Mehmet Ozbek: It's very, very important to actually maintain what we have. We have built our interstate state system back in 1950s. We have been using it since then. We need to take good care of it if you want to be able to keep using it into the future as well. I think it's a more sustainable approach to invest in the time and effort to preserve and maintain things as they are, than demolishing and rebuilding.

Avery Martin: Indeed.

Mehmet Ozbek: My research tries to answer that big problem of how are we going to be able to preserve our infrastructure, specifically roads and bridges.

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. Today, we have a friend and colleague, Mehmet Ozbek, who holds the Phelps Endowed Chair in the Department of Construction Management. Welcome Mehmet.

Mehmet Ozbek: Thank you very much. Thanks for having me.

Matt Hickey: It's our pleasure. We're looking forward to getting to know you a little bit better. Let me start with the Phelps Chair. Tell our audience about that endowment and the opportunities and responsibilities that come with it?

Mehmet Ozbek: Okay. You start with the difficult question, I guess. It's an endowment by late Joseph Phelps, who was a pioneer in the construction industry, who graduated from our program and then started working in the Hensel Phelps Construction Company. He actually took it to the next level before starting a second career opening a winery in California.

Matt Hickey: Oh, wow.

Mehmet Ozbek: He passed away in 2015. But, I believe, a few years before then, he actually made this endowment to our department for a professor to be selected and carry the mission of that endowment. Which is, basically, as you mentioned, Matt, comes with a number of responsibilities beyond our regular duty and beyond our regular teaching, research, and service. I believe the biggest part of that responsibility is to be engaged with the construction industry in trying to come up with a research agenda as well as in serving our students.

Matt Hickey: Now, I'm interested in how that dovetails with your own scholarly interests. We were lucky enough to have you last spring at our college research day give a lightning talk. When we say lightning talk for our listeners, I think we mean it. You have to cover a lot of ground in a short period of time, and we were so intrigued by your presentation last year. Tell us a little bit about the work you presented at research day and your scholarly interest [inaudible 00:02:44]. When you think about yourself as a scholar, what big problems or challenges do you pursue?

Mehmet Ozbek: Sure. Let me first address the question on what I presented last year, because that's a new direction that I took in my research recently, I would say in the last two to three years. That is imaging the future of the infrastructure. I have been working with an organization by the name American Society of Civil Engineers. They have developed a platform working with a Hollywood production company, which is a virtual environment depicting a city 50 years from today roughly, depicting a city in 2070. I worked with this organization as well as the production company during the development of this platform to provide input as to what the future might look like.

We are not suggesting that what that city depicts is exactly how the future will look like. But, the whole point behind that exercise was that we should start planning for the future now as opposed to reacting our way as we move forward. That was a very forward-looking experience or exercise that we went through that platform. In terms of my research, that deals with the preservation of the infrastructure. More specifically, the transportation infrastructure. More specifically, roads and bridges. This falls under a broader domain of research called infrastructure asset management. I'm sure you've heard the term asset management, but from a different perspective, from a financial assets' perspective of individuals.

In the context of infrastructure, we're looking at physical assets, basically. I'll give you an example, say, from highways. Within the right of way fences, we have defined 40 or so different asset items that we need to take care of starting with the fences themselves. And then, lots of drainage-related items, ditches, pipes, under drains and whatnot. The pavement itself and lights, traffic lights, signs, pavement markings, pavement markers, so on and so forth. I actually joke every now and then that driving is not the same for me anymore because, when I'm driving, I continuously look for these things and see are they in good condition. Do they need to be maintained?

Matt Hickey: Interesting.

Mehmet Ozbek: Do we need to be improve them? And, whatnot. My research focus... Asset management or infrastructure asset management in general looks at the overall life cycle of this infrastructure from design all the way to design construction, maintenance, preservation, all the way to disposal or decommissioning. My research focused on the maintenance or the preservation aspect quite a bit. It's not the most glamorous part of infrastructure, if you will. If you think about it, people take probably more pride in saying, "I built that thing," as opposed to, "I've been maintaining that thing." You can actually think about it from somebody running for the office perspective. I'm yet to hear somebody running for the office saying, "I'm going to maintain what we have," as opposed to, "I'm going to be building new roads, new bridges, new structures."

