[00:00:00] **Michael Donovan:** Welcome to the Evidence-to-Impact podcast, the podcast that brings together academic researchers and government and practitioner partners to talk about research, insights, and real-world policy solutions here in Pennsylvania and beyond. I'm Michael Donovan, the Associate Director of the Evidence-to-Impact Collaborative at Penn State.

[00:00:18] In this episode, we'll be discussing the intersection of chronic disease, prevention and genetics. With me today is Lindsay Fernández-Rhodes, Assistant Professor of Biobehavioral Health and Director of the Epidemiology and Genetics Across Populations and Society Lab Laboratory or EpiGAPS Lab here at Penn State. We also have Amy Flaherty, Director of the Division of Nutrition and Physical Activity at the Bureau of Health Promotion and Risk Reduction at the Pennsylvania Commonwealth Department of Health.

[00:00:48] So why don't we start with you, Lindsay. Could you give us just a brief introduction on yourself? [00:01:00]

[00:01:01] **Lindsay Fernández-Rhodes:** Sure. My name is Lindsey Fernández-Rhodes, thank you for the, the introduction. As you had mentioned, I'm an assistant professor at Penn State. I'd like to just kind of give you a, a, I guess the pathway of how I've gotten here. It wasn't my intention necessarily to go into academia, but I really found when I was in college that I loved research. At the time, I thought that medicine was the only way to make a benefit on people's health. Partly that was because of the limited, I guess you could say, exposure I had coming from rural Pennsylvania in terms of seeing even what public health might look like.

[00:01:39] So I had a very non-linear pathway to find epidemiology. But what I fell in love with with respect to public health and epidemiology was this idea that you could go upstream and find ways to make small changes that would benefit many people. There's often in public [00:02:00] health a kind of a story that we tell about how if you found someone who is, say, struggling to stay afloat in a river, and you could ask two questions, you could say, well, who's gonna jump in and save this single person? Or you could take a step back and go upstream and find out why it is that this person and maybe other people have fallen into the river and they're struggling so much. So, in my personal trajectory, I have tended to go upstream and think about how I can make small little changes that would impact an entire population as opposed to large, impactful, but individual changes for one patient or one person's life at a time. And so that's in part what fuels me to do what I do, and I've found just a great satisfaction in doing it. And in fact, Research, as I've seen, it, can be very creative and collaborative. And in fact, I may be thinking about the US

population most of the time, but I could be working [00:03:00] with people from all over the world to accomplish a common goal of improving health.

[00:03:08] **Michael Donovan:** Excellent. Thank you for that. Welcome to the show. Amy, could you give us a little rundown on yourself?

[00:03:28] **Amy Flaherty:** Sure. Happy to do that. So, I'm Amy Flaherty, the Director of Nutrition and Physical Activity with Pennsylvania Department of Health. I have been in this position for about six years, but I've worked in public health for pretty much my entire career. I started out in policy in the Pennsylvania Medicaid program, and then moved to maternal and child health, and I spent about a decade in maternal and child health as well. And sort of had a front row seat for health disparities in that position. And then, as I said, I've been in this role for about six years.

[00:03:58] I am extremely passionate [00:04:00] about the work that we do and. Honestly, I came to this work from a very personal perspective because I am someone who previously had struggled with my weight and made changes in my own personal life to try to address that, but I do recognize how complex it is for individuals to make those changes. So honestly, when this job came open, it was as if the job description was written specifically for me, and I'm thrilled to be in the position and extremely passionate and very proud of our programs and of our staff. So, thanks for having me.

[00:04:35] **Michael Donovan:** Excellent. Thank you for that. Lindsay, could you give us just a brief introduction on the Epidemiology and Genetics Across Populations and Society Lab Laboratory or EpiGAPS Lab here at Penn State?

