Podcast Episode 46

Collaboration is the cure: Dr Vivian Pinn calls for renewed efforts to bring about health equity through interdisciplinary collaboration and socio-political participation, and discusses her life and historic achievements.

Part 2/4 of our Healing Hate Conference series.

Speaking at the university where she was the only female and only African American student in her class, and in the auditorium named for her, Healing Hate conference keynote speaker Dr. Vivian Pinn reflects on progressing her career during eras of segregation, discrimination, and civil rights. Now a recipient of 14 honorary degrees, Dr Pinn discusses the importance of addressing the erroneous historical racial stereotypes that have informed contemporary unconscious bias, and how biases underpin the way we currently plan, provide and receive healthcare. She also describes her work at NIH, where she was the inaugural Director of the Office of Research on Women's Health, and she comments on how leadership and participation at the socio-political level is so important for everyone. With Randall Morgan, M.D., Executive Director for the W Montague Cobb/NMA Institute.

All views and opinions are participants own.

Dr. Morgan: You are listening to the Health Disparities Podcast from the Movement is Life Caucus. Conversations about health disparities with people who are working to eliminate them. I am Dr. Randall Morgan. I am an orthopedic surgeon in Sarasota, Florida, a member of the Movement is Life steering committee and the Executive Director of the W. Montague Cobb, National

Medical Association Health Institute. Dr. Vivian Pinn was the founding director of the Office of Research on Women's Health at the National Institutes of Health until her retirement in 2011. She experienced segregation firsthand growing up in southern Virginia and earned a scholarship to Wellesley College, and then, later studied medicine at the University of Virginia, and then, an illustrious career with too many highlights to recount, I'll mention that after serving on the Faculty of Tufts, she moved to Washington DC to become professor and chair of the department of pathology at Howard University, College of Medicine, and then onto the National Institutes of Health. She has dedicated her career to both research and activism. And since retiring from the National Institutes of Health has continued working as a senior scientist emeritus at the NIH Fogarty International Center. Welcome to the Health Disparities Podcast. Dr. Pinn.

Dr. Pinn: Thank you, Dr. Morgan.

Dr. Morgan: The first question we have is, since we are participating in this conference, Healing Hate at the University of Virginia. And I might add that we're having our session today in Pinn Hall, which was named for you in 2017 of which we are all proud. Why is this an important conference, right now?

Dr. Pinn: You would think that we have made lots of progress but looking at where we are today and the rising tide of hostilities and prejudice and biases that seem to be reemerging or emerging or getting center stage these days, it's important that we not lose sight, that while we've made progress, there's still many challenges ahead. And having this with the collaboration between those in the legal community, the medical community, the civil rights community is a wonderful way to proceed because if we don't have interdisciplinary collaborative team efforts, we will not make progress. And of course, I'm happy to see this based at the University of Virginia for this conference, with my history here, having seen many changes having taken place here, and then also recognizing the horrible situation with the protests that took place here a few years ago. It's been amazing to me and many of the UVA alums, how we used to think of Charlottesville as this nice academic town, and we thought of UVA as sort of a, you know, UVA wasn't perfect, but at least it offered a setting where you could have academic achievement and where there was intellectual growth. And then to see transformed to recently when Charlottesville is mentioned, instead, people picture those horrible protests and the racial protests and the biases that were expressed during that protest. So, I think this is a rich opportunity to help UVA and Charlottesville reclaim its original identity and not be associated with that horrible time of the protest and the horrors that went with it a few years ago.

Dr. Morgan: Maybe as a corollary to that question, how do you place the University of Virginia with regard to the state of Virginia and its importance in the state and some of the other institutions like VCU and the University of Richmond and HBCU institutions as well in the state. Since you're a native of the state of Virginia, could you comment on the importance of the University of Virginia?

