Kelly Brownell: Hello, and welcome to another season of Policy 360. I'm Kelly Brownell. It's a new academic year and while it is, I have some news for you. We have a new host for the podcast. Her name is Judith Kelley and she is the new dean of the Sanford School of Public Policy, previously our senior associate dean. Welcome, Judith.

Judith Kelley: Thank you, Kelly. I'm glad to be here.

Kelly Brownell: Oh, it's so nice that you've taken over the school and I know you'll do an outstanding job with everything including this podcast series.

Judith Kelley: Thank you.

Kelly Brownell: Now, regular listeners might remember that you were a guest on the program. You talked about an intriguing approach to your scholarly work using the Wikileaks documents to gain insight into what causes countries to increase efforts to combat human trafficking. You also guest hosted the program. You talked with former director of national intelligence, James Clapper.

Judith Kelley: Yeah, I'm a big fan of Policy 360 and I'm really looking forward to hosting it, but I thought, "What better way than to start out with talking with you about the work that you do?" Are you up for that?

Kelly Brownell: I am. I really love talking about this work we're doing on food policy.

Judith Kelley: I know you do. I've been hearing about it for some years and I'm looking forward to sharing it with our audience. Before we get to your work, I want to ask you about all the podcasts you've done over the years, some 70 podcast episodes. Is there anyone in particular that stands out?

Kelly Brownell: You know, there are so many interesting people we've had. People at Duke who do interesting research and people of world acclaim who are coming in here doing their work. One of the more interesting ones I thought was a group of graduate students who were talking about their particular work on public policy and an effort they had organized. I was so impressed with their energy and their passion and their ability to get things done. So, I thought of all of them, that might have been the most inspiring one for me.

Judith Kelley: I'm not surprised because as faculty members were very used to being outshined by our students, aren't we?

Kelly Brownell: In fact, yes.

Judith Kelley: Let's turn to your work on food policy. You're one of the nation's top experts on food policy and nutrition and obesity and as a matter of fact, the reason that I have this opportunity to serve as dean is because you decided to step away so

that you could lead the World Food Policy Center. So, what got you thinking about starting a world food policy center? Why now?

Kelly Brownell: Well, so I've been at Duke for five years and before that, I was at Yale for many years and ran a food policy center there that mainly dealt with obesity prevention and public health and nutrition. We did things like we worked on school nutrition standards. We worked on the impact of food marketing on children. We worked with places like New York City on their regulation to get rid of trans fats in restaurant foods. Something that I'd work on for many years are soda taxes, but I learned pretty quickly in this work that there were things happening in other areas of food policy like work on hunger and food insecurity, for example, that were related to what was going on in my orbit but I wasn't familiar with the people or the institutions.

Kelly Brownell: So, I set out to get to know them better and in so doing, I found out that those people weren't familiar with our work and like any field, the food policy field was segmented where there was a lot of depth around particular topics but not much breadth across them and very little communications across them. That led to very significant policy gaps and missed opportunities. So, for example, you might have an agriculture policy that dumps excess commodities like butter into schools. Well, that's great if you're a dairy farmer, but it's not so good if you're concerned about the health of the children.

Kelly Brownell: You get places where the fields combat one another like the debate over whether SNAP recipients, the people who receive food benefits what used to be called food stamps, should be permitted to use their benefits to buy things like sugared beverages where the obesity and hunger communities have squared off and there's essentially an impasse so nothing's getting done. There are a lot of examples of that. There's also a missed opportunity, if you could bridge these areas, to have a stronger, unified voice arguing for policy changes that would create wins across the areas.

Judith Kelley: Well, it's very appropriate that you're doing this at a policy school because there's so many issues on which we may find the right solution but it comes down to policies and collaboration and politics across issues to figure out how to really solve the problems. As you look to the future, is there something about food policy that concerns you in particular?

Kelly Brownell: Oh, my gosh. Where do we begin? World population is increasing at an incredible rate. They're already problems with feeding the world. There's now enough food being produced to feed everybody, but political and economic problems get in the way. That may not always be the case. There could be a time when there's just not enough food around. So, you have to have a lot of faith, for example, in genetic engineering of foods, agricultural technology to keep up with population growth. There's hope, but who knows whether that's the case. That's just one problem.

