

Interview with Dr. John Ruffin, Director of the NIH National Institute on Minority Health and Health Disparities (NIMHD)—Conducted December 28, 2012

Interviewee: Dr. John Ruffin

Interviewers: Dr. Stephen Thomas and Dr. Sandra Quinn

The following transcript is from an interview with Dr. John Ruffin, which took place at the headquarters of the National Institute on Minority Health and Health Disparities (NIMHD) in Bethesda, MD. Drs. Thomas and Quinn speak with Dr. Ruffin on a variety of topics related to minority health, including eliminating health disparities, minority inclusion in research, researcher training, and community engagement.

DR. THOMAS: So you've just come off of a highly successful summit. Neither rain, sleet nor Sandy stopped the Summit (laughter). Just your brief reflections on how the National Summit went and how it was different than the previous one.

DR. RUFFIN: I think it was successful, and I'll tell you what was the highlight for me at the summit, --the last day. That was the day that for the first time we got to meet all of our grantees in one place and to see them all, whether they were Centers of Excellence (COE) grantees, or whether it was our Loan Repayment Program (LRP) folks, or whether it was our Community-Based Participatory Research Program (CBPR) people. We got a chance to see them all in one single place and that's an opportunity. That's something that I've never had the opportunity to see up front. We've corresponded, we've talked to people, we see them one-on-one. I get emails from folks all the time telling me about their work and how things are going. But to be able to stand where I stood and view the entire group in one place, that was a real highlight for me. I think the other thing in terms of how it differed from, say the summit in 2008, which was also a joy is that in 2008, a number of the programs that I just mentioned, COEs, CBPRs, the LRP folks, many of them were just then gearing up. They had just received, many of them, their awards and they were anxious to take care of business. And so at the 2008 meeting, even had we met with all of them, the vast majority of them would have told us what it is that they were *thinking* about doing. They had ideas and they were ready to get started.

It's like a track meet and you're in the blocks, and you're ready to get out of the block. By 2012, many of them had been around the track. For example, some of the individuals in the CBPR program, ---which is an 11 year run, were in the early stages of their CBPR in 2008. In 2012, many of them had been around the track, and had come in for their renewals for the final leg --the dissemination phase of the program. So our grantees and other individuals at the 2012 Summit had stories to tell. And you probably saw that through the number of abstracts that were submitted --close to 200; the number of presentations that were actually made at the summit with approximately 100 sessions. So the difference was that they were in the blocks in 2008, they had

gotten out of the block, they had gotten data --many of them, and they were looking for a venue to convey some of their results. And it could not have been better than where they were at the summit, which gave them *all* a chance to share the things that they had done. Those of you who were there heard me say that it's the work that they accomplish that makes us look good. And I think that the 2012 Summit was better than the 2008 Summit because the people who were there could then *see* what we meant by health disparities research. They *had a better understanding of* how we intend to translate it into practice, and they could see how policy could develop and where it was needed from all of the things we were talking about. There's no better way to witness the science that's going on across the country and even abroad toward eliminating health disparities.

Some of you heard me talk about the young woman who's now at Harvard, who's the Chair of Epidemiology at Harvard School of Public Health, who prior to that was at the University of Washington, and all of the work that she's done abroad, which really connect the global aspect of this summit as well. That was the other highlight, I think, other than the fact that I got a chance to see all our grantees, I think having people from Brazil, having people from the UK interested in our work, here, and how we can form global partnerships across the pond. To me, that too, tells us that, hey, this is a really great story. And finally, the thing that I think kind of really enthused me up a lot is that the summit in 2008 was an NIH summit. It was about our ability to work with all of the twenty-seven Institutes and Centers at NIH and to get moving. This year's summit was much broader than that. This was a summit that consisted of a group that we call FCHDR: Federal Collaboration on Health Disparities Research. It involved *all* of the Federal government --14 of the 15 federal executive departments except the Department of Treasury -- HHS, EPA, the Department of Defense, it involved the State Department, Veterans Affairs and others. Basically *all* of the Federal government was involved. If you look at the make-up of the planning committee, the steering committee, all of the various committees that worked together to pull this together, you will see that this was clearly a government-wide effort. So I think we took it to the next level, okay? And watch out four years from now.