It's not as glamorous, I would say. But, it's very, very important to actually maintain what we have. We have built our interstate system back in 1950s. We have been using it since then. We need to take good care of it if you want to be able to keep using it into the future as well. I think it's a more sustainable approach to invest in the time and effort to preserve and maintain things as they are, than demolishing and rebuilding. My research tries to answer that big problem of how are we going to be able to preserve our infrastructure, specifically roads and bridges?

Matt Hickey: Great. Thanks so much for sharing. I want to follow a little bit on this casting-our-vision-into-the-future notion. Because, I find it fascinating. I think it's really cool. We tend to slap a label onto new technology, smartphones, smart cars, et cetera. What's your sense about a 50-year city in the future smart infrastructure going to look like? We will interview you again in 50 years to see whether these... I'm kidding of course.

Mehmet Ozbek: Given that you won't be able to do that, Matt, I think I can say anything that I want. I think in 50 years we're going to... I'll take the construction perspective, first of all, just because that's what I do. I think we'll be living in cities where buildings are building themselves. We are using a lot of robots, drones, lots of 3D printing where we hardly ever see any actual construction worker out there. It has pros and cons, as everything that comes with the future. We may perhaps achieve our vision of zero safety incidents in the future. Even if there's a safety incident with a robot, who cares? In the sense that, if a robot gets damaged or gets hurt.

But, at the same time, obviously, construction is a major driver of the economy and employment. What's going to happen to all those jobs? That's exactly the approach that we took with this platform where we are presenting these ideas, which are not all great in the sense that they're not going to resolve every issue out there. But, these are the ideas that we can start thinking towards and planning for. That's, I think, one aspect of what the infrastructure will look like. I also think, in terms of transportation, we are going to hopefully see less and less disruption to traffic, much in the way what we're seeing right now with I-25.

Matt Hickey: Sure.

Mehmet Ozbek: That lots of maintenance will be done, again, almost automatically. That's what we are guessing at least in the sense that either through robots that are working below ground or self-healing concrete, self-healing asphalt, that patches itself. That's-

Matt Hickey: That's cool.

Avery Martin: Wow.

Mehmet Ozbek: Yeah, that's kind of a crazy idea. In terms of transportation itself, you're definitely envisioning a lot of driverless cars, drones, and whatnot. That's, again, towards into the future. The real deal is if we see any of these ideas to be feasible, then we need to start planning for them right now, basically. That's the idea.

Matt Hickey: It's not going to just happen. Right?

Avery Martin: Right.

Matt Hickey: If I may press one step further, do you envision, and maybe I push this out to the next hundred years, a transportation landscape that actually doesn't depend on roads. What I mean by this is... I'm thinking of the Jetsons. I'm dating myself here. This is a 50 year old cartoon. But, automobiles, personal transport devices that in fact don't take any wear and tear on the pavement because they don't need it. They're hovercrafts of some sort, right? Have I lost my marbles?

Mehmet Ozbek: No, not at all. Absolutely. I think that's going to be the way to go in terms of transportation. You're right. We'll probably need less and less of a maintenance because of less and less use of roads in the way that, at least we know them right now, and more air based transportation. Absolutely.

Matt Hickey: So, there will be virtual highways, in a sense. Because, if we take every car in the United States and move it 6, 8, 10 feet off the ground, we still have traffic patterns to deal with. It's just in a different plane in some ways.

Mehmet Ozbek: Absolutely. We have multiple lanes because we can't go vertical. So, absolutely.

Matt Hickey: My goodness. Fun to think about, isn't it?

Avery Martin: Yeah. There'd be toll roads for the higher up.

Matt Hickey: Exactly, right.

Avery Martin: Altitude, yeah.

Matt Hickey: Right. Yeah. Now, the natural question, and this is where we really have a lot of fun, is talk to us about the pathway, your educational pathway, your family origins again, that led you to the point where you're in a position to accept this incredible honor as the Phelps Chair.

Mehmet Ozbek: Absolutely. I'm originally from Turkey. I lived there up until I was 22 years old. Got my bachelor's degree in civil engineering with a focus on construction engineering and management back there. And then, moved to the United States to Virginia Tech. So, I'm a hockey ram or RAM hockey, depends on the day.

Matt Hickey: Same here, same here.

