Speaker 1: Welcome to on the pandemic. This episode is hosted by Mario Dowd, executive director of health systems and population health integration for Rutgers university and former commissioner of health for the state of New Jersey. Joining the discussion today are Shauna Hudson from the Robert Wood Johnson medical school and Robert Atkins from the Robert Wood Johnson foundation.

Speaker 2: This is Mary O'Dowd from Rutgers university. And today I have the pleasure of talking with two of my Rutgers colleagues about trust [00:00:30] and how it affects testing and vaccinations for COVID-19 Shawna Hudson leads, community research projects at the medical school in new Brunswick, and has been engaged in COVID-19 research, focused on better understanding the reasons people are getting tested and vaccinated and why others are not. Bob Atkins leads the New Jersey focused initiative for the Robert Wood Johnson foundation. And he has a nursing faculty member in Camden. Bob has been volunteering as a vaccinator in South Jersey and [00:01:00] working to support programs to encourage people, to consider getting the COVID-19 vaccine throughout this pandemic. And in several episodes of this podcast series, we have talked about some of the disparities that we have seen in the severity of disease and death in our black and Hispanic communities across the country, and here in New Jersey, despite these increased risks, we have also seen that the numbers of people getting vaccinated in these populations has been [00:01:30] significantly lower than in white communities.

Speaker 2: Shauna, can you explain some of the history of how we got here? What has led to some of these inequities and the issues of trust between the healthcare establishment and communities of color? So, Mary, it's great to be here with you today and, uh, just in terms of what we've been hearing in our research, um, and as well as what we know about the history of medical research in this country, there are a number of examples, um, dating back [00:02:00] to the Tuskegee syphilis study, for example, which a number of, uh, individuals talked about in our focus groups, um, with their concerns in terms of the public health service, when they did the experiments on syphilis, uh, that's one of the most infamous sort of biomedical examples of research issues across the, the landscape and actually led to in 1979, a Belmont report that really focused on sort of, um, making sure that there are regulations [00:02:30] in place and federal laws that actually make sure that human subjects are in studies are actually protected. Um, in addition to Tuskegee, we also heard about, um, things like, uh, Henrietta lacks and the book, the immortal life of Henrietta lacks, where the Heela cells, um, were actually, uh, harvested. And there was no consent from family members in terms of, um, the use of Henrietta lacks as cells in the development of a number of life-saving treatments around cancer. So, um, in our

Speaker 3: [00:03:00] Communities, there have been stories that have been passed down that are true, that are rooted in the history of this country. Um, and in addition, uh, there are also issues just in terms of our Latino communities in terms of access and documentation that come up. So, I mean, in terms of your question about asking about how did we get here and the healthcare establishment, there are some abuses that have happened in the past. Uh, there are definitely remedies that we as researchers are working with currently in the current [00:03:30] context to address, but they are real.

And we really have to think about those and be sensitive to them as we're working with different communities that are vulnerable.

Speaker 2: Thank you, Shauna. That's, it's important history to try to remember as we're going through this. Um, you know, you've been doing some really interesting research, which you just talked a little bit about, um, hearing directly from people on what they think about testing and vaccination. Um, let's start with vaccination. There has been a lot of discussion on the issues [00:04:00] of trust related to who is willing to get backs unaided, and why not? What does your research tell us about this variability, both in access to the vaccinations as, as well as the willingness to actually get the shot?

Speaker 3: Yeah, so, you know, we actually started doing work back in November. We were funded by NIH to do some work looking at COVID testing. And then also to try to understand a little bit about vaccine and how that, um, would be thought [00:04:30] about in the community. So we've seen sort of a transition from November to now, November, where everything was really sort of hypothetical to what's happening today, where they're actually rolling out vaccine. So what we've seen are some interesting differences. Um, I think at cross groups, our study has been focused on Latinos and on blacks in, uh, four counties up in North Jersey that have been really affected. So Essex, Passaic, [00:05:00] union and Middlesex County. And so at the beginning, um, we saw across the groups that people really weren't in favor of the vaccine, they were really concerned about issues in terms of, um, how quickly it rolled out.