DR. THOMAS: And also took it to the next level with the agency at a *new* level. So the significance of the Affordable Care Act included legislation that created the Institute. Can you speak to the significance of your new status within NIH?

DR. RUFFIN: I think that the recommendations that will come out of this summit -- we've always felt even when we were an Office, when we were a Center, and even now as an Institute, we have always depended on the public to tell us what it is that they think that we should be doing that we're not doing. Our task then is to bring that information back and try to convert that information into good science. The Affordable Care Act I think is going to impact us in *sooo* many different ways as an Institute, both locally as well as globally. Now locally, what I mean by that, is that it gives us certain authority here as an Institute at NIH to do certain things. For

example to **plan** –and not plan just for our Institute but to plan across the agency. It gives us a chance not only to plan, but to execute. Not just in our Institute, but across the agency. More importantly, it gives us an opportunity to **evaluate**. Not just our Institute’s minority health and health disparities research activities, but *all of* the NIH Institutes and Centers. On the last day of the summit we had a meeting with stakeholders who helped to plan the NIH health disparities research agenda for the next five years. And that strategic planning process is for *all* of NIH. Again, they helped us to answer the question -what is it that we should be doing as it relates to health disparities that we’re not doing? So that planning process is a part of the law that resulted from our becoming an Institute. The law gives us the freedom now, to plan, review, coordinate, and to evaluate the minority health and health disparities activities for *all* of NIH.

Recognizing that the populations that we are concerned with, that those populations are not static, the law also gave us the responsibility to define a health disparity population. When we talk about what is a disparate population a ‘vulnerable’ or disparate population today, may not be a vulnerable or disparate population tomorrow or next year, or five years from now. So the law tasked us with working with the Agency for Health Care Quality Research (AHRQ), to define a **health disparity** population. And so we have been working both within HHS, because we’ve put together a group of experts representing AHRQ and NIMHD, working with the Assistant Secretary for Health, to help us to define exactly what that is and what that means. The public is beginning to of course participate in that project. I can’t tell you how many people have been in to see us. Whether it’s the LGBT community that have come in to see us to make sure that we understand some of the issues within their population and reports that they feel certainly suggest that they ought to be considered as a disparate population. I can’t tell you how many individuals have been in to see me from immigrant populations, who say, “We’re in this country, this country itself is borne of many immigrants but there are large segments of populations that are being left behind that need to be included and we want to bring our case to the table in terms of helping to define what this is.” And even though we have a Veteran’s Administration, you hear all the time about all of the different health conditions and challenges that are occurring with individuals in our armed forces. People who are coming back who are suffering from various kinds of issues, whether it be mental or physical ailments, who come to us as well and say, as a population, “There are issues here that need to be looked at.” --Individuals from rural and poor communities. Now mind you, I haven’t said a thing yet about racial and ethnic minorities. And of course, that too becomes the major focus in that whole definition thing as well. So here again, The Affordable Care Act has given us the kind of responsibility that we accept. They are challenges that we accept. Because there are issues that certainly need to be addressed and unraveled if we are to succeed in eliminating health disparities. And so our plate is full, no doubt about it.

DR. QUINN: You said something as you were talking about the changing of definitions to a ‘vulnerable population,’ and you talked about sexual orientation, veteran status, immigrant

Interview with Dr. John Ruffin, Director of the NIH National Institute on Minority Health and Health Disparities (NIMHD)—Conducted December 28, 2012

Interviewee: Dr. John Ruffin

Interviewers: Dr. Stephen Thomas and Dr. Sandra Quinn

The following transcript is from an interview with Dr. John Ruffin, which took place at the headquarters of the National Institute on Minority Health and Health Disparities (NIMHD) in Bethesda, MD. Drs. Thomas and Quinn speak with Dr. Ruffin on a variety of topics related to minority health, including eliminating health disparities, minority inclusion in research, researcher training, and community engagement.