[00:04:47] **Lindsay Fernández-Rhodes:** Sure. Thank you for giving me an opportunity to talk about my research. So, the EpiGAPS Laboratory, EpiGAPS for short, focuses on integrating both biologic factors and social [00:05:00] factors to study the underpinnings of diseases, specifically chronic diseases in populations that have been understudied previously. A common theme of what we study. Includes obesity as well as again, populations that have been marginalized or understudied. And with respect to genetic epidemiology, often that includes racial or ethnic minorities, women, or immigrant populations. Most of the work focuses on type two diabetes and how it is linked to obesity, linked to cardiovascular diseases, as well as ways that obesity is linked to maternal and child health as well. The goal is the better we can understand these diseases and their interconnectedness, the better we can promote and address them in the public.

[00:05:52] **Michael Donovan:** Excellent. Thank you for that. Amy, could you give us a little rundown on the Bureau of Health Promotion and Risk Reduction at the Pennsylvania Commonwealth Department of [00:06:00] Health?

[00:06:01] **Amy Flaherty:** So, I am, as you mentioned, the Director of Nutrition and Physical Activity for Pennsylvania Department of Health. In the bureau in which I work, our vision is to reduce the impact of chronic disease, injury and violence for everyone in Pennsylvania.

[00:06:14] We recently developed a new mission within the last couple years in which we support community partners to implement evidence-based prevention strategies. We're very focused on data and research around chronic disease, injury and violence. In an attempt to foster healthy and resilient communities across the Commonwealth, one of our highest priorities right now is around health equity. So, developing programs and policies that enable everyone to attain their full health potential. And I know we'll get into that a little bit more as we talk, so thank you.

[00:06:46] **Michael Donovan:** Excellent, thank you, Amy. My first question is is for Lindsay. You discussed already a little bit of the fascinating work that your lab engages in, in, in genetics and epidemiology and chronic disease. Could you go into a little more detail on some of that and some of the overall goals [00:07:00] of the lab, particular some of the populations you study, You mentioned marginalized or under studied populations already.

[00:07:07] **Lindsay Fernández-Rhodes:** Sure. I'm happy to do so. With respect to what my lab does, we focus on the ways that social factors, economic factors, even structural factors such as immigration policy. Maybe underlying some of the health disparities that we see in the United States today, in particular, we focus a good bit of our research and our, our thinking around Hispanic Latino populations because it's a population that, as an ethnic group is racially diverse, it is also diverse in terms of its origins. So, a large proportion of the population may have been born at in another location. And come to the United States later in life. They're also economically, culturally dietarily, linguistically diverse.

[00:07:54] And so there's a lot to unpack. With respect to these studies in [00:08:00] particular in among Hispanic Latinos, I mentioned immigration as a potential social determinant of health. Given that there are structural barriers to integrating, to coming to the United States and accessing some of the services and even healthy lifestyles that one might need to maintain health across the life course.

[00:08:20] And we tend to look at this as again, a structural determinant of health, not necessarily something that is behavioral or cultural. As you can surmise, the social determinants of health are certainly an active area of research in my lab. But we also acknowledge that for the same adverse environment that someone may be living in, not everyone will respond to that environment in the same way.

[00:08:47] Therefore, a lot of our work is interested in incorporating biomarkers or measures of biology that may further pattern why it is that certain individuals may develop [00:09:00] obesity or diabetes in their lifetime, whereas others appear to be more resilient. I should also note that much of our work is focused not just on the individual as if similar to how a Dr. may treat one individual at a time. We're really interested in thinking about populations in so far as we understand the diversity within that population and think about ways strategically to create changes or environments that could help an entire population maintain its health on average.

[00:09:36] **Michael Donovan:** Excellent. That's fascinating and really appreciate the distinction in population versus individual health as well. That's a very important one. Amy, I know you talked about the mission a little bit already, uh, about what the Bureau overall engages in. But more specifically, what are some of the programs that the division of nutrition and physical activity, uh, works on? Uh, particularly, uh, what are some of the programs [00:10:00] around chronic diseases, um, that Lindsay's lab really studies including diabetes and obesity?