Speaker 3: Is it safe? Can we trust it and really bringing back those examples that I talked about in terms of, um, previous mistrust and misuses of research? Um, I think over time, some of those things have changed and now the issues are less about the mistrust as we've seen more and more people [00:05:30] get back sated across the country, and that's really moved into sort of an access issue. So being able to get to mega sites, having testing that's available in your, um, in your area and being able to take the time off and be available when opportunities come up, as opposed to being able to schedule a times that work for people. So, um, I think there are still issues in terms of, um, hesitancy and some about it in terms of thinking about long-term [00:06:00] treatment. But we've, I think in our conversations with people, we really saw sort of a shift from a lot of hesitancy and not interested until I see lots of other people go forward to. Now it's more a question of how do I get access and, um, wanting to see how you can actually get to the sites and the locations

Speaker 2: And how does trust play into that?

Speaker 3: So for a lot of the people that we talked to, it was about seeing [00:06:30] individuals in their communities and seeing people that they actually respected getting the vaccine. So seeing their doctors, who they actually interacted with, um, seeing their coworkers that they were interacting with for our study, we were working with healthcare workers who are in hospitals and, um, home nurses and in settings where they actually were seeing their coworkers get vaccinated. So they were able to ask questions [00:07:00] of, you know, what was your experience, what happened? And then we're feeling a bit more comfortable as they were able to have those conversations, but in the early days,

when there weren't a lot of people to be able to have conversations with, it was very difficult to establish trust. And so being able to have access to people that you both trust in terms of the messenger, but as well, you trust that the message is one that's really addressing your questions. That's, what's really important and really [00:07:30] important in terms of thinking about that.

Speaker 2: I think I've heard you talk a little bit about trusting the environment and the place as well. So it's trusting other people, but also the place. Can you talk a little bit about that? Yeah.

Speaker 3: Yeah. So, I mean, the other piece of this is thinking about where do you go for your public health information and where are your trusted sources? So in our study, we had a lot of people talking to us about they really trusted their doctors. And [00:08:00] so, but their doctor's offices are not places where they can go currently for vaccine. They can go there for testing in some settings, but they can't go there for a vaccine. So that's one place. But in the absence of being able to actually go to sites that are based out of your local clinic, and actually, I should say many of our federally qualified healthcare centers are actually providing access to vaccines. But for people who don't have the ability to go to their providers, [00:08:30] then it's really about being able to get information from sources that they, that they trust. So it's your doctors, it's your clergy, it's your churches, it's the cities and townships. So throughout much of COVID, many of the towns actually were sending out emails and, and really contacting the communities and keeping them abreast of what was happening. And because

Speaker 2: The rollout for much of this has been local townships [00:09:00] in counties. Um, those are the main sources that people have been going to and talking about as being their trusted sources. Thanks, Shauna, Bob, let's turn it over to you for a minute. Now you have heard, um, the research findings that Shauna is talking about and you have the perspective of being out there in the field and actually giving vaccinations to people. Um, what are you seeing out there and do the things that Shauna has said here today, ring true to you and your experience?

Speaker 4: [00:09:30] Well, first of all, thank you, Mary, for the opportunity to be, um, be part of this conversation, because I think it's timely and it's exciting conversation. And yeah, I, I, um, really appreciate what Shawna said. And I think his remarks really lay out really two tensions that we should think about one Shauna, really talk to this distrust. Right. And there was the whole continuum of trust, right? So we have, um, these, uh, individuals who are coming to the vaccine center early on, they [00:10:00] trusted, he trusted it and they had the information. The information is the other kind of tension. There's just other piece that I'm trying to talk through about, like, did we have the information who the trusted messengers, I mean, she's touched on those points. Um, but I think we really have to acknowledge that our public health system wasn't really set up to really distribute this information in the way that it needs to be distributed.

Speaker 4: And we've seen it again and again, a different circumstance. Um, obviously the new work water crisis that we had, and that, that was a [00:10:30] prime example of a community. Not really having access to the information may need to make the best

decision. And I think we're going to see this again and again, um, you know, whether we're looking at things around Superstorm Sandy or vaccinations or the pandemic, um, these are the issues. And so right now, when we look at our most recent polls, which are suggesting that one in four are still got rejected vaccine that's problematic. And, and Sean also talked about some of our healthcare providers are frontline workers. [00:11:00] Um, we have some reports that 20 to 40% of them are opting not to get the vaccine. Um, and they are obviously people who have high levels of information, um, but don't have high levels of trust. And that's something that we have to really be concerned about because they're very close to it. I mean, there at the epicenter of the pandemic, even the worst that the coronavirus can do, um, you know, EMS workers, some nurses, some physicians, um, and they are still saying, no, I'd rather, um, [00:11:30] take my chances of, uh, the coronavirus than the vaccine long winded answer.