Mehmet Ozbek: And, got my master's and doctoral degrees over there in civil engineering, again, with a focus on construction engineer management. I also had the pleasure of doing one year of postdoc before coming to here almost 15 years ago. I joined faculty here at CSU back in 2008. I was actually thinking 15 years ago, right around this time, I might have been on campus for my interview. That's kind of how I came here. In terms of family, I'm actually a third generation student in my family.

Matt Hickey: Great. Very nice.

Mehmet Ozbek: I'm very fortunate in that sense. My paternal grandparents went to college and I believe they were one of the first graduates of their respective programs back then in Turkey. My parents did go to college. My sister who is 10 years older than me, also went to college. So, that kind of set the stage for me. I think college was the way to go. Another thing that helped me, if you will make my decision, was everybody that I know of in my family are civil engineers actually.

Start with my granddad, my dad, my mom, my sister. And then, that extended to extended families later on as well. My brother-in-law, my wife. So, a family of civil engineers. Again, that set a precedent for me as well. So, it was an easy decision to pursue civil engineering. I do remember my dad worked as a construction manager. So, since I was probably five years old or so, he would take me to the sites.

Matt Hickey: My goodness.

Mehmet Ozbek: I would just watch these equipment and how awesome they were. And, civil engineering, construction, was almost a central theme at our dinner table conversations. So, again, that was an easy decision and an easy path for me to take, I guess, to first pursue civil engineering, to pursue college. Both my mom and sister went to the dark side, if you will, and pursued academia. That, I'm sure, affected me quite a bit in my pursuit of a doctoral degree. And, here I am.

Matt Hickey: Now, Virginia Tech was a preface to a postdoc. And then, of course, we were lucky enough to recruit you out here. But, I want to talk a little bit about what you actually focused on for your dissertation. What questions or projects were you pursuing as a doctoral student?

Mehmet Ozbek: I don't remember that. [inaudible 00:13:09] I was... No, I do. That's obviously something that a doctoral student will never forget, having spent at least three to four years of their lives constantly working on one specific subject. That, actually, had something to do with what I described. I worked on a project funded by Virginia DOT, Department of Transportation, as well as NSF through my postdoc. And, actually... It was interesting. As I was moving from my PhD to postdoc, my advisor gave me the opportunity to write an NSF proposal saying that, if it gets funded, you have a postdoc. And, it did get funded.

Matt Hickey: Good for you.

Mehmet Ozbek: So, it was my first and only NSF project that got funded. Either I got the beginners luck on that, or my proposal writing skills have significantly worsened over time. [inaudible 00:14:01] I would like to believe it's the former. Because, I have pursued NSF since then and haven't been successful in that regard. But, what we did, both from my PhD and then the postdoc, was to help Virginia DOT figure out how they can best maintain all these asset items that they have.

Specifically, we looked at different counties that Virginia had. And, these different counties making different decisions as to how they're going to approach to this maintenance question. And, comparing these counties, I tried to identify the most efficient approaches to asset management, if you will, so that other counties could learn from those. So, in essence, my research, both then and right now, looks at decision making. Because, infrastructure systems are to be able to manage your assets, if you will. Or, if you want to manage or maintain or preserve your assets at any given time, you need to make a lot of decisions that really relate to three fundamental questions actually. What to maintain, when to maintain and how to maintain.

If we had unlimited funding and budget, these questions will be very easy to answer. Maintain everything in the most expensive way possible, continuously. But, that's not the world that we live in. So, I'll give you an example from our state, Colorado. I'm going to talk about only one asset, which is bridges. Remember how I said at the beginning, we have identified 40 or so different assets. Bridges are huge, obviously. And, State of Colorado has around 9,000 bridges. I'll just use Colorado Department of Transportation as an example.

They are responsible for managing or overseeing a portion of these bridges. At any given time, they need to be able to, again, figure out in this network, large network of bridges, which ones they need to prioritize in terms of maintaining and when to do that. Should they do it now? Defer the maintenance? And, how to do that in the sense that maybe there's a pothole? Should they do a bandaid approach and just fill that pothole or try to find the underlying cause and maybe really have a much more restorative approach. So, the three rules of real estate, does anyone-

Matt Hickey: Location, location, location.