Dr. Pinn: This is a tricky question. So, to be careful how I answer this, when I was growing up, which was in the forties and the fifties and actually early sixties, you didn't think of UVA and VCU and those schools as places you would really think about. We only knew the HBCU's because those were the places where we could apply and where we could educate. I remember when I went to Wellesley, there were people who asked me at Wellesley when you've got Randolph-Macon Women's College and you've got Sweet Briar College and Lynchburg College, and all those other colleges, of course, UVA was not co-ed then so they didn't mention UVA, but they wanted to know why would I leave Lynchburg and leave Virginia to come North to go to school? And my answer was very simple. They wouldn't allow me on campus. So, obviously, I didn't think about them. So, I didn't know a lot about those schools, except they were places where you only got to go when they had special days when they'd invite black youths out for, I guess, hand-me-downs or tennis camps or something. And interestingly, enough, when Lynchburg College, which later became

integrated and now has a very diverse student body, but I received my first honorary degree from Lynchburg College because the president of Lynchburg College said he wanted to make sure that Lynchburg College recognized me, and my response was that it really was significant to have gone from an institution where I was not allowed on campus to one that gave me my first honorary degree. So, that's saying a positive thing about Lynchburg College. I knew my grandparents had both gone to Hampton. My other grandmother had gone to St Paul's College in Lawrenceville, Virginia, which unfortunately is one of the schools that's gone under as have so many HBCU's for lack of financial support. And I knew that most of the kids that I went to school with would either try to go to Hampton, Virginia State. My mother, my stepmother had gone to Virginia State and we always were making trips to Virginia State, which is now Virginia State University. Those were the schools we were familiar with. And, so, I wasn't that familiar with these other schools that were at that time restricted and we could not attend. After coming back and coming to the University of Virginia and getting to know other schools and seeing them change, obviously, I'm still learning about those schools. I know more about those colleges and universities where there are medical centers, because I know people on faculty there. And there is now an African American president of the University of Richmond, which is such an impressive school, and to think I did not know much about it until a few years ago when I went to visit. What I'm pleased about is that we now have opportunities for all of

these schools and those who are growing up in Virginia today, won't be as limited in their knowledge or in their possible opportunities as we were in my day. So, that does represent some progress. And beyond that, because they were not considerations for me at the time when I was living and in high school and thinking about colleges, but just pleased that today that has changed to some degree.

Dr. Morgan: So, you're giving the keynote today, on the second day of the Healing Hate Conference, where the overarching theme is that of the medical professions and civil rights policy. Could I ask you to reflect on the ways your career as a physician has been in step with the evolution of the civil rights movement?

Dr. Pinn: Looking back to when I was growing up and there were so few, obviously I'm black, so, in our community looking for minority physicians, they were black and there were very few black physicians and almost no black women physicians. And then, when I got to medical school being the only woman and only person of color in my medical school class, in a city, Charlottesville, which at that time was not fully integrated and neither was the university, except for some of the graduate students. And certainly, was not co-ed at the undergraduate level. And there were places in Charlottesville where I was not allowed to enter, not allowed to eat or come in or stay, and yet I had to get through here. And then, when I

became a department chair in pathology, actually, when I was training in pathology to have someone tell me that as a woman, I would never be a chair of a department of pathology because no women would be department chairs in pathology. And few years after that, the first woman department chair was named that was Nancy Warner out at USC. And then, following that a second, and then in 1981, when I became department chair at Howard became the third woman in the US and the first African American woman in the country to become a chair of an academic pathology department. And then, seeing rules change as we try to diversify specialties and diversify, areas within medicine and I've seen a lot of this happen and been witness to it. I looked at things that were parallel. Like, I will mention the Loving Case just to mention it, but the Loving vs. Virginia Case and how that sort of paralleled my life. So, I can remember the dates because they got married in Washington. For those who don't know that was an interracial couple out of Virginia at a time when Virginia and 15 other States had laws that prohibited interracial marriage. And they got married in Washington in the summer of 1958, which was right after I finished high school and then returned to Virginia, and two months later, a month later, the police broke into their bedroom and charged them and arrested them for interracial marriage. They went back to Washington, but then they sued the state of Virginia and that was in 1963, which was the year I started medical school. And actually, it was not until a few months after I finished medical school in 1967, that the

case was settled and the Supreme Court found in their favor, and those rules were changed. Now, those laws against interracial marriage, when I think about civil rights and how we of color, were asking to be identified as individuals, not having to experience all the things of segregation and restrictions that we grew up under, lived under. That to me is just sort of an example of something parallel that was happening that had to do with civil rights. That sort of parallel things that were happening in my life, which was being accepted to medical school, being accepted to college, being accepted to medical school and during that time seeing changes in the institutions, in my hometown and home state. I could think for example, when I was in college and I'm pre-med, at that time most college exams were after the Christmas break, not before, like kids now have Christmas break and they can have a good time. We had to study and work on papers. And I was coming back to Virginia and I needed to work on papers. And I asked my father to check to see if the library of the City of Lynchburg would let me use its library to get books, to work on my papers. And he was told, no, I was not allowed to use the library or the books. Now, this is the fall of '61. This is my senior year in college. So, I said, have the library at my former high school reach out to Randolph-Macon, Sweet Briar, Lynchburg College. This may explain why it was so great later to get a degree from Lynchburg College. To the colleges in my town to see if they would allow me to either use the library or have someone check books out for me to use while I'm home to work on my