Speaker 2: Yeah, no, and it's, it's a difficult situation that we find ourselves and there are so many different sources for information that people use and making those healthcare decisions for themselves. Um, you know, I know that I go to the CDC website, but that is not what everybody else is doing necessarily out there. Um, you know, we all have our informal networks that also influence us and that can be our [00:12:00] family and friends, our coworkers. So I think Shauna talked a little bit about, you know, in certain clinic environments, people were watching their coworkers get vaccinated and that can be an influencer, or it can be our broader community. And, you know, we've talked a little bit about, you know, uh, members of your church or your faith community. And, you know, for me, sometimes it's the parents of the kids at my, um, at my school, uh, down the street where I hear them talking about whether or not they're going to get vaccinated and why and where they're going to get that vaccine.

Speaker 2: [00:12:30] Um, it could also be the media. Um, recently we saw queen Latifa who was very public about getting her vaccine up in her hometown of Newark, New Jersey, which is a positive message that the media can and, and media makers can and put out there. I've also seen videos of the former, some of our formal former presidents and first ladies, um, Carter, Obama, Bush, and Clinton altogether, um, and encouraging people to get vaccinated, um, and [00:13:00] that will influence some people and not others. Um, but, but what is your perspective on who people look to for making decisions about their own personal healthcare decisions?

Speaker 4: Yeah, I mean, I think that's really interesting when we think about what's happened, uh, in this country, as we think about trust and the institutions that we trust. And you mentioned, um, journalism, um, and, and mentioned, um, looking at our healthcare system, I'm looking at our local [00:13:30] and state and federal government. Um, and there's, it varies in terms of how much trust there is. Um, and so it's great if Joe Biden and Barack Obama, um, to get the vaccination, but that doesn't necessarily mean that individuals, um, who don't feel connected to Joe Biden and Barack Obama, um, are going to get their vaccinations. And so what we've really tried to focus in on and put our effort to it's, how do we engage, uh, these trusted partners in the communities, [00:14:00] right? Those that are, um, either delivering healthcare, which, which Shawna,

um, already mentioned, um, what people trust their, their nurses and nurse practitioners and their primary care providers.

Speaker 4: Um, but they also trust people who, if they are, um, going to the food bank, they trust those people. They trust, uh, they trust their, um, the religious leaders, their, their, um, their pastors and their priests. Um, and if those individuals are able to tell them, Hey, I've got the vaccination, [00:14:30] I think you should get the vaccination. Here's why, um, those are trusted types of mess, messengers, people that are helping them with housing. And so how do we figure out how they engage those? Um, and so as grant makers, that's our opportunity. What we've we've, we funded those different kinds of organizations. And so we've been trying to do is to go, how do we leverage that trust that's already built in, right? That's already built into the system. Um, and these individuals who are disconnected from these institutions and the systems, how do we use that trust [00:15:00] to get them to say, all right, I'm going to believe you. If you're telling me I should get this vaccination, then I'll get them back to nation.

Speaker 2: You know, Bob, I've heard you say, um, that the whole behind the vaccine program actually working is that enough people actually have to get that shot. And so, you know, some of the media messages that we've talked about, those are some oftentimes the, the easier things to do. You know, you record somebody, you put out a podcast, you know, it's out. Um, but it's not likely that these alone are going to [00:15:30] get us to where we need to be in terms of the high percentage of the population vaccinated. So for those people who are on the fence, who have seen those messages go out, but still haven't decided to get the shot. What are some of the strategies that you're working on, um, to sort of move this discussion forward?

Speaker 4: Yeah, that's a great question, Mary. I think one of the things that the frame it out is first, we have to acknowledge that the vaccine center is these peas. And I have the, um, [00:16:00] the pleasure of working, uh, volunteering for the Rowan school of osteopathic medicine. They have a vaccine center there they're vaccinating up to a thousand people in a day, um, Camden County, uh, down the Southern end of the state. They have a mega site that has 4,000 people a day, but these vaccines centers are not going to be able to accommodate a lot of populations that are going to have to accommodate it. You put it out there for this to work. We have to get the majority of the population, um, vaccinated. And we know that those [00:16:30] that don't have transportation, we know older adults with health issues, we know special needs population.

