessons from the postdoc that you'd like to share for me?

Heather: Absolutely. And I think aside from the opportunity to go live at home, one of the things that really appealed to me about the postdoc with Nicole at the University of Calgary was she was doing a lot of community based work. So physical activity promotion for cancer survivors, cancer patients, but in community settings, which was really to me like boots on the ground. I had a lot of experience for my PhD behind the computer and doing the data stuff that if I was going to be in this space as a person working in oncology, I wanted to learn about the people and meet them and be the one doing assessments, and delivering the programs as well as on the data side. Writing the papers, I kind of wanted to really have an immersive experience. And when I talked to Nicole, what she had planned for my postdoc was exactly what I was looking for.

Matt: That's cool. So at some point CSU emerges on your radar screen, and we were lucky enough to recruit you here. So how the hell did we pull that off?

Heather: You know, I really liked my interview here. You guys did a good job.

Matt: Good. Good. I'm glad.

Heather: Yeah. I came probably not the best time of year. I think it was February, so it was not 70 and sunny. So maybe in the future we should plan interviews around that.

Matt: The academic calendar sometimes doesn't quite fit for us [inaudible 00:16:32].

Avery: Yeah.

Heather: But no, I always saw myself in a department of health and exercise science. Undergrad was health and exercise science, masters in exercise physiology, PhD kinesiology, postdoc kinesiology. I did not see myself really outside of that. So HES felt like a really good home to me. And when I got here, between the facilities and the HPCRL, I was very wowed by it. I felt like it had all the things that I needed to really succeed in what I thought would be my research program. And definitely the people I had such great interactions with everybody I met on my interview, I wasn't at the end of the day like, "Ooh gosh, I can't wait for this to be over." Like, "Oh, what are we doing next? So yeah, I think that combination of it was the people and the research opportunity, and I think it's hard to find that combination.

Matt: Yeah. Shouldn't take it for granted. It's a good lesson. So you've earned tenure here, you've earned accolades, and there are more to follow for sure. Before we talk about of day in the life of the Leach Lab, I want to talk a little bit about it. As you think about yourself as a scholar and a mentor, do you have particular role models that, "The way I do things are really strongly informed by different people?"

Heather: For sure both my PhD mentor, Rebecca Lee, and my postdoc mentor, Nicole Culos-Reed. I think the way they ran their labs was slightly different, but I think the one thing that they had in common was they were so approachable, and at no point in either my doctoral training or my postdoc did I ever think that they didn't have, not only mine, but all of the students best interests in mind. You really got this feeling that they truly wanted to see you succeed. They sort of had this intrinsic motivation and reward for seeing their students succeed. And I think that reciprocity was so inspiring to me. But in terms of lab structure, I mean they had all of the elements that you read in these mentoring things, weekly lab meetings, one-on-one meetings, great communication styles. So I think I didn't honestly think about it at the time, because they both had very well established labs. It wasn't until I got here, I'm like, "Oh, I got to start one of those." But I think living those experiences, I think again, I just got lucky to have two fantastic mentors.

Matt: It has to be incredibly rewarding for you to hear your students talk about you in the same way that you talk about your mentors, right? Because I've heard your students use the same kind language and man, what better reward? And to say, "Here are people that have really influenced me that I admire and I respect, and my students are talking about me like I talk about them."

Heather: I mean, I hope so. I've always said, "If I can be half the mentor that I've had, then I'm doing something right."

Matt: No, you're definitely doing something right, that's for sure. So let me not just off campus again a little bit. So in the midst of all this educational pathways and postdocs, and data, and interviews and all this stuff that there's life is going on outside of campus as well. So talk to us a little bit about things that appeal to you. What do you do for fun? Talk to us a little bit about your family if you're willing to do so and share a little bit more.

Heather: You know, fun has evolved since my postdoc, right? Having a family, having kids, and stuff that changes what you do in your spare time. But here in Colorado, we like to like everybody else, get out in the mountains and hike. Now my son Connor, he's six, so he's getting into sports. I know. So getting into sports. So we have a good time. You know, shuttling him around to football, and baseball, and hockey and so that's fun. Trying to keep my two Australian shepherds busy.

Matt: Right on.

Heather: So lots of outdoor time.