Kelly Brownell: Food insecurity and malnutrition have now been surpassed by obesity worldwide as significant problems. There are many places around the world, a lot of places actually, with a dual burden where food insecurity and obesity coexist. It happens in our community. It happens all around the U.S., but it happens in developing countries too, sometimes within the same family where a mother, for example, might deprive herself of food in order to feed her children. So, you might get overnutrition of the child, particularly with some nutrients and undernutrition of the mother.

Kelly Brownell: These problems are all affecting one another and they're very significant in the world scene. Countries like India and China are expecting massive increases in diabetes that follow behind this cascade of obesity and related disease that are occurring. When you put it all together, there are a lot of reasons to be worried, not to mention the impact on the environment of modern agricultural practices. It's hard to think that there's any non-industrialized way of creating food to feed the many people that are on Earth, but a lot of that creates environmental damage.

Kelly Brownell: There are many perplexing problems that are very important not only to human health, but to environmental health, but also things like political stability between countries. Say, for example, when a shared water resource like a river, an aquifer, or a lake starts to go low. So, you could just count the ways.

Judith Kelley: Yeah, sounds daunting. You've been interested in this work a long time, ever since you were a young man. I have a 17-year old and I can certainly understand how young men are interested in food, but how does a young man become interested in food policy? What was it that got you into this in the first place?

Kelly Brownell: Well, my training is in psychology and I started my career doing randomized trials for treating obesity but I got frustrated with the poor results and thought that obesity was probably something better prevented than treated. That led me right to public health and that, in turn, led me right to public policy because if you're going to do things that have large impacts on people, you can't just be doing small, randomized, clinical trials.

Kelly Brownell: So, we started thinking of things that would affect the whole nation like school nutrition standards, for example. That was a long story. It was a long story for me, but it led me right from traditional medical models where you focus on an individual or problem and you deliver some treatment for it to preventative population-based strategies. This is really public health 101, but it's been a very exciting transition for me and it's very exciting to think about these public policy possibilities.

Judith Kelley: When you look to all the work you've done, is there something that stands out as being particularly a success in your view of the work that you undertook?

Kelly Brownell: Well, one interesting case study is we used this model on our research of what we call strategic science. What that is, is finding out ... Don't let other scientists describe or drive the science agenda, but let policymakers drive that. We interact with policymakers a lot in order to figure out what kind of science can be done to help support their work. We have one very interesting case study.

Kelly Brownell: When I was in Connecticut, we worked with a Connecticut attorney general to ... What ultimately happened, to stop a program the food industry had launched called Smart Choices, where the food industry had essentially gotten together with itself, had created nutrition standards, and they said, "Well, any of our products that meet our self-defined standards could have this Smart Choice label on it." They had set such lax standards that things like Fruit Loops and cereals like that could have the label.

Kelly Brownell: So, we worked with the Connecticut attorney general to see if this practice could be stopped and it was really exciting because essentially six weeks after he launched an official investigation into this program the industry pulled it. That was an exciting victory and the science helped support the research, but it helped support the change, but the change was produced by a change agent, in this case, a state attorney general.

Judith Kelley: It's good to have incidents like that that bolster your confidence in what you're doing, but do you sometimes just get frustrated with the system as a whole and then the many things that have to be done?

Kelly Brownell: Oh, my God. Yeah, well it can be daunting just because of the purview of what we're doing is so large. My learning has never been greater in my whole career just because we have this broad purview. We're learning about agriculture. We're learning about food insecurity. We're learning about food safety. We're learning about food defense, for example, or potential contamination of the food supply ...

Judith Kelley: Right, right.

Kelly Brownell: Through acts of bioterrorism. So, that is really exciting. Yes, it gets frustrating. The behavior of the food industry gets very frustrating at times. The food industry has to do one thing, sell more food. Sell more food is not necessarily in the public's interest. You get this fundamental conflict between corporate interests and public health and this gets played out in a lot of ways. Some of the papers I've written over the years have talked about parallels between tobacco industry behavior and food industry behavior and that can get very frustrating.

Judith Kelley: I know that you have been making some progress here lately, locally, right here in Durham. Can you share a bit about that?

