INTERVIEWEE: Priya Kishnani
INTERVIEWER: Jessica Roseberry
DATE: December 29, 2010
PLACE: Genome Science Research Building

KISHNANI INTERVIEW NO. 1

JESSICA ROSEBERRY: This is Jessica Roseberry. I'm here with Dr. Priya Kishnani. She's Professor of Pediatrics in the Division of Medical Genetics. We're here in the Genome Science Research Building. It's December 29, 2010, and I want to thank you very much for agreeing to be interviewed today; I appreciate it.

PRIYA KISHNANI: I thank you for being here.

ROSEBERRY: Let me just start with a little bit of background about how you became interested in doing medicine.

KISHNANI: I come from a family of physicians. My grandfather was an ophthalmologist, and my mother is a pediatrician. I grew up in India, and my mom dedicated her entire career to caring for very sick individuals and actually did it without ever charging the patient. She was really an inspiration for me throughout my life, and right from when I was very young I knew that I was going to do medicine. My fascination for children has always been there, because they just seem so resilient but at the same time also seem so vulnerable—that is why I started my career in pediatrics. My background is what drove me to medicine; I always wanted to try and make a difference, and I wanted to do, at minimum, what my mother had done for the field.

ROSEBERRY: And how did you come to Duke?

KISHNANI: So this is interesting. I was trained in India and came to the US as an observer to the Children's Hospital of Philadelphia. At the time I was interested in pediatric hematology-oncology, and I came to the US to do an observership at the Children's Hospital of Philadelphia Peds Oncology Division. Interestingly, I met the person who is now my husband shortly after coming to the US, and that's what changed my path in the sense why I stayed in the US. And at the time I was still very keen to do work in oncology, but it was also the era or the time when there were lots of changes occurring in the field of genetics. As I was doing my residency in pediatrics then at Duke there was this very interesting cover on *Time* magazine which talked about genetics, the wave of the future. That really caught my attention. It just happened to be the month I did an elective in genetics, changed my mind, and said I was not going to do oncology anymore and took on genetics as my career path. That's really why I'm here.

ROSEBERRY: So the medical genetics, can you define that a little bit for me as someone who's a lay person?

KISHNANI: Right. It's a subspecialty, and it's typically followed after one completes a residency in pediatrics. Less often it could be after a residency in internal medicine, but it's usually a pediatrician that ends up going on into further training. It's like cardiology where one specializes in internal medicine or pediatrics: genetics is one of those subspecialties. It clearly is an emerging specialty now, and still not too many people are embracing that particular aspect of the field. So it's a career essentially where you end up taking care of individuals with genetic disorders or what we call inborn errors of metabolism before birth right up until death. So although I'm trained as a pediatrician, I see patients across all age groups, and in fact I see a lot of pregnant women, I see families

for counseling if they're at risk for a particular cancer, et cetera. So that's what a medical geneticist does. It's pretty far ranging right from counseling to diagnosis to now development of treatments and interventions. So that's what our field is.

ROSEBERRY: Is Duke strong in this area?

KISHNANI: I would think that Duke is well recognized nationally for our contribution to the field of medical genetics. I think Duke's strength has come really from its ability to distinguish itself in certain aspects of inborn errors of metabolism. I think we've got a lot of expertise in the glycogen storage diseases and the lysosomal storage diseases, in Down syndrome and Fragile X syndrome, now in autism, and in certain syndromes like 22q11 deletion syndrome. We've established ourselves in certain niche areas, and I think we're recognized at an international level for these areas of expertise that we bring.

ROSEBERRY: Are you—I know this is a very broad question, but are you able to make any comparisons between medicine in the US and in India, just out of—?

KISHNANI: Definitely there's—there are many similarities but also many distinctions. I think what's common across the globe whether it's the US or whether it's India is I think physicians typically are compassionate, and they're in the field because they want to make a difference, and they want to do the best for their patients. I think the approach is definitely different. In India it is much more hands-on, where we rely a lot on our clinical abilities and bedside skills to come to a diagnosis. I think medicine in the US is more driven by laboratory testing. I think the one major difference is that India is very behind in terms of technology, and so US really offers that opportunity for patients as well as physicians and the scientific community to really make advances. Technology is

moving so fast, and with the use of those technologies you can really advance medicine, so to me those are the real major distinctions between the two.