[00:10:10] **Amy Flaherty:** Thanks. I think Lindsey touched on this a little bit when she mentioned how complex obesity can be. And so recognizing that obesity is not a simple fix. I feel like if it was a simple issue to solve, we would've solved it by now. So recognizing those complexities in the variety of upstream factors, we try to develop and implement programs that can address people in the communities in which they live, work, learn, and play. So we have a number of initiatives around diabetes management for individuals who are already diagnosed with diabetes. A big focus of ours in the last several years has been diabetes prevention. We recognize that a large portion of the population is pre-diabetic and doesn't know it. So, we have tried to make it easier for people to access the diabetes risk test and then have access to diabetes prevention [00:11:00] initiatives. That's a CDC recognized program that has a lot of evidence behind it, and it's been in effect since probably about 2010.

[00:11:07] But we also recognize that it's you can't just say to people, hey, you should eat better. You know, you have to give them the opportunity in the

community in which they live to have access to nutritious foods. And the same thing with physical activity. We recognize the role of physical activity, but you have to have physical activity opportunities in the communities in which people live. I mean, do they live in a safe neighborhood? Do they have sidewalks? Do they have lighting? And as far as access to nutrition, do they have access to healthy foods? We know a large portion of our vulnerable population accesses food through food pantries, and it's become very important to us over the last five years. We developed a program called Healthy Pantry to have more nutritious options in pantries. So we're looking for individuals to have sufficient nutrition to maintain a healthy lifestyle. Not trying to have them have access to healthier options and not just [00:12:00] giving 'em healthier options, but also telling them how to prepare this food, and these are the types of recipes you could use this ingredient in. So to that end, that's how we develop our program.

[00:12:10] So we look at the areas of need and then develop programs that can address some of those upstream factors. So we have a program called WalkWorks where we encourage physical activity in communities. We have walking routes. We also partner with boroughs and townships to develop active transportation plans, recognizing that not everybody is getting from point A to point B in a car. You have to recognize that some individuals are in a wheelchair, some people are biking, some people are walking. So are there sufficient infrastructure support for individuals to get to work or to the doctor's office, not necessarily in a car. We also, I mentioned a little bit about our Healthy Pantry program. I suspect we'll get into some of our other programs as we talk, but thanks.

[00:12:58] **Michael Donovan:** That's great. So [00:13:00] showcasing really the cross agency approach in, um, interacting with the built environment really can engage and, and change policy outcomes. So we've talked previously, and Lindsay alluded to this a bit, uh, about how we talked about this in the context of social determinants of health here on this podcast. I'm interested in how social determinants of health intersect with chronic diseases, particularly around engaging with marginalized or understudied populations. So maybe for Lindsay, what social determinants are really the most prevalent in these kinds of studies and, uh, with these populations and why.

[00:13:48] **Lindsay Fernández-Rhodes:** Thank you Michael. It's great to hear that you've talked about the social determinants of health before on this podcast. I had spoken briefly about Hispanic Latinos and and perhaps this is the population I'm most [00:14:00] familiar with. So, forgive me for describing a little bit more about how these social determinants that I'm gonna talk about are quite prevalent and why they're so salient for this population. With respect to

Hispanic Latinos, it's. A race ethnic group in the United States that tends to have the lowest levels of education than any other group. And in fact, this, presents certain barriers for advancement within the United States. So, say an immigrant may come to the United States and have less than a high school education, certainly this may limit their abilities to both self-advocate and progress and be promoted within their.