Kelly Brownell: Well, the object of the World Food Policy Center is to bridge four fundamental areas of food policy, four clusters. One cluster is hunger, malnutrition, food

insecurity. The second is obesity and related diseases. The third is agriculture, environment. And, the fourth is food safety and food defense. So, there are obviously global things that can be done on these and we are, but we also believe that doing something locally is very important.

Kelly Brownell: So, we're working with the community where we live, Durham, and a rural North Carolina county, Edgecombe County, to see if we can create model food systems communities. The hope there is to try to take these two places and get everything right to the extent humans can by finding out what's working that exists within the community already and scaling it up by convening people from around the world to learn about best practices, to find places where you can intervene that create wins across these areas rather than the segmented efforts that are occurring now, and develop a set of best practices that potentially could be replicated other places around the country and the world around specific topics like early child development and nutrition or food-related innovation and entrepreneurship would be examples.

Judith Kelley: I can imagine that as a large, emerging city, yet sitting in an agricultural environment, Durham is particularly or North Carolina is particularly well-suited for these types of interventions. I know you went on a tour recently of North Carolina and looked at farms all over the state. What were you looking for when you did that?

Kelly Brownell: It began because we realized that the only way we could make this World Food Policy Center work is to collaborate because we simply can't have the expertise in all the relevant topics. Part of our collaboration has been with terrific institutions that are in our area, University of North Carolina the School of Public Health, for example, but the relevant case here is the School of Agriculture at North Carolina State University which is one of our two land grant colleges. The dean of the ag school there at NC State has helped me make a number of connections in the agriculture world around the state. It's an extremely interesting agriculture state.

Kelly Brownell: Through the dean there, we met with people at the North Carolina Farm Bureau. The Farm Bureau is an advocacy organization for farmers. It's a very impressive organization and the president there, Larry Wooten is his name, said that, "If you're going to be working on these food policy issues, especially in the state, it'd be interesting to go around to business and farms." So, he and his colleagues were nice enough to organize a two-day tour where we took our entire group and then Larry himself and several of his colleagues out on a two-day tour of farms around North Carolina.

Kelly Brownell: We saw everything from a one greenhouse hydroponic lettuce operation to a person on three acres growing organic produce for niche restaurants to a 6,000 acre, $100,000,000 a year mega farm growing soybeans, corn, tobacco, watermelons, huge sweet potato operation. Another place 4,000,000 pounds of blueberries a year. What was especially interesting was visiting the animal operations because we visited a poultry farm and several swine farms. That was

extremely interesting because there's a huge amount of controversy about these confined animal feeding operations, the quality of life for the animals, the waste that comes from it and things like that.

Kelly Brownell: We got to see all this first hand and it was really very interesting. We developed a number of impressions from this. One was how hard farmers work. Another was how vulnerable they are to things outside their control: market forces, weather, sometimes their relationships with what are called integrators, which would be a big company like Smithfield or a chicken equivalent where a lot of their business life is controlled by these companies. Also, how deeply embedded these farms are in families, how many generations they tend to go back and how often we saw children of the farmers being involved and being groomed potentially to run the farms afterwards. It was an extremely interesting experience for us and we learned a lot. We're grateful to the people at the Farm Bureau for putting this on.

Judith Kelley: There's so many issues interconnected also here in North Carolina with immigration and seasonal labor and so I can really see what you mean by the complexity of these issues. Part of this complexity, you talked about this notion of a model food city. What do you mean by that? Can you share that?

Kelly Brownell: Let me give you one example. One of the issues where we'd like to create a set of best practices that could be replicated elsewhere is around early child development and nutrition. We held a summit meeting here not too long ago where we brought in experts on brain development, child development, child nutrition, and then also people who work in the community. The experts on brain development were essentially saying that if you don't get nutrition right at certain critical stages of development, it's a life sentence, that you just can't recover no matter what happens nutritionally afterwards. That's thinking about the brain as a possible mechanism of linking a diet to human health. The microbiome is a gut-related equivalent of that potentially. There's a lot of places where it's really important to get nutrition right.

Kelly Brownell: We wanted to find out what science would suggest are the most important nutrition interventions at different places of life, even going back for example, to the father's nutrition before conception ever occurs because there's really interesting epigenetic effects that happen through that mechanism. Once you establish those priorities, what kinds of programs and practices can you implement to actually make those things happen and then how can that be done on the ground, in a place like Durham? Bringing together the scientists is one thing. People do that a lot. But, actually thinking about what is it mean on the ground is not something that people do a lot. There are just a whole number of interesting things that come up.