ROSEBERRY: Well, tell me a little bit about Pompe disease.

KISHNANI: So Pompe disease is—it's a genetic condition. It's what we call an inborn error of metabolism. It's in the category of diseases called lysosomal storage diseases. The lysosome is an organelle within the cell of the body, and it serves as the garbage disposal system. Glycogen, which is a sugar moiety, is degraded in the lysosomes by a particular enzyme called acid alpha-glucosidase. So this enzyme is what's missing in individuals with Pompe disease. As a result of this particular enzyme deficiency, glycogen builds up in muscles in the body, the manifestations can be from as early as birth to as late as adult life. The primary manifestations in the infants who present with this disease are heart involvement and muscle involvement, which mean they have a significant thickness of the heart muscle combined with a lot of muscle weakness. This results in either no motor milestones or loss of any minimal milestones that they may have achieved. These children die before they're a year of age because of significant cardiac failure: the heart muscle so thick or heart so enlarged it occupies almost all of the chest cavity. These infants are very weak, floppy, and hypotonic to the point that they can't feed themselves, they can't roll over, they can't even swallow, and they can't sit up. It's a lethal disease if not treated. The later onset forms, or the adult forms of the disease, can present anywhere from after the first year of life to as old as the sixth or seventh decade of life. In adult forms of Pompe it's primarily a skeletal and pulmonary muscle involvement, so there's not as much if any cardiac involvement. These patients can live longer, but ultimately what's debilitating is that they lose a lot of motor strength

involving the proximal muscles of the legs and the arms, making it difficult for them to climb and/or walk. The diaphragm, which is the muscle for breathing, gets compromised very early, ultimately requiring ventilator support and a wheelchair. There's a whole spectrum of severity. So I wouldn't say that the adult form is not severe, it's just a spectrum of involvement within this disease.

ROSEBERRY: What percent of the population has Pompe disease?

KISHNANI: The true incidence of Pompe is not really known. Across all the forms of Pompe disease it's believed to affect about 1 in 40,000 individuals. There are some forms, certain ethnic backgrounds, that have higher frequencies, for instance amongst Chinese and individuals of Taiwanese descent. Where newborn screening has been initiated we now know it's about 1 in 33,000 in the Taiwanese population. We believe that it's more common, at least the infantile form, in those of African-American descent, but as we don't have newborn screening in the US at this point, we don't know the true frequency or incidence of this disease.

ROSEBERRY: What would newborn screening mean?

KISHNANI: Newborn screening would actually allow us to identify patients who are affected with Pompe disease, and that would give us better estimates of the true number of patients that are affected with this disease rather than this best-guess estimate that we are making at this point, it would also mean treating the patients earlier.

ROSEBERRY: How did you become involved in working with patients with Pompe?

KISHNANI: I started my training at Duke in pediatrics and then went on to do my subspecialty training in genetics. I was mentored by I would say the finest physicians, Dr. YT Chen, Dr. Steve Kahler, and Dr. Charlie Roe, all well-recognized giants in the

field. Dr. Chen has a longstanding research and clinical interest in the glycogen storage diseases including Pompe disease. As such, I followed in my mentor's shoes. We had lost a child to Pompe disease around the time when I was starting my fellowship here. Another colleague of mine who was my senior fellow, Johan Van Hove, and Dr. Chen had gone to the funeral of this child, and I know that they had made up their minds that day that this was not going to repeat itself. That's where the Myozyme story began at Duke with the benchwork to develop the enzyme, or make the enzyme that's missing, in the human body. As I was still in clinical fellowship training, I observed how they had injected the enzyme into quail birds that have Pompe disease, and it was remarkable to see/learn that the birds actually started to fly. So we knew that the proof of concept that this enzyme therapy would work, and that's when I started to get involved with the design of the clinical trials and the conduct of the clinical trials for Pompe disease. So this was in 1996 when we started work with the design of the clinical trials, so I've been involved now for the last fifteen years of my career doing this.

ROSEBERRY: So did Dr. Chen kind of pass the torch to you?