[00:14:41] Within their job added in, if they have irregular immigration statuses, so perhaps they had a visa, and, you know, given the complexity of the immigration system, sometimes those visas can come and go. And that this may be both a financial burden, a logistic burden, but [00:15:00] also make it impossible or perhaps better to say, difficult to again self-advocate and navigate through this process as a population, they experience grave wealth gaps. Roughly eight times, I believe it is that a non-Hispanic white family, their median income is around eight times Hispanic family's. And so this poverty serves as sort of a very upstream social determinant of health that's going to impact, as Amy had mentioned, diet, physical activity, the ability to shape the lived experience in which the lived experience of someone and how you can access and promote those things even within your own family.

[00:15:45] So suffice it to say there are a number of social determinants of health that could be intervened upon. To address some of these upstream concerns and benefit the entire population again, so that individuals as they're living in [00:16:00] their communities, have a better control of their weight, ability to maintain a healthy weight, and avoid obesity or type two diabetes as they age.

[00:16:13] **Michael Donovan:** And from where you sit, Amy, are there particular social determinants that you and, uh, your program, uh, uh, program partners in the Department of Health really try to target and find ways to intervene with.

[00:16:51] **Amy Flaherty:** Yeah, I think Lindsey touched on some great points there. I mean, some of the most significant ones for programming purposes from our perspective are transportation and [00:17:00] childcare.

[00:17:00] We do have advanced the Diabetes Prevention Initiative, but we also recognize that it can be complicated for individuals to make time in their schedule to participate in diabetes prevention programs. Prior to the pandemic, the majority of them were in person. And we have transitioned to virtual platforms, which does eliminate some of those significant barriers to individuals participating. It is a time commitment to participate in the DPP program. So the

program runs for an entire year and for the first six months they meet in person almost weekly. So it, it is very significant when you talk about childcare needs as well as transportation. And so we partner with agencies that can provide, you know, all three prongs, so to speak. Not just the diabetes prevention class, but also provide transportation and child care during the sessions, and also provide access to physical activity for individuals as well.

[00:17:55] Some of the more complicated ones. I think Lindsey really touched on this a lot with the Hispanic and [00:18:00] Latino population. One of the, the more significant and more complicated ones to address are household income and level of education. And I think that's something where we see, we really need to see some cross collaboration across, not just Commonwealth's apartments, but also private-public partnerships as well because that is such a difficult one to tackle.

[00:18:22] I mean, we know, I know we're talking mostly about diabetes today, but we know from our Chronic Disease Burden Report that asthma individuals who have asthma are more likely to have lower household income and lower education levels. So we know that this is gonna take a big collaborative effort to sort of resolve some of those more complicated social determinants of.

[00:18:47] I will also say we have tried to develop some smaller pilot projects too. We have done a program, in Erie County with individuals who are new to this country. They have a large refugee resettlement [00:19:00] population in Erie. And so we've done work with them around helping individuals acclimate to living in the United States. We have also heard anecdotally that individuals may come to the US with healthier eating habits, and then once they assimilate, they encounter diseases like we, we see historically in Pennsylvania and the United States, which are diabetes, issues with obesity, et cetera. So we have done some small pilot programs as well, teaching individuals how to grocery shop and what to use ingredients, what to do with the specific ingredients, et cetera.

[00:19:33] **Michael Donovan:** It's important to really think through, you know what some of the barriers and challenges are to this work. Um, some things that come to mind are thinking through, um, ensuring that there's culturally and linguistically appropriate services, uh, both delivered but also advertised, and that we are really trying to, doing our best to reach populations that may be harder to reach for a variety of reasons.

[00:19:57] So how are some of these strategies, uh, [00:20:00] employed? What are some of the challenges around it and uh, and, and really maybe some

examples from your own work. I don't know. Lindsay, would you like to give it, give it a go?