Speaker 4: Um, you know, that, uh, those that are undocumented, uh, agricultural workers, um, homeless, they're not going to come through the vaccine centers. So how are we going to move, um, and be able to take the vaccinations into the communities where people are. And so what we've really been trying to do is a couple of different, uh, initiatives. Um, we [00:17:00] worked very closely with the New Jersey department of health, um, over the past few months, really trying to think about, okay, the vaccine sites are set up. Now we have to start thinking about the looming challenge, which is how we're going to get those hard to reach and vulnerable populations. Um, and so we actually are able to put some funding into five sites across the state, working partnership, New Jersey

department of health, and, uh, Sussex and Warren Bergen County, union County, Gloucester, and Cumberland and Salem.

Speaker 4: And they are all working [00:17:30] with, uh, people experiencing homelessness. Um, and they are, um, they have the Johnson Johnson vaccine, which is, you know, which is great because it's one and done. Um, and they are using again, leveraging that trust that they have, um, that these organizations have in these communities to vaccinate homeless populations. And that can be migrant workers. That can be those that are experiencing domestic violence. That can be those that are living in a shelter, living at a motel. [00:18:00] Um, and so that's really encouraging, um, another initiative that we are, it's really small. It's just a little pilot is working with barbers in the city of Camden. Uh, the center for family services is initiating, initiating a project where they are, um, going to work with the County department fell, get, um, we hope to be at least 15 to 20 Barbara's vaccinated in the city of Camden.

Speaker 4: Um, both Barbara is, will be photographed, [00:18:30] um, getting their vaccination. Um, they also receive a training on how to inform others about the importance of the vaccine. Um, and then they will go back to the barbershop, have a picture of them that will be displayed in their barbershop. And as their clients come in for their hair, haircuts, hopefully it stimulates a conversation and they're in a position to leverage again, that trust to say, Hey, you know what, I'm cutting your hair. You trust me to cut your hair. Um, trust me when I tell you that you should [00:19:00] get your vaccination and you think it's just something that's going to give us again, that, that, uh, as Shawna pointed out, these trusted messengers, whether they be someone that you trust your healthcare can be trusted your hair haircut, uh, let's make sure that we're leveraging that and make the best use of that.

Speaker 2: Yeah, well, and it's those informal networks and community influencers that, you know, sort of change the dynamics of some of these conversations. Now we've talked a lot about healthcare workers and how they are so important as [00:19:30] a knowledge source for people who are, um, out there in every poll that I've seen. They're often ranked number one, that people across every political and racial demographic, healthcare workers, doctors, and nurses in particular are highlighted as the trusted source. Now, Bob, you're a nurse. Have you gotten your vaccine and why?

Speaker 4: Of course, Mary, of course I got my vaccine and I, uh, yeah, I'm a nurse. And one of the reasons I, I got it was because I really wanted [00:20:00] to be a part of the solution in terms of figuring out how we get as many shots in arms as we can as quickly as possible. Um, and so to be able to, um, volunteer at the, uh, school bossy pathic medicine, I had to take it back to native and, um, and not only did I get vaccinated, I've got my mom who was a retired nurse out of retirement and got her, uh, to volunteer also the sites I actually made her and him work together to vaccinate others, which is, um, pretty fun thing to be doing. Um, but yeah, [00:20:30] I think, yeah, wow. The only way we're going to, to move forward and get out of this pandemic, which is, um, I think really diminishing the quality of our lives, uh, and the, and the length of our lives obviously is to get as many people vaccinated, fast as possible.

Speaker 4: Um, and, uh, so being able to tell others, you should get this vaccine and also be honest about it, because look, there, there are going to a lot of people experienced some symptoms. I think that's part of the information. You have to be able to share it, say, Oh, the first shot you may [00:21:00] have forearm, you get the second shot. There's a, there's a good chance that you're going to feel some fatigue and maybe have some fever, but it's going to go away. And it's a good time. You'd be able to give them the information. This is a sign that you're, you're getting the new response that we want. So, um, so it's important to really be able to, as a nurse and healthcare providers to really provide accurate information that you put out, Mary nurses, um, are the most trusted profession in the United States still going. And, um, I am proud to be a nurse and I'm really happy that [00:21:30] I've been able to participate in helping to get us back.