DR. THOMAS: So you've just come off of a highly successful summit. Neither rain, sleet nor Sandy stopped the Summit (laughter). Just your brief reflections on how the National Summit went and how it was different than the previous one.

DR. RUFFIN: I think it was successful, and I'll tell you what was the highlight for me at the summit, --the last day. That was the day that for the first time we got to meet all of our grantees in one place and to see them all, whether they were Centers of Excellence (COE) grantees, or whether it was our Loan Repayment Program (LRP) folks, or whether it was our Community-Based Participatory Research Program (CBPR) people. We got a chance to see them all in one single place and that's an opportunity. That's something that I've never had the opportunity to see up front. We've corresponded, we've talked to people, we see them one-on-one. I get emails from folks all the time telling me about their work and how things are going. But to be able to stand where I stood and view the entire group in one place, that was a real highlight for me. I think the other thing in terms of how it differed from, say the summit in 2008, which was also a joy is that in 2008, a number of the programs that I just mentioned, COEs, CBPRs, the LRP folks, many of them were just then gearing up. They had just received, many of them, their awards and they were anxious to take care of business. And so at the 2008 meeting, even had we met with all of them, the vast majority of them would have told us what it is that they were *thinking* about doing. They had ideas and they were ready to get started.

It's like a track meet and you're in the blocks, and you're ready to get out of the block. By 2012, many of them had been around the track. For example, some of the individuals in the CBPR program, ---which is an 11 year run, were in the early stages of their CBPR in 2008. In 2012, many of them had been around the track, and had come in for their renewals for the final leg --the dissemination phase of the program. So our grantees and other individuals at the 2012 Summit had stories to tell. And you probably saw that through the number of abstracts that were submitted --close to 200; the number of presentations that were actually made at the summit with approximately 100 sessions. So the difference was that they were in the blocks in 2008, they had

funding. They can also choose to spend those three years elsewhere also. Here is where our challenges come, believe it or not. We have individuals who come to us now who want to do social determinants of health research, who want to do health disparities research at the population level, work in the community. To spend those 2 years, NIH has had a chance to look at itself because I can't place them, in many instances, with a researcher in our intramural program. Because we're just now, in our own Institute, developing that emphasis, where individuals can come and actually do research, and so they're knocking at the door. Because you guys out there in the universities are training them, we are now funding them. We have R01 grants now that deal with the social determinants of health, only you have to apply for that particular mechanism. So now we're producing all of these individuals with that combination, who are interested in this field. So what does that mean? That means that NIH has to broaden its culture. NIH has to start to recruit individuals in our intramural program here at NIH that can accommodate individuals with those kinds of interests. And I'll tell you what. I'll tell you how it's going to translate in a very practical sense. You will see more individuals working over in our Clinical Center, and you will see, because we are a research agency, you will see more and more individuals participating in clinical trials – okay? – and all of the things you and I have just finished talking about, because these individuals now are going to feel better about it because there is a *field* that is training people to deal with this. It's going to make it a lot easier. It's growth, right? That's what it is. It's all about growth.

DR. THOMAS: You even have the Danish Ambassador interested in the social determinants of health. He participated in your Summit.

DR. RUFFIN: How about that? How about that! That was a beautiful way to have him participate, because he's an individual who's dealing with a rather homogeneous society. He's saying, in *spite* of that – in spite of it – we have few minorities in our culture. We're basically almost homogeneous, but we still have disparities, health disparities, and we can learn from you about how to take some of the things that you've done in your heterogeneity, and apply that over to our homogeneity, and vice versa. There are some things that we have here that you can transport over here that might be helpful. That was also the beauty of that Summit...learning about so many transferrable models.

DR. THOMAS: Well, we can't thank you enough for your time.

DR. QUINN: Absolutely.

DR. RUFFIN: You betcha. I enjoyed talking to you. You bet. You betcha. Anytime.