papers. And the response was no, I was not allowed to use the library nor to have someone remove or check out books for my use. So, here I am, I'm having to travel. I'm going to either have to buy all those books, or I'm not going to be able to work on these papers like I should. And I was from a poor family and I had just lost my mother. So, we were really still struggling with medical bills and something happened that I'll always remember. I have all these things from my past I will remember. I got a letter and I wish I had kept it, I didn't keep it, but I can remember it. I got an envelope from James Ramsey Ullman, the author who wrote, "*Tiger of the Snows",* and who'd been, with the ascent of Mount Everest in Nepal. And I happened to know him because he was the stepfather of one of my college roommates. And one day I was handed an envelope from him because I was like, "What am I going to do? We can't afford to buy all these books. Plus, if I buy them, I've got to drag them all the way down and talk about a bad back. That was going to really affect my back even then to drag them to Lynchburg, but we can't afford to buy these books and how am I going to get my papers done?" And I got this envelope from him and in it was a message saying, "Use this as my small protest against discrimination." And it's from James Ramsey Ullman. And it was a check for $75. In 1961, $75 was like many hundreds of dollars today.

Dr. Morgan: Yes.

Dr. Pinn: And so, I was able to go to our bookstore and buy the books that I needed to work on my papers and take them home. So, I could meet my assignments when I came back. I can think of things like that, that today I'm not sure our students even think about. If they need books, they can go to the city libraries. These are changes I've seen. I've experienced the worst side and I've seen the better sides emerge. And I'm hoping that no, child today or young lady or man today will have to go through those kinds of rejections that we lived through. It would be very easy to be very hateful about them but if you don't rise above the hate, it drags you down into what caused all that to happen before.

Dr. Morgan: But it does show, the barriers that some students have because of economics even today.

Dr. Pinn: That's right. That's true.

Dr. Morgan: So that the books may be available somewhere, but not to them.

Dr. Pinn: That's true.

Dr. Morgan: Because they simply can't afford it.

Dr. Pinn: That’s true.

Dr. Morgan: Or they don't have transportation to get to the library or all these other things that are constantly in the way of education and advancement of young people, particularly in our urban centers these days. In terms of health disparities and health equity, which trends are you most concerned about?

Dr. Pinn: Oh, I could go down a list and that's probably because of my time at NIH when I focused on so many different areas, but I think you have to focus on several different areas. Of course, we can always focus on specific diseases and specific conditions, and there's a whole list of those. There are so many things we need to look at. Today, I think two of the most outstanding are the latest data related to maternal mortality. That's because the fact that today here we are in 2020, the United States is the only developed country in the world where there has been a continued increase in maternal mortality, as opposed to other nations that are developed nations, and that we don't have an explanation for that, and the fact that most of those deaths probably are preventable deaths, and most of them are in mothers of color. Doesn't seem to be related to income level, doesn't seem to be related to education, but there's some factor there and we don't know what that is. And, fortunately, this conference is addressing that to some degree but, obviously, NIH, March of Dimes, many colleges of OB/GYN, all looking at this and it's become a current

topic of focus. But that just demonstrates how we are developed country, we've got the foremost in research, we think our healthcare is the best and yet, you can have a situation like this. We don't have an easy answer for it. I've heard of poor women who didn't get prenatal care, who are part of the statistics of maternal mortality. I've heard of, not going to say wealthy, but let's say affluent minority women physicians who themselves are physicians who have become part of this statistic of maternal mortality. So, there's an area that is an example of the kind of thing we need to pursue. Then, I think in addition to look at specific diseases, which this conference is doing to some degree. I think you have to go back and look at opportunities in healthcare. I think we can't really discuss bias and hate and healing hate in the communities, if we don't look at opportunities to enter into health professions, be it medicine, dentistry, nursing, administration and public policy, public health, or even legislative positions where you can have an impact and looking at the role of biases there. Looking at the role of biases and hate. Why does it exist, as it affects our ability to move into leadership positions? And, of course, over the years, I've given more attention to those of leadership positions for women, but you don't separate women of color and women let's say different, LBGTQ community or women with disabilities or women and men, because it goes parallel and how their rise into leadership positions are all very important. And then looking at healthcare delivery itself, as well as career development. What are the interactions and how do biases affect the