Matt: Let's see if we can find a little classic flames jersey.

Avery: Yeah.

Matt: Right?

Heather: He has one.

Matt: Oh see?

Heather: He does, he already has one.

Matt: Way ahead.

Heather: He already has one. Yep.

Avery: Perfect.

Heather: The retro?

Matt: Right.

Heather: Oh yeah.

Matt: I love it. That's great. So there's this work life balance piece, right? It's not all about what's going on here. Before I talk again about a day in the life of your lab, I'm really interested in you sharing reflections on what lessons have been learned from this COVID experience. We didn't see it coming. Who would've? You're forced to adjust. And I think again, my impression is your ability to adjust has been one of the wins. Not one we would've gone knocking on the door of, but you've been really innovative, and I think sharing that would be useful.

Heather: Yeah. For sure. I think one word is adaptability. I think sometimes, especially as researchers, we write a grant, and you have milestones, and a timeline and you get really stressed out when something isn't going to hit one of those timelines or milestones. And COVID just blew the whole thing up. I tell people that, "If I could design a study to be the most impacted by COVID, so in other words, the worst possible study design during a pandemic, was exactly one of my studies." We were studying the impact of group cohesion. So this ability of people during an exercise class to garner social support, and basically make friends, how does that impact their quality of life, and long term exercise behaviors? So this idea of trying to do that with social distancing in place, it was the worst possible study design. So we struggled with, "Should we wait out the pandemic? Or do we need to figure out some way to still do this study given all of the restrictions?"

 So fortunately we decided not to wait it out. So a couple months in, we made the plunge and contacted our funders about, "What can we do with human research in these times?" Particularly for us, I mean, we're studying cancer patients and survivors. These were a immunocompromised group, a high risk group. So again, more than anyone, we didn't particularly want them gathering in groups and getting close and making buddies, especially in 2020. So a couple months in, we made the plunge to switch completely to virtual, and try to now ask the question, "Can we create cohesive groups and a sense of social support on Zoom effectively?" So it was a lot. It was challenging to change all of our study procedures, and protocols, and it changes everything about your research questions. But ultimately I think a lot, a lot of good has really come out of it. We've learned a ton, and our programming virtually has been immensely successful. We've gotten really fantastic positive feedback from our participants, and we're able to reach so many more people than we were having them come into the lab in Fort Collins. So silver linings, I suppose.

Matt: Silver linings, that's a good way of looking at it.

Heather: Yeah. Adaptability and silver linings, those are my lessons.

Matt: There you go.

Avery: Sounds like a book title.

Matt: Yeah, exactly. So talk to us about your team, your current team and what you're working on. And you're free to name names. We always love to hear about your students.

Heather: Yeah. So right now, let's see, I have five graduate students, two PhD students. So we have Mary and Emma, and then three master students. We've got Bailey, Hattie, and Lydia. And then we have a full-time research associate, Elena. And then I don't know if it's supervising, but I have another part-time research associate on a multi-PI grant that I have down at on shoot. So Ethan works for us part-time a little bit. And then we have an undergraduate practicum student, and like we do every semester, and this semester we have Tyler from HES.

Matt: You've got your hands full.

Heather: Yeah. We've got a solid team.

Matt: And so give me a day in the life. And we know as we've tried this question out many times, that there is no representative day that doesn't exist, but have some fun to talk to us about what life in the lab looks like anyway.

Speaker 1: Yeah. I think highly variable, is how I usually describe it. But I think for my students, a fun day in the life is them being with our participants. Most of them are attracted to the work we do, because they truly want to use exercise to help people, and they like to be with people that they can hopefully promote physical activity, and do something good with. So a good day for them is usually whether they have people coming in and doing assessments. So again, they get to nerd out on doing VO2 max test or sub max test, or some sort of physical assessments.

 They really like to do that kind of stuff, not just in person, but now actually on Zoom as well. We're doing a lot of assessments over Zoom, and then the actual programming and intervention stuff, where we get to lead them through an exercise session. And also we do a lot of discussing their barriers to exercise. So I think a lot of them love hearing the stories from our participants, and they form some really, really neat relationships with our participants as well. So I think those are the fun days.

Matt: That sounds like a fun day.

Avery: Definitely.