DR. QUINN: So when you look at – there are many issues – but two issues, one is that on the research side, what we are seeing, both our own research and in the literature, is that researchers are not asking – I’m talking right now racial and ethnic minorities – they’re not asking them to participate. We’ve always said, “Oh, those groups do not participate.” But the reality is, a lot of the research, including our own, says that people are willing to participate and when they are asked, they say yes. But they’re not asked. So two questions, Dr. Ruffin, for those researchers who somehow or other are still struggling with this issue and still not up to speed on how to really be inclusive in their recruitment and retention, what guidance do you have for them? But on the other side, for the populations that are living with these disparities everyday across the US, what would you say to them about why it’s important for them to be part of this research enterprise?

DR. RUFFIN: Let’s divide it up, then. Let’s first talk about the researchers and their ability – or their inability – to recruit and bring people into the research enterprise, and then we’ll come back to why minorities may not wish to participate. The first group, the researchers, they’ve got to get serious! That’s what it means. And they’ve got to get serious about the significance of clinical research. That’s what it means. I mean, how can you be serious about clinical research and not be inclusive? And when I say inclusive, I want to be more specific, because I think that there are researchers out there who feel, often time, that what it means is that you have to have minorities included, but not necessarily *significantly* included. And there’s a difference. In other words, I may choose to say that I have an African-American in my study. *An* African-American in my study. So I may have met somebody’s guideline because it may not have said “in proportion to your representation in the population.” It may not have said that, it may have said “included.” Included doesn’t give you a number, right? But if I had three or four people in there so as to satisfy that guideline, that’s not going to satisfy me as a clinical researcher. It’s not going to help me to get the answer to the problem that I really want to answer. That, to me, is very important. Do I have the population at the table, that at the end of the day it’s going to give me the answer to the research question I have raised? Not that I have got Stephen at the table, but just having him, is that enough to give me the clinical results that I am seeking?

DR. QUINN: You’re talking about the science.

DR. RUFFIN: I’m talking about the science.

DR. QUINN: Is it really being able to do science in the way it needs to be done.

DR. RUFFIN: Absolutely. It’s – will you get to that point if you don’t? And so my point is that if you go after the science, you will set it up right because we’re smart enough to know how to do it. If you’re going after *the science*. If you’re just setting it up to do a research study that may

not give you what you're looking at or what you're looking for, then you're not going to get it. So what I'm saying is, I'll get back to where I started – people who are doing clinical research have got to get serious to make sure that the science is set up in such a way that you can come out of it saying what ~~it is~~ – that the science is meaningful, right? Just to digress just a little bit on that same subject, is that even when populations are included, we have a tendency to sometimes aggregate instead of disaggregating things the way they ought to be, right? So it means, then, that just to have one or two at the table – you may say for example, “I had 3 Asians at the table.” That may not be enough, you know why? Because maybe what you need at the table is Vietnamese, maybe what you need at the table is Japanese, maybe what you need at the table would be Filipinos. All of those may need to be at the table because you cannot say that I'm going to draw some conclusion from this because I had Asian-Americans at the table. That's not enough. What these different Asian-Americans bring to the table in a good clinical study may be different. I've seen that done. I can give you a specific example. I know for a fact that when you are talking about cervical cancer, and you're talking about cervical cancer in Vietnamese Americans, it's off the chart. Not so for Japanese women. Not so for Filipino women. So you missed the whole story if you don't set up your clinical study in a way that it becomes inclusive, but not just inclusive in terms of saying, “I had an African-American” or “I had an Asian,” but did you have sub-populations represented and did you look deeper enough into the study to be able to address all of those various issues, right? All of that, to me, says that if you're doing good clinical research, that's where you would have to go. I'm putting a lot of burden on the researchers to say that it has to be set up right, and that to do good science, you have to be inclusive in all those different arenas that I just alluded to. Now we have another problem.

DR. THOMAS: Okay.