[00:20:27] **Lindsay Fernández-Rhodes:** Sure. Before I, I answer that question, I wanted to reflect on what Amy had said about this unhealthy assimilation hypothesis as it's sometimes called. And perhaps we can put in the podcast a link to a study that I've done in Hispanic Latino populations. And I wanna reflect on this, this study that was launched by many, many investigators and initiated through NIH funding. It's an observational study, so I must admit that the design is not intended to be an intervention itself and change people's [00:21:00] behaviors. But this study included more than 16,000 Hispanic Latino adults from four US communities. And the reason why I bring up this study called the Hispanic Community Health Study, study of Latinos is that they did a, a quite a phenomenal and time intensive job at translating every questionnaire into Spanish or English, ensuring that every staff member was bilingual, was fully trained, and that they had done a lot of vetting to ensure that when community members came into the clinic, and they were scheduled for their long visit, for literally an entire day that they would feel comfortable to both provide accurate information, talk about their health, and in some cases, in the case of, additional follow up, even talk about their immigration status, their household income, other things that might be sensitive.

[00:21:54] So with respect to what I've seen from observing populations, it's so [00:22:00] imperative that you get a sample that is actually representative of the community. And in order to do that, you have to put that intensive work into building those community relationships, the relationships between the investigators and who are often living in the same communities, and then the participants.

[00:22:19] Now one thing to mention is this study was only launched at at four US Urban Communities. In part because those communities were so closely net with the community centers already, they had active partnerships. Nonetheless, we are left with a bit of a blind spot in terms of what this means for say, someone living in Erie or living in rural Pennsylvania. And so more work could be done to, again, engage communities in all of the locations that they're at engage other racial and ethnic minority communities, and again, assess how maybe living in a rural setting may impact their experience as well. So, [00:23:00] rural settings, of course, are gonna be logistically more distant, but also there may be something unique about those settings that's important to understand in terms of type two diabetes as well.

[00:23:14] **Michael Donovan:** And from your perspective, Amy, especially in a State as rural and urban as Pennsylvania with great divides between. Wonder if you wanna touch on some of the challenges and barriers to, to your work. I'm sure that some very much align with Lindsay's experience.

[00:23:31] **Amy Flaherty:** Absolutely. And you hit the nail on the head because we do see a lot of challenges in rural Pennsylvania particularly. I mentioned earlier that some of our programming, especially for Diabetes Prevention Program, has gone online, so we were able to purchase a national platform so that individuals could participate from their homes. But there's also a challenge in rural communities about, you know, what their bandwidth is, what their infrastructure is like, and one of the initiatives of the department has [00:24:00] also been to address that issue. Again, you've touched a little bit too on cultural, culturally and linguistically appropriate initiatives.

[00:24:07] And I'll go back to our Healthy Pantry project. We initially, when we started Healthy Pantry about five years ago, we were focused on hiring nutrition educators to be working in pantries and we also were overlaying some of our programs on top of the other because we did the diabetes risk test then as well. And then also if an individual scored high on the diabetes risk test enough to be referred to a DPP program, we would then refer that individual. So we were kind of layering our programs on top of one another. It's been a very successful program and in the last probably three or four months, we've turned our vision to more culturally appropriate foods as well.

[00:24:45] So we are, we now are assisting with the task force with feeding Pennsylvania to engage in conversations around culturally appropriate foods and food sourcing. The Healthy Pantry project has been very successful, but it's also been at an [00:25:00] extremely busy time for pantries. Lots of families are relying on pantries, and food prices are going up. So there's so many challenges right now with that type of work, but we're really focused right now on this culturally relevant food. So individuals who come to the pantry see resources and ingredients that they're familiar with and know how to cook.

[00:25:19] **Michael Donovan:** That's fascinating. Really, really important work. I'm so glad that there's been progress in this space, especially during remarkably challenging times for families, uh, individuals, uh, across the state during the Covid 19 pandemic.

[00:25:34] I'd like to transition a little bit to talk about the intersection of genetic and developmental factors. So the question is, from a genetic perspective, what are some of the drivers of health disparities when it comes to chronic diseases

experience across a person's life course? And then the second part of that question is really about the intergenerational context. How do those drivers [00:26:00] interact And the progeny of individuals further down the familial line. Lindsay, I think this would be a great one for you.