Mehmet Ozbek: Thank you. Great. The three big rules of transportation asset management or highway asset management is drainage, drainage, drainage. Potholes happen because we cannot drain the water off the road. Are we going to just do the bandaid approach, as I was saying, or are we going to maybe look at the root cause and spend significantly more money to fix the drainage in that area? These are important decisions, and these are very complex decisions. These are actually driven by multiple parameters as well. If I'm going to select one bridge over the other one because I have only funding for one of those, how am I going to make that decision?

That's when multiple criteria come into the picture. Obviously, we're going to look at the traffic, the area it serves, the amount of vehicles that go over that bridge. The climate that might be affecting that bridge. The current condition of that bridge versus the deterioration rate. How fast that bridge is deteriorating. These are very complex decisions. My research definitely incorporates that multi-criteria decision making into making those decisions, basically.

I also look at optimization. That's also what my PhD... That optimization, in essence, has an objective and multiple constraints. In this case, in the same example that I shared, the objective is maybe to improve the condition of the largest number of bridges, if you will, or maintain them at a certain level, if you will. And, the constraint will be the budget. My PhD and everything that I have done since then really looked at this complex decision making phenomenon, if you will, and incorporated optimization, prioritization, multiple criteria decision making and whatnot into the picture.

One thing that I... Or, I should say, I don't want to get credit for that, I and my co-PIs have realized, which we should have realized this longer time ago. But, we realized that fairly soon as traditionally and primarily when those decisions are made, people have prioritized economics. In recent years, we have also seen environment being a concern. Maybe I want to fix... I'll keep on using my example of bridges. But, again, you can extrapolate this idea to then maintaining 40 different asset [inaudible 00:18:45]

Matt Hickey: Sure.

Mehmet Ozbek: Becomes a major, major problem. Maybe I should fix this bridge because, without having this bridge in service, I'm having a long detour of vehicles which are going to then impact the carbon emissions. But, one thing that hasn't been taken into consideration is the social equity or social impacts. So, if you define sustainability, you need to look at the economics environment. But, social impact or social equity has been neglected.

A recent research project that I and my co-PIs have started working on was how do we incorporate social equity into this huge complex decision making problem as well? Because, we have a lot of communities with underrepresented individuals, so should we really give some priority maybe to the bridges that are within those communities? But, even taking that to the next level, maybe it's going beyond just the road transportation the way that we know it, as you mentioned, Matt. But, can we develop more bike friendly and pedestrian friendly communities?

Because, owning a car may not be a big deal or expense for us. But, it is actually a big expense for those communities. Not just purchasing a car, but keeping that through the insurance and the maintenance and whatnot. So, in the last year or so, my research has taken a whole new direction where I'm not just crunching numbers, if you will. I'm doing all kinds of optimization and multi-criteria decision making. I'm really looking at this social impact. I have started to look at this. I have barely scratch the surface on this because this is a very understudied area of this field, I think. How we can incorporate that into decision making. Because, I think that's going to... That's important. That's going to complicate decision making even incredibly more because we are putting the human element and the social aspects, a lot of qualitative things into this very quantitative framework, if you will. But, that's very important.

Matt Hickey: I'll say. It's really interesting.

Avery Martin: Yeah.

Matt Hickey: Now, I want to talk a little bit about the transition from Virginia Tech and postdocs to CSU. How did we get on your job hunting radar screen?

Mehmet Ozbek: Again, I'm trying to remember. This was 15, 16 years ago when I started the job hunting. But, there were a few schools that I had heard about. I hadn't been to Fort Collins prior to that. But, what I heard about CSU, specifically my department, was the incredible partnership it has with the industry. So, that was one big driver. The other thing that I found to be interesting at the time was this was a standalone construction management program as opposed to what I was used to, was CM being a part of civil engineering. That was my path. And, when I learned about that there's a standalone CM program with close to 8,000 students at the undergraduate level, that was an eye-opener. That definitely was one of the drivers for me to apply to CSU. I should also say that, of all the universities that I have applied to and interviewed in, I felt that CSU was definitely the most accommodating to the idea of a dual hire.

My wife was, at the time, just a semester behind me, basically. She was in her last semester of her PhD. So, she was also very much interested in academic positions. CSU pretty much had welcomed us with open arms saying that, "Yeah, we do understand the dual body problem or two body problem. And, we do value the fact that couples can bring a lot of good stuff and diversity to our university." Therefore... That was another thing going for CSU. I also should say that I got somewhat lucky. I mentioned my interview at the beginning, that it was about 15 years ago when I had my interview with CSU. I remember I came here and, during my interview with our dean of the college back then, Dean April Mason, I tried to explain everything that I've been trying to tell you. Obviously, in a very non-technical way as I'm trying to do here.