DR. RUFFIN: Now the other issue is minorities and all those various populations and whether or not they want to participate in a study. That's a big issue, okay? Because what I would say to them is that if you don't participate in the study, then that could be detrimental. And the way I like to approach these things often time, I like to approach them from a personal standpoint. I think this this is how you can sometimes get people to see that being included as a participant is important. But I think that it's an education issue from my own experience out there. Education, education, education! A lot of times you have to diffuse the situation a little bit. I tell people all the time, I say, “Do you know what? When people are asking you to participate, for example, in clinical research, or if they're asking you more specifically sometimes to participate even in a clinical trial, it doesn't mean you participate only if you're sick, or if you're ill.” You don't have to - a lot of people don't even know that there is such a thing as volunteers who participate in these studies and that they're not guinea pigs when they participate in these studies. So researchers and other folks, even people out in the community, have got to be able to educate folks about what it is. We spend a lot of time, when we are talking about trust and other issues, we spend a lot of time talking about horrific stories. And some of the things that took place, yes,

they actually occurred, and we have to be mindful of that. We have to keep that on the table. But we have to let people know. You are taking pills, for example, perhaps for your diabetes. Or you're taking pills, perhaps for your hypertension. And keep in mind, that to get there, to get to that point to pop that pill that you took this morning, there were studies that were done on these conditions for these treatments to be available to you, okay?

I'll give you two examples. One, it could have been that ~~that~~ the study can be generalized, in that what I took, worked this morning. And it could be that it worked for all three of us sitting at this table, right? That's good. But it could also mean, and I've heard people say, that I took that, you know, "I took that medicine and it helped me." And I've heard other people say "I took that medicine and it didn't do any good at all. It didn't help me at all. I didn't get the same impact from it that he said he got from it." Well, that means there are differences in us, in different people. And if you're not included in that study, then we don't know how to help you. So you're going to get left out of interventions and you're going to be left out of cutting edge research that could be very, very helpful to you if you're not a participant in the process. But I also understand the challenges, okay? And for us in the community, once we convince people, we have these stories to tell them and we get them all cranked up to participate, other things are going to come into play. And we, in the community and as researchers, we've got to be ready to relieve them of that, right? So we got them ready, we got them jarred up, we said, "Listen. You want to be healthy? You want to take a pill that you never participated in or people who even look like you never participated in?" You know, then they say, "No, maybe I *ought* to participate in this. Maybe I ought to." It's like what you just said a minute ago. You said people aren't asking them, but when they ask them they're ready. So now we've taken away the anxieties and we got them ready and they want to participate, right? But then there are other issues and we have to be ready to deal with those other issues.

And what might some of those other issues be? Some of those other issues may be fear, alright? Because I'm not so sure that I'm not going to be used as a guinea pig, how do I know that for sure? I myself, even jokingly, I had a cataract removed and I went over to Johns Hopkins to have a cataract taken out of my eye. I know that I had great doctors, no doubt about that, and so when they took me into the room to have this thing removed from my eye, the doctor came in. Then a black physician came in to assist him. And I jokingly said to the doctor, who I know very well, I said, "I'll go to sleep now." (laughs) "I'll go to sleep now." The point I'm making there, is that it helps. Okay? It helps no matter what you say, because of the fear that is engrained in us, no matter how you want to look at it. It helps when there is a relationship that you can relate to when you go into these kinds of situations, whether it's participating in a clinical trial or whatever. Now what does that mean? That means we have to train more people that causes me to feel more relaxed in those kinds of situations.

Now some people might say, “Well come on man, get over it, this is 2012! You shouldn’t feel that way. This is America.” I have every right to feel that way. This is America, and everything is not equal, no matter how much we would like to think that it is. It’s still what we’re striving to do, it’s not where we are. We’re still trying to reach that point where you don’t have to think that way, where the thought should not even as much as enter your head. I don’t think we’re there yet. I think we have to keep working toward that end. But I think that trust is one factor that we still have to get over, and I think that those of you and some of the researchers that we’re funding in our own Institute, are working hard on that one issue, of trying to get people to get over their fear and to be trustful as opposed to being distrustful.

But whose job is it to make me feel that I can trust? The researchers --people in the community? They’ve got to make me feel as though I can do it. I can’t do that by myself. Asking people to do that on their own is not being very reasonable. Don’t think that they can do that. I have relatives in my own family who are not going to feel that way on their own.