delivery of care to patients, the receipt of care by patients, as well as the careers advancement of those who are providing that care? So, I think those are two areas that we have to look at. I, this morning I quoted the words of the song from South Pacific back in 1949, and I think those words, interestingly enough, from back then sort of are relevant today because that song says, and it's interesting Rodgers and Hammerstein wrote that back then because it says, in essence says, "You aren't born with hate, you are taught with hate," and I have recently, as we focus on unconscious bias or unintentional bias, which of the terms most often use, I often wonder if it really is unconscious or unintentional, but I think most of those biases are based on stereotypes, historical stereotypes. And that goes back to how we learn about stereotypes from what we're exposed to and hear about when we're young. And that was before I even remembered that song, from South Pacific, because that in essence sort of sums up what my thinking has been. And so, I'm glad to know I'm in tune with Rodgers and Hammerstein, even though I couldn't sing in tune, but at least our thoughts are in tune. But to me, that's that those are the major areas we need to address. What are people afraid of that they have to hate others who are different so much? It's got to be a fear. It's got to be a fear, or I won't say self-loathing, but there's some degree of self-doubt, if you've got to put down others that you think are different and how that affects how we receive healthcare, how we deliver healthcare and how we

grow our careers. Those are important concepts today that we must so, tackle.

Dr. Morgan: I would like to ask, since you now probably been in the space of research and women's health for over 30 years, maternal mortality, was it the same concern when you started the office or has this been a gradual increase? Somehow, the reality of this and these statistics have been presented to us. And so, the National Medical Association, every meeting we go to now, maternal and child health and maternal mortality is the topic. And I'm wondering, do we sleep on this? Was this happening?

Dr. Pinn: I think we slept on it and looked at it differently and maybe that's because at that point, other countries were also struggling with maternal mortality. I think our major focus back in the early 90's and moving into early 2000's was trying to get women to know about the importance of prenatal care. Remember, we did a conference in Hawaii and saw this program where the Hawaiian public health officials working with grocery stores in a specific grocery store chain offered to women, free groceries and certificates for free groceries, if they would go for their prenatal checkup as a way to encourage, prenatal care. So, that would help cut down on maternal mortality or fetal mortality in that population. And that one has stuck out with me because I remember visiting that program and thinking it was a wonderful way to show community and medical collaboration to

affect it and those were the kinds of things we focused on. It has really emerged over the past few years, as other countries rates of maternal mortality have been declining, least of developed countries to all of a sudden realize that for US, those rates are increasing. So, it may have been a sleeper issue, but I think we were focused on that problem from a different perspective until a few years ago, it hit us that no, we haven't been doing that great a job something's wrong. And why is it mostly people of color or women of color are the major factors or major components of that data.

Dr. Morgan: Thank you. In terms of health disparities and health equity, what potential initiatives and remedies are you most optimistic about at this time?

Dr. Pinn: One, I'm pleased that we have seen an increase in research. We have an evidence-based system of medicine in this country, and if we're going to bring about changes, we all have anecdotes we can quote. But if we're going to bring about changes, especially to hardliners who don't see the importance of addressing disparities, or that we need those changes for disparities. Once you've got the evidence from research that really helps to make the case, as well as to convince others. If you're going to tackle the problem, you need to know what you need to tackle in order to solve it, and that's why research is important to help us identify what are the major contributing factors to whatever area of health disparities you want to

focus on. So, we can direct our attention and our resources towards correcting those areas. There are so many different areas that are being addressed within research. I could take up the rest of this podcast, just listing all those different areas. But I think the fact that there's research the fact that for the most part, there's an increase in attention to these issues by many governmental officials, local and state level governmental officials, knowing of its importance. And probably, most importantly, over the past 20 to 30 years, I think there's been a much greater awakening of the population to demand improvements in their health. And so, if you've got your electorate of those who vote, of those who make up the communities asking for, what are you going to do so that my health has improved? What are you going to do so I don't die young like my mother or my father did? That puts the pressure on the medical, the healthcare, the public health community to bring about a difference. And certainly, if nothing else, the communication, education of our communities about the importance of their health and what they can do, we can't blame those populations. We talk about behavioral. We can't put it all on just personal behaviors. Sometimes it's genetic, sometimes it's inherited. And sometimes it has to do with the environment in which these folks lived. I mean like the lack of stores with fresh fruits and fresh vegetables, and you tell them, you need to improve your diet, but they don't have the money to go across town to a Whole Foods or Trader Joe's, and there are none in their neighborhood except liquor stores and frozen foods in the cabinets.