I hope I'm successful. If not, please warn me. But, I gave her an example in saying that infrastructure is very important and have actually different types of infrastructure interact with each other. I vividly remember giving her the example. I focused on the transportation infrastructure, roads and bridges. But, that transportation infrastructure more often than not is also home to the power infrastructure. If you have these lights and light poles, the electric power lines and whatnot. So, I say if anything were to happen to a road, if a road gets damaged, potentially our power structure might be affected too. I told her, also, a road might get damaged because of the big pipes that are running beneath that. So, here's another type of infrastructure, water infrastructure.

I gave her all this. And, the next day I'm returning to the airport for my flight out. Went to the airport. I'm looking at the screens at the gate. It talks about a huge sinkhole, and maybe you would remember this, Matt, which opened on I-25. That sinkhole happened because of, I believe, a water main that broke down, which then made the road collapse, which may or may not have affected the power infrastructure at the time. I don't recall. But, I just pulled out my laptop and sent an email to Dean Mason saying that, "I promise I didn't make this, because this was the exact example that I gave. But, this is exactly what I was talking about." So, I don't know, maybe it was meant to be that I was able to even showcase it wasn't me. To this date, I maintain my innocence. I didn't make that happen. But, that was exactly the example that I shared with Dean Mason.

Matt Hickey: Wow. So, you and your wife, did you come at the same time? You said you were separated by about a semester or so.

Mehmet Ozbek: A semester. We did come at the same time, but she started a semester later, or after me, because she had to wrap up her PhD. She was here finalizing her dissertation when I started my fall semester here.

Matt Hickey: Talk to us about a day in the life for you. This could be collaborators that you're talking with, the new projects that you just mentioned, student training opportunities, even the public facing interactions with our construction colleagues who are such great supporters for your department.

Mehmet Ozbek: I guess from a research perspective, I live in weekly cycles. I'll talk about, not from a day perspective, but from a week perspective. What we do, I'll take that last project as an example, as you mentioned for that project, which looks into how we incorporate social equity into transportation asset management decision making. I and two other colleagues of mine, so all our co-PIs on this project, we meet with our graduate student who's a PhD student, as well as we also work with an undergraduate student on this project first thing on Mondays. So, 9:00 AM meeting. We have a standing meeting. And then, we identify some tasks mainly for our students, but also for ourselves. And, we try to hold each other accountable to those. And then. Our goal is then to accomplish those tests by next week when we come back. And then, we do check-ins and whatnot.

From my perspective, I don't have a physical lab per se. I'm in front of the computer most of the time crunching a lot of numbers as I mentioned at the beginning. This reminds me of a funny story. Back at Virginia Tech, my cubicle was right outside of the faculty offices. So, any faculty going out of their office would see me as they're walking by. It had its advantages in the sense that I had easy access to my advisor. In the same token, my advisor had easy access to me. So, there were times he wouldn't even bother to step out of his office. He would just yell my name from his office, saying, "Mehmet, would you come here? I have a question," or "I need you to work on this kind of a thing."

But, there was one [inaudible 00:26:51] who would usually leave around 6:00PM and would see me in front of the computer and looking at the numbers that has been my life, crunching numbers. At the time, every single evening, he would tell me, "Mehmet, keep looking at the numbers. They will change." So, didn't make too much sense of it until I finally did. It was a good, good joke. That's still the same for me, that I crunch numbers, I'm looking at the numbers, I'm playing with the numbers. That's, I guess, my research life, I would say.

In terms of teaching, I definitely had the pleasure to teach both undergraduate and graduate classes. Obviously, you have different approaches to both. But, I'm usually on a Monday, Wednesday or Friday schedule. Mondays, Wednesdays, Fridays, I really spend a good amount of time in the morning to still, believe it or not, prep for my class as here I am in my 15th year teaching the same class for the 28th time at a row, because I teach same class in different semesters as well. So, that's what happens.