Matt: I know this better than most, but I hear from so many of your students that be because of how pervasive the touch of cancer is, there are very few people that don't know somebody, if they're not a survivor themselves, right-

Heather: Absolutely. Yeah.

Matt: ... it's someone, a mom, a dad, whatever it might be. And I hear so often for your group in particular, and not surprisingly that that's a big motivation. Because I know somebody, I want to understand this better, and that's a powerful motivator, right?

Heather: Yeah. Absolutely. I think the personal story behind it really teaches them a lot. And I think that's the other neat thing, is they all come in with different experiences, their own lived experiences that they can bring to our programs and intervention, and just the lab in general.

Matt: So we exercise our imagination a little bit. This is almost a cliche, this question in some ways, but if we put yourself five years in the future, what's going on in the Leach Lab?

Heather: Five years from now? I mean, the obvious is I hope I still have funding to keep doing the work I'm doing. I don't know, I think we've learned a lot over the course of the pandemic. So I'm actually most excited to see the direction that sort of the next big grant, or the next big study goes. If you asked me three years ago what it was going to be, I think it would be different than what I think it's going to be now. So I think I'm not totally sure specifically-

Matt: But let me press you on that. Just-

Heather: Okay.

Matt: ... we'll play prognosticators. So where do you think the field is heading?

Heather: I think given the last two years in this explosion of virtual stuff, I think we need to go into some more comparative effectiveness testing. Because I think there's a lot of people that do want to go back to face-to-face stuff right there. You have a lot of people who say the virtual stuff is working now, but there's going to be burnout. People are going to get burned out, they're not going to want to do this forever. But then you have all of the upsides of some of the telehealth, telemedicine where again, we can reach people in remote locations, we remove barriers of travel. So I think we won't really know which is better until we test it. So I think some large studies doing some efficacy testing or like I say comparative effectiveness with some of the more traditional face-to-face approaches, and exercise and physical activity interventions with some of the newer telehealth, or video conferencing intervention modalities.

Matt: Do you see integrated approaches kind of hybrid, right? So you've got a mix of a couple days at some site, even again, if it's distributed sites, of course that gets harder obviously. You need infrastructure, and people have got wheels up, or in the community, but can you envision a blended model?

Heather: I mean, you're really trying to complicate my study design, but I think pragmatically, absolutely. I think that's where probably the field in terms of exercise oncology in the community will probably go, right? We're not only doing exercise interventions for cancer survivors in laboratories and at universities. We have tons of programs out all over in the community and clinics. So I think definitely that I think those places are going to go towards those hybrid models. And as a researcher who enjoys that kind of work too, I think that would give us a good opportunity to do some sort of practice-based evidence to see what's happening there.

Matt: And some of the fears about, "Can we maintain community in a virtual setting", can be addressed by this sort of hybrid model so we don't lose touch literally and metaphorically. Right.

Heather: Yeah. And I think that's a lot of what, and some of it I'm presenting this year at some of our conferences. So we measure group cohesion and we have before the pandemic some of our levels that we were able to achieve in the face-to-face. And so we're able to compare retrospectively if we're achieving that same level of community. We also look at our participant evaluations, whether they mention that being with other survivors, or was the instructor really instrumental in their enjoyment of the program or the intervention?

Matt: And this is my next question you're anticipating. So have you learned some lessons from your experience about those sort of attributes that help recapitulate community in a virtual setting?

Heather: We try to mimic some of the things we do face to face. Things like how do we initiate discussions to get people to get to know each other in the group. So we intentionally try to do some of those things, but I think that data is still sort of pending. I think we really need to dig into it a little more, and try to figure out exactly what we need to do, and if we even can recapture some of those things that we know are important in face to face exercise settings.

Matt: Did you find elderly demographics resistant to technology, or were they ready to rock and roll? Because there are some, I think urban myths about that, right?

Heather: Yeah. Define elderly.

Matt: Yeah. I was thinking of myself actually. As the resident sort of dinosaur, but let's say 65 and above, right?

Heather: Yeah. So our average age-

Matt: Which is not me by the way, I want to be clear about that.