Speaker 2: Yeah. I love your story about your mom too. It's vaccination is a family affair and yeah, I have a, a good number of nurses and doctors in my family. And, you know, as they've, we're the first ones getting vaccinated, I got to see all their pictures. So it reminds me of the barbershop image as well. And, you know, it was very exciting to see that, um, many of them working on the front lines treating COVID patients. So that was a relief to, um, I have a few [00:22:00] of my family members who work in the healthcare, um, I'm sorry, the education public education systems. And so they are now recently gotten their vaccines. And I was texting with my aunt the other day, who was complaining about the symptoms. I'm like, great news. You feel terrible. That means the vaccine is working

Speaker 4: Exactly, exactly what we wanted.

Speaker 2: Exactly. Um, but you know, we, what role do you think healthcare workers play? And you talked about nurses in particular being a trusted source, the most [00:22:30] trusted source, but how does, what role do they play in this conversation about vaccination? Because we know two things, one, um, people are going to them with questions about how to make the decision for themselves, but we also know that they're not all getting vaccinated and that's in some of our, um, polling data only a little over half of the healthcare workforce has decided to get the vaccine so far and, you know, hopefully that will increase. Um, but you know, that's [00:23:00] a conflict. So what do you think about that?

Speaker 4: No, that's, that's, um, something that's really discouraging, right. Again, uh, those are those healthcare, those frontline workers, those, um, healthcare providers that are, have seen firsthand, uh, the ravages of the coronavirus, um, that are just trusting and disconnected from, uh, well from science, because the best science [00:23:30] we have suggests that this is safe and effective and really necessary. And they have made the decision that the risk is greater from the vaccine than from the virus. Um, and that is something that I think we really have to lean into and figure out how are we going to get this buy-in because, um, yeah, when you see that one in four, um, Americans in the most recent poll are still, um, indicate they may [00:24:00] not get the vaccine. Um, and again, as you pointed out sometimes up the hat of healthcare providers saying, no, um, how do we do that?

Speaker 4: And so I think one of the things that we really have to think about is how do we, um, inundate as many as possible to make them feel like, okay, um, you, you get the sense that nobody wants to be the first one to have bad reaction from the backseat. Um, but also nobody wants to be the last person to get it. Um, and the last person to be kind of be able to participate in society or the last person that gets sick in front of buyers. Nobody [00:24:30] wants to do last person on the battlefield. Um, so, uh, in a battle that hopefully we're going to be winning, or how do we kind of inundate and use social messaging to really spread the word and make it seem like, Oh, you're being left out, being left behind because I think, um, social pressure where, and we can get you the social influence. They get, um, as many as possible if feel like, Oh, I don't want to be left out everything's happening and I need to have the vaccination to kind of move forward. I think that's one of our best bet, but then is that you put out marriage it's really discouraging.

Speaker 2: So [00:25:00] learning, relearning those, um, those peer pressure strategies from high school and applying them in the professional workplace. Okay, great. You must have teenagers at home, Bob.

Speaker 4: I do. I do. Um, just because got your, friend's going to jump off a bridge or you got to jump off a bridge, but we have to be careful of your friendship.

Speaker 2: I want to go back to you, um, and talk a little bit about testing because understanding that [00:25:30] there are, um, you know, a lot of people still not getting vaccinated, we're still seeing cases here in New Jersey. Um, and that the issue around testing has been with us longer because we only had the first vaccines at the very end of last year. It's been a journey at first, we didn't have enough testing. Um, and then, you know, with the advent of new testing technology coming online, we were able to address that and had a huge increase in testing. And I think that helped us control the spread of the disease because then we could [00:26:00] isolate and, um, you know, sort of break that spread. Um, in late December, we actually hit the high Mark here in New Jersey with over 93,000 tests done in one day. Um, but lately those trends of the volume of testing have been going down in hovering around 50 to 60,000 tests a day.

Speaker 2: Um, but there has also been some variability in how people who have been able to get tested. Um, you know, in my personal experience, I got [00:26:30] tested through a hospital. My kids were tested through their pediatrician's office when they caught a cold and had symptoms. And we wanted to make sure that we knew what was going on. And our local YMCAs actually has a testing site for our community where you can either schedule or walk in. So there's a lot of different ways you can get access to testing, but in your research, what are some of the issues that you've learned that are affecting access and willingness for testing? Um, and are they the same or different [00:27:00] from vaccination?