In terms of, you mentioned, working with our industry partners, obviously that's a big part of what we do. I think anybody in the department would tell you the same thing. But, from my perspective, that has primarily been, at least for the last two to three years as I've been working on this project, the Future World Vision Project with the American Society of Civil Engineers. So, I work with that organization, and I have mainly been a champion in trying to promote the platform and the ideas behind that platform in multiple venues, which will include industry professionals. I'm trying to sell the idea, if you will, to them as to how they can use it in their companies to train their next generation of employees. And, how can actually do this as a means to start as a company to really look into the future and that sort of stuff.

Matt Hickey: That's neat. Now, I want you to think about your legacy, your impact, aspirations you have as a teacher, mentor, collaborator, cast a vision again for the next five or 10 years about here's how I hope my impact is taken by others, what my students might be doing, the kind of growth and projects that we're currently working on in terms of their potential impact.

Mehmet Ozbek: Sure. I guess, again, from a research perspective, I want to be able to say that 10 years from today that some of the tools or frameworks that I developed to help the decision makers are indeed being used by them. Especially, again, this latest project excites me quite a bit, where these decision makers will have a completely different approach in making their decisions, where they're also looking at social equity and the impacts of their decisions on social equity. That'd be, I guess, my legacy, if that's the right term.

In terms of my students, my graduate students, there are two things that I keep telling them. One is the importance of work ethic, and the other one is the importance of communication. I would like to think that I'm a hardworking individual, partly because I also think that working hard compensates for other shortcomings that a person may potentially have. I always tell my students, "I don't need you to be extremely smart or intelligent. You need to be hardworking." That's one thing that I try to really instill. The other one is communication. I always tell them, I mentioned these weekly meetings, but I also tell them, "Anytime you need any help or anytime you need to communicate with me because you're running into a problem."

And, that happens fairly frequently during graduate school. That's the definition of graduate school, roadblock, huge wall, brick wall. You need to find a way around it or just plow through it. But, communicate with me. Those are the big ideas that I would like my students to really have and carry forward. Now, at some point... I'm currently merely an advisor. At some point, I want to become a grand advisor where one of my advisees will have their advisors. Hopefully, they will carry on the same ideas. Because, some of these ideas that I have are basically passed to me by my advisor. That's an interesting relationship between advisors and advisees. I think it's a, for the most part, lifelong relationship. I definitely want to see that a big part of what they do.

Matt Hickey: Now, you've got obviously a ton going on. But, I'm curious about what occupies you and your wife when you're not on campus and staring at numbers and mentoring students, et cetera. What do you look forward to in terms of fun things to do in Fort Collins? It's obviously that you love Fort Collins and it's hard not to. Great place. What do you do when you're not on campus?

Mehmet Ozbek: I'll probably talk about this year. Because, the previous two years, I don't even want to remember. This year we finally got our season passes for skiing. We are trying to help our eight year old learn how to ski. We actually started that process right before Covid hit. So, that's March. March, 2020, he tried his first skiing. He said, "I love it." And, I couldn't book the second trip.

Matt Hickey: Sure.

Mehmet Ozbek: Basically, let's just put it that way. This year, we have been busy over the weekends trying to get him to start skiing and get us back to skiing. That has been our main thing for this year. Otherwise, obviously, we enjoy everything Fort Collins has to offer in terms of our beautiful downtown, all the places that we can visit in terms of different food options. During my interview, I don't remember who told this to me, but somebody told that Fort Collins has the second largest number of restaurants per capita after I think San Francisco. I never researched this. I didn't need to, because when I came here, I realized there are-

Matt Hickey: Yeah, there's a lot of restaurants.

Mehmet Ozbek: ... a large number of options here. So, we like to try those as much as we can. I would say that's what we have been up to at least this year. In addition to that, when we get a chance, we like to travel internationally. Obviously, we have those international ties. We try to go back to Turkey at least once a year. We have my sister-in-law living in London, so we like to visit her every now and then-

Matt Hickey: Oh, that's great.

Mehmet Ozbek: ... so that my son could play with his cousins. And, along the way, we try to make a few stops in Europe if we can as well.

Matt Hickey: That's great. That's awesome. Istanbul has been on my bucket list for a long time. Beautiful city with a lot of history.

Mehmet Ozbek: It's one of those few cities which have that 24/7 lifestyle, really.

Matt Hickey: I can hardly wait.I have to ask as a quick aside, what's your favorite spot to ski?