Those are things they can demand and that's, what's going to make a difference. If people don't know about asking for these things, it's not going to change. And today I think communication, education have helped, and people know, and they're asking for improved contributors to their health.

Dr. Morgan: And, if there's one call to action that you would like for our listeners to hear, based on what you've heard at this conference, what would that be?

Dr. Pinn: Teamwork collaboration. You got to work together. No one person, no one group is responsible for it all. That synergy of collaboration you can't beat. And that's what I'm hearing with the different communities that have come together here. So, without going to a specific focus, specific disease, specific action, wherever is needed, that synergy of collaboration and teamwork, interdisciplinary, I like to call it is extremely important.

Dr. Morgan: I think it was very much depicted here at this conference because today we're at the medical school and yesterday we were at the law school and we've had the nursing school involved and the school of education and social work. So, it shows the examples of a strong, research university, that has all of these different disciplines on site. And we can easily put together a collaborative conference and, one of great input by thought makers. It's very interesting to me that you've played a major role in

defining women's health, beyond the reproductive system. As an orthopedic surgeon, I am very aware that for women and particularly women of color, orthopedics is not a gender-neutral discipline. And it is with those populations that we seem to see the greatest disparities. How can we do better in terms of women and minority health?

Dr. Pinn: It's very interesting when we were first starting our office and the need to do research on women's health and to look for sex and gender differences. And we could always point out that women had not been included in many studies of heart disease or many studies of other conditions that affect both men and women. But we wanted both women and men to appreciate our efforts in research to look at sex and gender differences. So, my other piece was when I talked about where women have been excluded, but how this research was going to benefit men, too, then, I would go to osteoporosis to show the reverse because most studies of osteoporosis have been done in white women with the presumption that osteoporosis is not important for men, and it doesn't occur in black or women of color, which we now know is not correct.
So, to show that while we were increasing the numbers of women in studies of other conditions that for studies of osteoporosis, we were having to make an effort to increase the diversity of women in studies and the number of men in studies of osteoporosis, so that we could learn where the same criteria that were being used for white women valid if you

would try to determine what was the baseline for deciding is osteoporosis in men or deciding when to treat or not to treat. And, also, to recognize, and not neglect women of color going by that old traditional thought based on no fact that women of color don't get osteoporosis. So, that was one of our early areas of focus and then began to look at other areas. I think two of the greatest areas, probably that we've focused on so much related to women's health and the musculoskeletal system were one, osteoarthritis, looking at criteria for treatment and changes in osteoarthritis. That was one of the first major public/private partnerships that NIH had. And fortunately, Dr. Steve Katz, who was then the director of NIAMS. That's National Institute of Allergy, Musculoskeletal disease, and I'm blanking on the Musculoskeletal disease and Skin invited us to partner with him in this partnership to really look at and evaluate changes in joints, using x-rays and other image studies, to try to determine how you could best predict outcomes. And we know that osteoarthritis is a severe problem in women, as well as men and something that really need to be studied. And I think as the first major public/private partnership that NIH had both set an example for how these partnerships could work, but also for a major multi-year multicenter study, to evaluate this condition. And part of what was built into that were that there were several centers that had to focus on making sure that women of color were recruited into these studies so that we could tell if there was a difference. And I think that research is still going on, and that is extremely important.