Speaker 3: So, you know, it's interesting, what we've been hearing about sort of the access to testing has been for, for many people, they've been going to pop-ups pop-ups and also to their doctors or urgent care. And so a lot of people talked about having like long lines and having to take the entire family and then trying to sort of navigate that entire

process. So, um, it, [00:27:30] it wasn't that people didn't know where to go. It was this once you got there, it was very difficult. The other things that we've been hearing, um, particularly for our Latino, um, participants were issues in terms of being able to get to some of the settings. So if you don't have a car calling an Uber, having an Uber that has multiple pickups, and then sort of feeling like you're exposing yourself on your way to do something that's healthy for your family is problematic. And so we heard stories like that [00:28:00] as well, the issues around documentation, and am I going to have to pay for this? And so if I don't have health care, then how do I actually navigate the system? So those are some of the issues that we were hearing in terms of our discussions with community members and what their major issues were with testing and access.

Speaker 2: I, you know, um, in a lot of different meetings where we're talking about how to promote vaccination, and I think that it's really important to focus on that, but [00:28:30] I also think that it's important that we remember that testing is a really important tool in controlling the spread of the disease for a few different reasons that I'm focused on one is that we still have a lot of disease circulating in our communities. And we are not at the low levels of the summer, even though it's getting warmer outside and New Jersey. In fact, as a hotspot, um, when you look at a map nationally and globally, New Jersey is bright, hot red in terms of the number of disease circulating in [00:29:00] our state. Um, second, we have new variants circulating and we need to better understand them and how they behave and testing is the way to identify them.

Speaker 2: Um, even if you've been vaccinated, you know, in fact, the department of health and CDC are particularly interested in testing cases of COVID, um, where the people have already been vaccinated, so they can understand the vaccine effectiveness and how different, um, variants may impact that. And then [00:29:30] third, there's a whole group of people, um, that either aren't vaccinated or can't be vaccinated kids, for example, have no vaccine available to them yet. And, you know, so the entire pediatric population is relying on testing, tracing, distancing, and masking as the only tools they have to prevent spread. And so, you know, we need to continue our focus on the importance and value of testing, but given all the issues that you've talked about, what have you learned [00:30:00] about ways that we could improve testing strategies? So,

Speaker 3: You know, there are a couple of there, there are a number of different ways that we can improve that. So one way is, um, you know, thinking about are there, there are new opportunities for in-home testing. Some of the counties actually are actually providing in-home testing where you can have access to a male, um, opportunity, and then you can mail back your testing. So very similar to ancestry.com, where you're [00:30:30] doing saliva based testing. You can do that. Um, we also have the, the different, different clinics and Walmarts and CVS and Rite aid and other settings. So if you're not, if you don't have a regular source of primary care, um, there are opportunities to be able to go and be able to, to access those, the caveat being that you actually have to have a car and you have to have the ability to get there, but it's really important to continue testing, because I think as you noted for all of those different reasons, [00:31:00] just because grandma and your teachers are vaccinated, does not mean that, you know, we're able to, to basically, um, make sure that everybody is safe.

Speaker 3: And so we need to continue the testing and we need to do it in ways that continue to make the community brought more broadly speaking safer. Um, so being able to access what's happening in your counties, what's happening locally, um, and checking the DOH website, there are a number of different [00:31:30] locations where you can find out about testing. Um, and as well, we've been seeing, we work with over 20 different community-based organizations, um, and the counties that we're working with. And so a lot of them have partnered with different healthcare groups locally to help people either navigate to testing or they're even providing testing themselves. So, so there are, there are opportunities to be able to find testing in the community and we need to now more than ever, I think continue to do the testing [00:32:00] so that we know as the weather gets better, you know, the CDC has given guidance that people who are vaccinated can congregate together in doors, but there's always that slippery slope. And we don't want to see there be more community, transmission and spread because people think they're safer while we're in this sort of interim period between vaccination and not being fully vaccinated. So as Bob said, is, is you're leaving the field. You don't want to be the last one on the field, but if there are a bunch of us who are still [00:32:30] on the field, then we need to make sure we flank to make sure that everybody stays safe.

Speaker 2: Thanks, Shauna. That's a really way. Good to end this conversation. And Bob, Shauna, thank you so much for joining me here today. Thank you, man. It was a lot of fun. Yes, definitely. Thanks for more information on COVID-19 resources and the new research projects focused on translating COVID-19 research from the bench to the bedside, visit the J X website@njactsdotrbhsdotrutgers.edu [00:33:00] backslash COVID 19. Thank you.

Speaker 1: You've been listening to on the pandemic, we'll be back soon with new guests and new information from the top minds in health, to learn more about how Rutgers is making a difference during the COVID-19 pandemic visit rutgers.edu/united.