Mehmet Ozbek: Right now, it's Keystone. But, partially, because we feel it's more family friendly, family oriented. Prior to our son was born, it was Breckenridge. It's funny how things change with life, obviously. But, right now, it's Keystone.

Avery Martin: Nice.

Matt Hickey: The beauty of Summit County is, if you have a place or are renting a place, you can get to multiple different... Of course, depending on the pass you have. But, it's a great opportunity. That's neat. Well, we have two questions we want to wrap up with. It's related to the environment we find ourselves in here at CSU. The first one is the college. It's College of Health and Human Sciences, this eclectic mix of different disciplines. I'm interested in your reflections on what you like best about being an academic in the College of Health and Human Sciences.

Mehmet Ozbek: Other than the fact that we have our own very cool podcast? And, they didn't pay me for this. As you said, it's a mix of different units. I think I like the fact that, between this eclectic mix, as you mentioned, Matt, we are able to actually touch the human life from multiple different aspects. So, from designing and building the spaces that we live, learn, work within, all the way to our nutrition, education, our health. I think even though these are very different units, as you mentioned, I think the overarching theme is the human life. And, how, between these different units, we're able to touch on every single aspect of the human life.

Matt Hickey: That's well said.

Avery Martin: Very well said.

Matt Hickey: Yeah. We find ourselves embedded within an institution that holds out its commitment as a land grant very seriously. So, share some reflections about what it means to find yourself as a professional at a land grant institution.

Mehmet Ozbek: I guess the amount of coming to engagement is mind blowing in my opinion. I was also reflecting on my undergraduate experience where I did have the opportunity to do a bunch of extracurricular activities. But, I don't think any of them really had that flavor of being engaged with the community and serving the community. Here I am looking in my own department. But, the same applies to, I think, all across CSU, where we have all these student organizations and clubs. And, they are putting the knowledge that they gain through our education, through this campus, to work, literally work by serving the communities, by engaging with the communities.

That has definitely been, I think, driven by the fact that CSU is a land grant university. I actually find myself very fortunate to be a part of this university, mainly because of that, something that I missed out on when I was an undergrad, basically, that I can do and see every day here. A great example that I think epitomizes that is CSU Spur, which I had the pleasure of visiting recently. The amount of programs that they have for the community from hydroponic farming to water treatment facilities to our own CM certificate program is just incredible, in my opinion.

Matt Hickey: It's remarkable.

Avery Martin: Related to the numbers that you look at regularly and staring at the screen long enough, the numbers will change, how have you seen those numbers in practice? How have you seen the research that you've done in real life making an impact, whether through sustainability, through those social efforts? What's one little vignette that you wouldn't mind sharing of how you've seen your research make an impact?

Matt Hickey: A great question.

Mehmet Ozbek: That's a great question. Since I talked about my PhD and how I looked at different counties within the state of Virginia and how they approach their decision making and what they do to be able to manage their inventory of assets, if you will. So, what we ended up doing was identify the most efficient county, and not for the sake of coming up with your top 10 best list. But, to then work with that county, which was making its own decisions for the road network falling within that county, within the constraints of that county. And then work with that county to extract, what do you do? What are some of the best practices?

We did that, and we were able to actually then inform other counties, "Look, these are some of the approaches that you can take when you start making decisions," which was well received by those counties. And then, they have since then adopted those practices to also improve their efficiency. Want to give this example just because I talked about that during my PhD. But, that's kind of the idea. Yes, you look at numbers, you crunch numbers, you run all these models. But, at the end of the day, the goal is to come up with some practical solutions. That, I think, I would give as the vignette as you asked for, Avery.

Avery Martin: That's great. Thank you very, very much.

Mehmet Ozbek: My pleasure.

Matt Hickey: Well-aligned with our land grant mission again.

Avery Martin: Absolutely.

Matt Hickey: We're an outward looking institution. It's great. Well, thanks again for coming.

Mehmet Ozbek: Thank you.

Matt Hickey: We really enjoyed it.

Mehmet Ozbek: Likewise. Thank you so much.

Avery Martin: Yes, greatly appreciate it.

Mehmet Ozbek: Thanks.

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

Avery Martin: Stay tuned for the next episode. It's on the way. In the meantime, go listen to our episodes from Seasons One, Two, and Three. If you want to learn more about our CSU College of Health and Human Sciences, go to www.chhs.colostate.edu.