Get beyond the trust issue though, and get to even some of the more practical issues that we don’t think about. And that is, you get into some of these socioeconomic issues of people going over to Hopkins to participate in a clinical trial. Even folks right there in Baltimore, let alone talking about somebody participating from DC, because it becomes more practical even after you’ve gotten them over the fear and over the trust issue. I’ve got to get *over* there, okay? And if transportation is not an issue, then who’s going to help keep the baby while I’m gone over there? (laughs) It becomes a very practical issue about how do I get from Point A to Point B. If I want people in rural America to participate in a clinical trial, are you kidding me? People in rural America, even when they go to be diagnosed often times for very serious illnesses, the disease is advanced further than it ought to be because of lack of or limited access to transportation -- because they can’t get from Point A to Point B. So the very practical issues of participation, sometimes you have to look at that in other ways.

So the researchers, as a part of your question, have got to be forward-thinking and looking at what is happening demographically in our country that minorities are becoming the majority and you’ve got a different culture that you are going to have to deal with along the way. The population that you are trying to get involved for various reasons are still kind of apprehensive about participating. We have to dissect all of those, because it is not one size fits all. I know people in the African American community who would not participate in a clinical trial who never heard of the Tuskegee situation, okay? Never heard of it. So that would not be their reason for not participating in the trial. It has to be something else. That something else has got to be looked at, and researchers have to get to the point where they’re more open-minded too, because they think that the reason that person is not participating is because they’ve heard of the syphilis study in Tuskegee and that’s gotta be the reason. So in terms of trying to address it, we

try to address it from that angle, right? That may not be the reason. So you still may not get that person, and yet that person's never heard of what happened at Tuskegee as horrific as it was.

DR. THOMAS: It could be how they get treated on an everyday basis at the hospital or how their family members get treated.

DR. RUFFIN: Absolutely. Absolutely. They remember those kinds of issues. The reason I'm so excited, to be honest with you, about our CBPR program, community-based participatory research program, is that it's going to really take a community to really deal with these kinds of issues. And when I say – I always try to put emphasis – because NIH, we've always had community involvement in many of our research projects here. I can point out a number of examples. But where we differ to a great extent, is that we're talking about community-based, and the emphasis here, *participatory research*. Which means that the community is involved *every single step of the way*. From formulation, to carrying it out, to evaluating it, and disseminating the results. That's where the difference comes in. And I can see the difference, and I think those of us who are serious about getting more minorities for the moment – minorities *for the moment* – involved in clinical trials and clinical research, I think that the community is going to help us through a lot of that as we become more involved and get the community involved, and we *change* to a great extent, that definition and that perception of research and what research is. We were talking earlier about defining what a health disparity or vulnerable population is, we have to also define research. I've seen it evolve here at NIH. It's not all genetics and it's not all about cleaning glassware that a lot of people did not feel a few years back, that getting out into the community and working in the community and getting the community involved, they would have *never* designated that as research. That was something else, but not research. Social and behavioral issues have found their way down in our laboratories, okay? That wasn't the case just a few years back. I mean, I can remember just a few years back where that wasn't important. We have redefined what we call research and what research really is. And that, to me, is progress. That's important.

DR. THOMAS: We're going to come to a close and at the very end we'll give you an opportunity to say anything you want to share. But do you know that there is a generation of young scholars now, coming up, who are going through the promotion and tenure process as health disparities scholars. You've been in this long enough to see the whole arc. Can you comment simply on that? Creation of the new field?

DR. RUFFIN: Yeah, that's exciting to me. But do you know what? It was going to come anyway. Because we were going to keep bouncing our heads against a wall until we had to figure out what is going wrong here? What is it that we *should* be doing that we're not doing? And the thing that's so exciting to me about how the field evolved, is that, from my perspective, at least from the Institute perspective – I've been around here long enough now to at least see

this evolution and these transitions – is that it's what the people define. It's what they want. I don't believe that our Institute would have gotten to that point as quickly as we did, were it not for us asking the right question. We just asked the right question, and we got the answer. The question we asked was: What is it we should be doing, as it relates to minority health and health disparities, that we are not doing? That was the question. And we took that question around the country asking people, and there were those who told us, "You gotta get the community involved. You gotta get the community involved. That's how you do it." So what we were expanding and creating, was a whole new paradigm.