[00:26:28] **Lindsay Fernández-Rhodes:** Thank you for this thoughtful question, Michael. I spend a lot of time thinking about all of these complexities, so I'll do my best to take it one at a time.

[00:26:36] Much research has gone into thinking how early childhood and perhaps even the prenatal period, may be important at setting a person up for their life's trajectory of health. In fact, this is referred to as the developmental origins of health and disease. And often as researchers, we might approach it with a question about might that be that critical [00:27:00] window in which someone's health is impacted most strongly? But also the follow up question is, are there things we could do in adulthood that would perhaps write the ship?

[00:27:10] For example, with maintaining a healthy weight, we know that, say a child gains weight early in adulthood, that could impact their likelihood to mature and pass through pubertal milestones earlier. And then in turn, they may stop growing. So their growth plates might fuse and they may be likely to attain the same height they would have otherwise. We know that the genetic architecture of some of these things is shared, but presumably there's an environmental component that, again, once an individual is set on a trajectory or on a path, It can be a quite difficult to get back onto the right path.

[00:27:48] For this reason, with my own research, I've moved over time from thinking about adults to thinking about children and in particular the ways that households and adults can [00:28:00] facilitate healthy lifestyles for children as well.

[00:28:04] I'm a mom and so I know how difficult it can be to sometimes have exciting food on the table that's both nutritious, and is going to get gobbled down. But there are ways that our communities could be structured in such a way and our families as well that these things can help. And we can help try to keep our kids on track for time because there's a kind of a body of literature that supports that early life is so important.

[00:28:31] I did mention how genetics is important and one of the key things you might think about when you think of genetics is that it goes, is passed down across generations, in terms of every one of us has a mom and has a father, and we are working with the genetic material that they had given us.

[00:28:48] But the open question that remains is how do the experiences of our parents and of ourselves in critical windows of our. Of our lives impact how our genes actually [00:29:00] come to be expressed and what they mean at the end of the day. So this is often called epigenetics, and it's an area that my lab also studies in particular, we're interested in how social determinants of health and important critical windows impact how genetics are expressed at the end of the day.

[00:29:19] And recognizing that, you know, a lot of things that are passed across generations, genes included, but also how we view education, what kind of hardships we may or may not face. Those are all linked across our lives. And so we take a sort of linked lives perspective and recognize that none of us are living in no vacuum. And these are complicated problems that required complicated, I guess, research paradigm to decompose them, so to say.

[00:29:52] **Michael Donovan:** And Amy, how has the department at large and your programs in particular really looked at the life course and the developmental orientation? [00:30:00] Do you care to comment on any of that?[00:31:00] [00:32:00]

[00:32:06] **Amy Flaherty:** Sure, that was a terrific segue too. We tend to develop a lot of our programs and implement a lot of our programs in school or early childhood education settings. Just recognizing that healthy habits start early. Like Lindsay said, a lot of it is genetic, so that is a little bit more complicated, but just recognizing that if we can implement policy systems and environmental changes in early childhood settings and as well as in school settings, we know that we can have a longer term impact. We also recognize that children are teachers as well, so they may be learning important nutrition and physical activity, standards and facts in school or early childcare settings, and then take those lessons home to their parents. So we do try to focus a lot of our interventions on a similar age range that Lindsey was referencing.[00:33:00]

[00:33:01] **Michael Donovan:** Great. And from both of your perspectives, we've really seen a lot of interaction on intersection across these sectors. So one thing that we really try to get at in this podcast is thinking about ways that the, the academic research communities and practitioner communities, whether they be in government or or other settings, can really work together more effectively and efficiently to improve outcomes and, and bridge gaps that may.