KISHNANI: Yeah, so Dr. Chen initially started the clinical trials with a lot of help from me and the clinical team. As an inventor of the cell line there are certain conflicts of interest that come into play, making him unable to continue. Although it as unfortunate that he could not participate, I think his biggest strength is at the bench. With that, he handed me the responsibility, When I took over the project, it was in its infancy stages with only three babies; it's been a long journey from then to now. We were challenged with even getting other physicians at the institution convinced that this is not a lethal disease, and we have to do our very best to save these children. Each time a child was

sick and we admitted them to the hospital there was a lot of resistance—people thought, "It's not going to make a difference, these children die, why are we pursuing this to this extent?" We had to educate within the institution as well as at others across the world. And these families—you can well imagine they were coming from different parts of not just the US but from the globe—ultimately they had to go back home, taking what they learned with them. The therapy was exciting, but it was important to stress total care of the child. For instance, if the child has a cough or a cold you can't give up the treatment just thinking that they're going to die. So it was a very long and difficult road, but I have to state that I was very lucky to surround myself with a team that helped me along the way. I had invaluable support from my colleagues at Duke and also around the world, where we really had to work in partnership, especially as we sent children home. Before we used to often have very sick babies fly to Duke for treatment. We used to initiate the therapy under clinical trials, send the children back home, and continue to work with both the families and the physicians. We started with the infants. We were able to show that, in the pivotal study which was then presented to the FDA, that all eighteen babies that were treated were alive at eighteen months of age, and fifteen out of the eighteen were not only alive, they were not even requiring any ventilator support. Their hearts had pretty much normalized in size and function, and many of these children were walking. Our oldest survivor now is 11 and ½ years old and going to school; he plays baseball. Of course they do have some limitations. They're not as strong as other children, and clearly this treatment is not a cure, it's definitely allowed them to go beyond their first birthday and for families to enjoy occasions like birthdays, going to school, and other milestones which they would never have seen. So that was the work with the infants.

And then we clearly had to demonstrate that this worked also in adults, and so we participated in the clinical trials for what we call late-onset Pompe disease and had to go through the same drug approval process for the adult form of the disease. And what we're currently working on is the various challenges along the way of when you administer a foreign protein or therapeutic protein. There can be many limitations to an infused protein such as reaction to the protein, an antibody response to the protein. So the work continues. I would say we have plenty ahead of us still.

ROSEBERRY: Well, let me back up just a little bit and ask you how Dr. Chen first discovered that enzyme, that it might work for kids with Pompe.

KISHNANI: So the work—the enzyme—knowledge about the gene, knowledge about the enzyme, was known. It was also known that this particular enzyme needs what we call a tag to deliver it to the lysosome. There were previous attempts at making of this enzyme, and it was taken from placenta or from Aspergillus niger. The problem with those forms of the enzyme was that it was not tagged to go to the lysosomes, as a result of which it was lost in the bloodstream and never made it to the target site which was the lysosomes. So what Dr. Chen and Dr. Van Hove, my co-fellow that I was speaking about, recognized is that it was very important to get the mannose 6-phosphate; that's the sugar moiety that needs to be tagged onto the recombinant enzyme, and with that tag it's able to take the enzyme to the lysosomes. It's based on work that was done for another lysosomal storage disease, Gaucher disease, and so the same principle was applied to Pompe. I think the one thing that has to be remembered is that Pompe is a muscle disease. Muscles make up about 40 percent of body weight, so it's a large task to try and fix with a replacement protein. Not only did we have to find a way to tag it to the

lysosome, but we also had to find it in a way where it would be at doses that would be safe but also beneficial in terms of muscle improvement in these patients.

ROSEBERRY: Do patients have to receive the treatment throughout the rest of their lives?

KISHNANI: Yes, just like any other therapeutic protein. Like if you think of someone who has diabetes, they take insulin, or if you think of someone with hemophilia, they've got to take Factor VIII throughout their life. This is similar. This is an infusion that's done every two weeks; it lasts about 3.7 to four hours, and the treatment as it stands today is needed for the rest of their lives. Of course what we have now is what we call the first generation of a treatment, and the ultimate goal would be gene replacement therapy. The idea is if you can get these infants to become children and the adults to become older adults, and if you can keep them healthy throughout their life while more definitive therapies will develop on the horizon, I think that's the goal.

ROSEBERRY: Can you tell me about setting up those clinical trials?