Kelly Brownell: When you talk about, for example, children's nutrition priorities in schools, it's a pretty blunt instrument that usually gets used. You want more fruits and vegetables, less junk food for example, but there could be more precise nutrition interventions that might even vary from children within a grade school

from age to age. Maybe there's some interesting entrepreneurial opportunities for farmers, for example, to breed foods that are especially high in these nutrients and then schools become the customer for that.

Judith Kelley: I see.

Kelly Brownell: So, there are a lot of ways where you could bring together the science with the practice and the policy, but across these areas. So, you're addressing simultaneously food insecurity, obesity, environment, and agriculture. That's where the excitement lies. It's like all these pieces are out there floating in the air and it's our job to figure out how to lock them together in ways that haven't been done before.

Judith Kelley: In addition to these pieces, you are also adding faith communities into the mix. Why is that?

Kelly Brownell: We got interested in this issue of food and faith because our divinity school at Duke has some very strong scholars who write about this a lot. People are interested in food and scripture and the role plays in churches, but also churches became a place where a lot of food assistance gets delivered. Many soup kitchens and food pantries, for example, are in churches.

Kelly Brownell: So, we're collaborating with our divinity school and the Duke endowment to host a meeting here in the fall that will be a food and faith summit to find out what state-of-the-art work is available and then to see what can actually be done on the ground within this context of model food systems communities.

Judith Kelley: Right now you have a lot of ambition for the Center, but it's still in the early stages. What will success look like in the long run for you?

Kelly Brownell: Success will mean that we made a difference and by impact, we're not thinking about more publications or how many times other scientists site our work, but it's how much practices and policies have actually changed. In Durham, for example, if there's less food insecurity when we're done ... We'll never be done, but if let's say five years ahead there's less food insecurity, there's less obesity, the schools are providing healthier foods for children. Children in the summers, for example, who aren't in school don't have the advantage of the healthy meals the school might provide. What can be done about that?

Kelly Brownell: If those sort of things can improve, let's say the environmental impact that Durham is having because the food waste has gone down, more women are breastfeeding for a longer period of time, there are a number of tangible outcomes like this that will be signals of success in our mind. But, we don't want to have just an impact on Durham, we want to be evaluating everything we do and creating a template that can be replicated in other places.

Judith Kelley: What do you see the research questions around this are?

Kelly Brownell: Oh, my God. There are so many research questions it would be hard to even begin. I mentioned breastfeeding. Let's just take that. There aren't many nutrition interventions that will have a more profound impact on a developing child then having breastfeeding occur.

Judith Kelley: Right.

Kelly Brownell: But, there are a lot of things, of course, that get in the way. There are cultural norms and all kinds of other things that make it hard to have optimal practices. There's a lot of research that can be done. In randomized trials, for example, across pediatric practices about different recommendations that can be given to women to breastfeed. You could do different interventions and then test these with employers about breastfeeding-friendly practices that employers might have and whether that actually improves breastfeeding rates. There are just a lot of trials that can be done, in other words, attach the impact of these interventions. Those things are very important.

Kelly Brownell: Just one other example, our relatively new mayor in Durham, Steve Schewel, when he was running for office used this model food systems community as part of his political platform. There's a whole series of political polling type things and message-framing research that could be done about how political figures who might be interested in these issues could frame them to their constituents in order to garner maximum support. That's just a few of the research questions, but deeply embedded in all this work is our desire to evaluate everything.

Judith Kelley: Well, I'm looking forward to see how it all goes and I surely wish you the most success. I look forward to talking to you about this as it unfolds and welcoming you back to Policy 360 in the future. I know that sometimes you'll also serve as a stand-in when I'm not available to do that, so it's great to have a pro available. So, thank you so much for coming.

Kelly Brownell: Well, thanks for the opportunity to talk about these things.

Judith Kelley: Kelly Brownell is the director of the World Food Policy Center and the dean emeritus of the Sanford School of Public Policy at Duke University. He also has a new podcast called Future Food Policy. I hope you will check it out. We have more information at our website policy360.org.

Judith Kelley: Thanks for joining us, I'm Judith Kelly.