[00:33:29] So these may be caused or exacerbated due to different career backgrounds training, life experiences workflows and deadlines associated with the different disciplines and areas et cetera, et cetera. So this is really an

opportunity to brainstorm from where you are both sitting what might be some strategies to make these connections a little more efficient or more effective or both?[00:34:00]

[00:34:16] **Lindsay Fernández-Rhodes:** I'm happy to begin. So I think a first step is to have more conversations like this. I must admit I'm excited hearing about the work that Amy and the Department is doing. And it's very easy to kind of hang out in your own space and and with respect to my work, it's more kind of the observational space, seeing how things are playing out over time, not so much thinking of ways that we could in the moment work to change how the food pantry works or the, these various programs that Amy has described.

[00:34:47] So I'm hopeful that conversations between academic research institutions and then practitioners, broadly speaking can result in more effective communication, but also [00:35:00] new ideas on maybe even kind of new trends or new ways to attack the same problem. As we've seen with obesity epidemic, it is certainly not something that appears to be going away, it may be shifting in its forms, and becoming more severe for some individuals. But again, it's an intractable, seemingly intractable problem that we will have to work together to, address.

[00:35:32] **Amy Flaherty:** I completely agree. I mean, this is a perfect pairing between the Department of Health and Penn State, because otherwise I don't know if I would even know about Lindsay or her work. So it's as if you planned this. Uh, good job.

[00:35:44] So, yeah, I totally agree. I mean, we are very data driven at this point. We've been very data driven for probably the last decade or so. We're always looking for partnerships that can enhance our awareness and our knowledge about things like that. To Lindsay's [00:36:00] point, I don't think the obesity issue is going to go away anytime soon. A lot of the data that we have seen, Takes us up through 2019. It will be really interesting to see what we learn about the data from during the pandemic. That's gonna be really interesting. I think it's gonna increase our challenges in that area.

[00:36:17] **Michael Donovan:** Excellent. Well, I'd love to open up the floor for any final thoughts as we conclude this episode. Does anyone have anything that they'd like to bring up, perhaps hasn't been covered already?

[00:36:41] **Amy Flaherty:** I'd like to just touch a little bit on our State Physical Activity and Nutrition grant. We have been incredibly fortunate to receive this funding from cdc.

[00:36:49] We're starting our final year of our SPAN grant, as we call it, and we do address a lot of nutrition and physical activity strategies through this SPAN funding, [00:37:00] one of which is breastfeeding support, in birthing facilities as well as in the community. We do recognize the role of breastfeeding and the connection with minimizing obesity. So we do a lot of work around breastfeeding support in birthing facilities.

[00:37:15] We also continue to work around availability of healthy foods in hospitals and community settings. I talked a lot about our Healthy Pantry project, but we also have a program called Good Food Healthy Hospitals, where we try to increase the availability of nutritious options in hospitals. And that's not just for patients, it's also for visitors and staff as well. And then we also implement nutrition and physical sta physical activity standards in early care and education settings. And I talked a little bit about our Walk Works program as well, and that's our goal is to increase the number of places that implement community planning and transportation interventions to support safe and accessible physical activity, and also just recognizing that not everybody is [00:38:00] in a car, and we need safe options and accessible options in communities as well. So thanks for letting me weigh in on that as well.

[00:38:12] **Michael Donovan:** Absolutely. Absolutely. Well, with that, I will bring this episode to a close. Many, many thanks to our guests, Lindsay Fernández-Rhodes, Assistant Professor of Bio Behavioral Health here at Penn State, and also the Director of the Epidemiology and Genetics Across Population and Society Laboratory or EpiGAPS Lab.

[00:38:33] Also here at Penn State. And we also have Amy Flaherty, director of the Division of Nutrition and Physical Activity at the Bureau of Health Promotion and Risk Reduction at the Pennsylvania Commonwealth Department of Health. And lastly, I'm your host, Michael Donovan, the Associate Director of the Evidence-to-Impact Collaborative here at Penn State.

[00:38:52] And this has been another episode of the Evidence-to-Impact podcast. If you enjoyed our conversation, please do subscribe. Thanks for listening.[00:39:00]