And people began to see that there are layers to this. There are layers. Sure, we still need basic research and we still need people in the laboratory doing things at the molecular level, but *clearly, clearly*, we've got to get to the population level, and *clearly* we have to get to a community level, which is where we are, and *clearly* we have to start looking at things globally. All of those different phases, all those different stages is about connecting the dots, which is what I always say: You've got to connect the dots. And you can't eliminate any of those issues. So to me, to watch what the people said we ought to be doing, i.e., you need to include community in here. You need to look at the social and behavioral issues here. I know you guys are smart as it relates to biomedical science and I know that you understand the molecular basis of this and the molecular basis of that, and I know you understand the genetics of it all, too. You're bright people. I was trained that way, so I know. But at the end of the day, you're going to graduate to another level. And the thing I like about it, is that when you start talking about health issues, you can talk about it molecularly, but if it doesn't have an impact socially – what is the *impact* of it, how does it translate societally, how does it get into our society and where are the differences going to be made? – if it just stays here, and at this level, and it doesn't have an impact out there, or I don't understand, it may even have an impact, I just don't understand what it is, and I don't have anybody out there, people who do good research, who can interpret that for me, how am I supposed to understand what that's all about? So I think what is happening, is that our folks are beginning to help to connect the dots. And I'm beginning to see that science that you just alluded to, and I'll tell you how we are witnessing it here at NIMHD.

Now that we have an intramural program in our Institute, it's beginning to reveal itself because we have now created an intramural program in our Institute where we have individuals who come to the NIH, and they can spend 5 years with us at NIH. We call it our DREAM (Disparities Research Advancing our Mission) Program. An individual can come, spend 2 years with us here. We'll put them in an Institute. If their work and interest is in cancer, we'll put them in the National Cancer Institute (NCI) with one of our intramural scientists in the NCI. If it's infectious disease, we bring them in, we put them with NIAID. And then when they leave us, what a deal, right? We give them 3 years of funding. Something very similar to a K award, so they get 5 years: 2 with us, 3 out there. If they were at the University of Maryland, they would return to Maryland, okay? They would return to the University of Maryland with 3 years of

funding. They can also choose to spend those three years elsewhere also. Here is where our challenges come, believe it or not. We have individuals who come to us now who want to do social determinants of health research, who want to do health disparities research at the population level, work in the community. To spend those 2 years, NIH has had a chance to look at itself because I can't place them, in many instances, with a researcher in our intramural program. Because we're just now, in our own Institute, developing that emphasis, where individuals can come and actually do research, and so they're knocking at the door. Because you guys out there in the universities are training them, we are now funding them. We have R01 grants now that deal with the social determinants of health, only you have to apply for that particular mechanism. So now we're producing all of these individuals with that combination, who are interested in this field. So what does that mean? That means that NIH has to broaden its culture. NIH has to start to recruit individuals in our intramural program here at NIH that can accommodate individuals with those kinds of interests. And I'll tell you what. I'll tell you how it's going to translate in a very practical sense. You will see more individuals working over in our Clinical Center, and you will see, because we are a research agency, you will see more and more individuals participating in clinical trials – okay? – and all of the things you and I have just finished talking about, because these individuals now are going to feel better about it because there is a *field* that is training people to deal with this. It's going to make it a lot easier. It's growth, right? That's what it is. It's all about growth.

DR. THOMAS: You even have the Danish Ambassador interested in the social determinants of health. He participated in your Summit.

DR. RUFFIN: How about that? How about that! That was a beautiful way to have him participate, because he's an individual who's dealing with a rather homogeneous society. He's saying, in *spite* of that – in spite of it – we have few minorities in our culture. We're basically almost homogeneous, but we still have disparities, health disparities, and we can learn from you about how to take some of the things that you've done in your heterogeneity, and apply that over to our homogeneity, and vice versa. There are some things that we have here that you can transport over here that might be helpful. That was also the beauty of that Summit...learning about so many transferrable models.

DR. THOMAS: Well, we can't thank you enough for your time.

DR. QUINN: Absolutely.

DR. RUFFIN: You betcha. I enjoyed talking to you. You bet. You betcha. Anytime.