Heather: ... let's see, so our virtual program, our average age I want to say was 59. What we have so far and in our virtual intervention is lower than that. I want to say it's 48, or something like that. So again, I don't know if we just aren't attracting people who are in that demographic over 65, that they see that it's a computer based thing, or a web based thing, and they don't even bother signing up or it just so happened. That's all we have. So far, I don't think we have the sample size to pull out just people over 65 yet. Yeah. So we'll see. I think we're going to continue for sure, doing the physical activity programming, so for fit cancer for the next, at least two years virtually. So I think by then, we'll get a really good idea of how acceptable it was for people of all ages.

Matt: Stay tuned.

Heather: Yeah. Stay tuned.

Matt: So I want to talk about this multilayered environment we work in on campus. So we start with this College of Health and Human Sciences into your immense credit, you've already alluded to that, but what do you like best about working in the College of Health and Human Sciences?

Heather: What do I like best? Let's see. So obviously the things I do align so well with the vision and mission of the college, but I like that our college I think does a really good job of us getting to know people outside our department. So especially when I was new in my first two years, they organized some really great workshops and seminars for junior faculty, and I got to meet people from social work, and OT and the other departments within our college, who were other researchers who were either struggling with the same things, or had success in things that I was hoping to have success in. So I think that was something I really appreciated. And even now, as you mentioned, College Research Day, where we get to know people outside of our little HES bubble.

Avery: The little lightning talks, they're kind of fun, aren't they?

Matt: Yeah.

Heather: Definitely.

Avery: That's great.

Matt: So the next layer up course is CSU is proudly and prominently a land grant institution. And talk to us about what that means to you.

Heather: Yeah. Research, teaching, and service. I think when you asked what drew me to CSU initially, I honestly think that was it. Because I feel like I never want to conduct research sort of in this silo that it's just research. If I wanted to do that, I would probably go to a medical campus. I really like being able to use my research for teaching. So we use our interventions and programs. I love being able to train my grad students on our protocols, and talk to them about the why. "Why are we using this theory, and how does it work?" So I love that teaching component and they're learning a ton of skills and delivering our programs and interventions. And then the service piece, I feel like is a very natural fit for the work we do. We have been running an outreach program called Fit Cancer since 2017.

 So taking what we know from research evidence-based practice, and providing a program, a service to the community. So we love it. And kind of full circle, we also have IRB approval to collect data as part of the program, so our participants can opt in to data collection, and most do because I think they are first curious about it and also want to give back. So then we're also able to use the data collected as part of our service, or outreach program to answer additional research questions. So it's a really cool, like I say, "Full circle", thing for me, that I think I will always continue to do.

Matt: Almost a self-perpetuating model, in some ways-

Heather: Yeah. Absolutely.

Matt: ... it continues to [inaudible 00:35:06], that's pretty cool. You know, one thing that I think has been impactful for you as well, in addition to us being a land grant, and of course we're, we're not an academic medical center, but we're not far from one. And so CCTSI and other opportunities to connect. And one of the things that I found about the front range that's been fun is that spirit of, "Let's figure out how to pursue a problem", is not limited to this campus, which is pretty neat actually.

Heather: Definitely.

Matt: Yeah. So talk to me a little bit more about your experiences up and down the Front Range.

Heather: Oh yeah. So I'm also a member of the University of Colorado Cancer Center. So that is the only NCI National Cancer Institute designated cancer center in Colorado. So being a member of that institution has opened up a ton of opportunities for me, both funding wise, networking wise. They have a great cancer prevention, and control program, a ton of resources. So that's been really great. I have two multi-site studies where we're collecting data down there and up here, so it also expands the reach of our programs and our interventions. Working with colleagues at CU Boulder, they've been really great. So yeah, I think the ability to find people doing things that either compliment you, or are very different from you across Front Range has been awesome.

Matt: Well, Heather, on behalf of the college more, thank you for coming and spending a little bit of time with us today. And we're looking forward to dropping your conversation as part of season two.

Heather: Awesome. Well, I can't wait. Thanks for having me. It's been fun.

Avery: Of course.

Matt: Our pleasure, as always.

Avery: And that's the show. Thank you for listening to another episode of Health and Human Science Matters.

Matt: Be sure to listen to the rest of season two as well as our episodes from season one. And if you want to learn more about our College of Health and Human Sciences, go to www.chhs.colostate.edu.