The other area that I saw as, not that we didn't have lots of studies in the area of musculoskeletal diseases, but looking at professional sports. Women had not been in professional sports and you looked at most of the sports injuries they were described in terms of men. The ACL tears and the sprains, etc., but had anyone ever looked at suppose you have a pro basketball player, who's had a baby and is lactating. Does lactation have any effect on muscle strength on ability to perform on a professional ball court? What about differences in how joints and muscles are affected in women, knowing that bone strengths and bone builds are different in women than they are in men. Have we really looked at that? And as we see an increase in the numbers of women playing professional sports. I think many of the professional teams were really beginning to be concerned because they realized they had no answers for this. They really had nothing to work with, and there was a need for that information. And I think that continues today, as we see more women engaged in more professional sports where sports medicine was primarily looking at male athletes. That obviously it is imperative that we also look at differences where there are women involved in sports, so many sports, all sports to know. And then, just basic things like cheerleading, in high schools, concussions. We hear about concussions for football players, but how many people really thought about the concussions that high school cheerleaders get just from participating in cheerleading, and how that may

affect their ability to perform in college or later, mental abilities. There are so many areas that need to be addressed in that area. I could bore you with lots and lots of lists, but those are just a couple of areas that I recall that we found to be very, exciting and stimulating.

Dr. Morgan: And that has continued certainly in the field of orthopedics. And as you, probably, know that the incident of ACL injuries in women is greater than it is in men. So, that's a real problem for the young secondary school athlete and sometimes even younger than those, and certainly for professional athletes as well. So, I think hopefully we can work more closely, with the NCAA, as well as some of the interscholastic organizations and looking at the care of women and women athletes.

Dr. Pinn: I must say that at one point, the president of one of the national women's athletic groups who had been an outstanding athlete here at UVA was the president of that group. And so, I had a chance to speak with her and she was pursuing, getting some of these issues. So, I was pleased there was an old UVA contact there. Without asking her permission. I won't call her name, but I think most people can figure out who it is because she was outstanding here and outstanding on the national scene, and outstanding in her concern about getting more information, which I have to really be pleased about.

Dr. Morgan: Well, I think that this will help to contribute as well to some of the thinking and programmatic development for Movement is Life. Of course, Movement is Life was really started looking at osteoarthritis and looking at the effects of osteoarthritis on multiple factors in one's life, and then, looking at the comorbidities such as obesity, diabetes, hypertension, as well as even depression as related to people who have osteoarthritis untreated or poorly treated and it perpetuates so that this conundrum is what we've tried to address. And again, this has been a multidisciplinary opportunity to try to make this happen. So, this I think fits very well with what the Movement is Life mission is.

So, this has been very helpful, in terms of, understanding, I think more about how you view, health disparities. How you view the intersection of disparities and the civil rights movement. And not so much the civil rights movement as the environment in which you grew up in, in Virginia and these particular situations that one had to traverse in order to be the scholar that you have become. It does give an example for all of our young people that everybody can succeed. And everybody has certain, barriers regardless of what their level of intelligence or enthusiasm is. There are barriers that we all have to overcome. So, my last question would be you've been an active policy influencer and policy maker for many years. How true is it to say that we could only really make progress in achieving health equity, through policy and social legal frameworks?

Dr. Pinn: I think it's very important that the groundwork be laid at the individual level at the interpersonal level, but if we're going to really have change, it's got to be a part of public policy law and accepted standards of behavior and practice. So, I think it is true that policy and socio-legal frameworks must be respected, must be put into place. If we're going to change organizations, if we're going to change structures of communities, if we're going to change the whole infrastructure of the medical and health area, it's got to be based on evidence. It has got to be based on what we know to be true. And therefore, it can't just be anecdotal and just interpersonal, but you need that interpersonal development of recognition in order to build on that. What I like to say is you can't be involved in health and healthcare without attention to the sociopolitical environment. And that's one of my key phrases I use when I'm speaking to groups. You can't say, I'm too busy with my practice, you can't say, I'm too busy with my health to be involved at another level. You've got to be active at the sociopolitical level. And I think that's what this conference has been about.

Dr. Morgan: Thank you so much. Are there any other comments that you would like to make? Did we stimulate any other questions? Quite a lesson for me. I appreciate the opportunity to be a part of this podcast.

Dr. Pinn: Oh, I think I've covered a number of things and I'm pleased that you're doing this and interviewing so many people with different perspectives. I think the bottom line is we all feel the same way that there's progress to be made in that we can make it.

Dr. Morgan: I would want to thank Dr. Pinn so very much for being a part of this podcast and expressing her experiences, her beliefs and, also welcoming her back home to the University of Virginia. She's a very admired person here today. And so, it gives me a great deal of satisfaction to be with a real hero in Virginia today, as we conclude this podcast. Thank you very much.

(End of recording)