KISHNANI: Clinical trials for rare genetic diseases are really very different than clinical trials for, say, something like a drug for hypertension. So we don't deal with hundreds of patients, we deal with very few patients; it's as few as eighteen to twenty patients is what, as I told you—for the pivotal trial, all we had was eighteen babies in the trial. So the design of the trial is one aspect, but actually getting the babies within a reasonable period of time is another challenge. We have had some patients come from all over the world. We had families that came from South Africa, from Peru, some that came from the United Arab Emirates. I mean, we've had patients from all over the world. Our work included arranging transportation, relocating families, administering treatment, dealing

with insurance coverage outside of protocol, and also dealing with sibling issues because most of these children had siblings that were normal and who needed to go to school—so taking care of all those aspects. Our work went beyond a typical clinical trial; it was organizing all of the above and trying to keep things going. The second part started after the piece was done at Duke and we had sent them back home: the educational piece to the physicians who've probably never seen a patient before with Pompe and now had to deal with enzyme replacement therapy. A part I think that a lot of people tend to forget is we didn't know the natural history of this disease beyond a year of age; we didn't know what to expect. That constant education and updating of the medical literature of how these children were doing and what certain risks were, such as the high risks of anesthesia due to their heart complications. You can lose a child to anesthesia. I think the main things that these trials taught me were humility, an appreciation for human life, and the importance of working with a team. The whole process has been pretty life changing for me.

ROSEBERRY: Sounds like you're very much involved in the lives of these patients.

KISHNANI: I would say yes. We have families that lost children to the disease that still come back to Duke year after year. We have families where children have done really well, but they still have some persistent deficits which are not corrected by the enzyme therapy or because the therapy was not started in time, so those families come here in person very often, or contact us via e-mail or via phone, or if I travel I end up seeing these families. It has been a real commitment, and I think that's what it has to be if one wants to take on the treatment and therapeutic development for a rare disease. I often am on the phone for several hours each night talking to different physicians around the

world. Time zone differences and the fact that I have to also get my work done at Duke make it so that it's after hours and weekends when I'm talking to physicians and families alike, trying to assist the best I can.

ROSEBERRY: So the physicians in other countries are now giving these treatments locally, is that what I'm understanding?

KISHNANI: Right. So in 2006 the drug got approved by both the FDA and the European Union as a definitive therapy for Pompe disease. Once that happened the drug became available commercially, or outside of a clinical trial, and so it really opened up the doors for many patients who otherwise did not have access to the treatment. Often patients were not qualified for the clinical trial or could not access a site where a clinical trial was being done. Additionally we were unable to help everyone and unfortunately lost many babies along the way. The sponsor of this particular drug, Genzyme Corporation, opened up what's called an expanded access program, allowing infants and some adults to get treatment even if they didn't qualify for clinical trials so as to enable early access to the drug before approval and commercially available. The drug that was approved for infants, called Myozyme (in the US) and the drug approved for adults, called Lumizyme, are now available I think in more than forty countries already, so it's been a remarkable road. And I think there are over 1200 patients as we speak today who are on this therapy.

ROSEBERRY: Is Duke still kind of the center of this treatment or still kind of the knowledge base?

KISHNANI: I think Duke plays a very important role, especially leadership-wise, in the field of Pompe disease. Of course, there are other centers around the world which are

also gaining experience. This is wonderful for the advancement of knowledge collaboration with others, but Duke does maintain a very important role in the Pompe community of physicians, researchers, and scientists.

ROSEBERRY: Can you tell me about working with industry in developing this drug?

KISHNANI: One thing I would like to say is that people often talk about industry in a very negative light. If one wants to develop a therapy, one has to learn to work with industry. The industry has its job to fulfill, and, yes, they've got to—it's a business model, but I think on the personal and professional level, at least in my dealings from the rare disease front with Pompe as my prime example, they have been very supportive and wonderful to work with, and I couldn't have asked for a partnership with a better company than Genzyme Corporation in taking this, as we say now, bench-to-bedside approach. They've been very open, very honest, and very respectful of what our thoughts are and our viewpoints in trying to make this drug a reality. Without industry support I don't think this drug would have ever made it to patients. Although working with industry has its plusses and minuses, we all must recognize in academia that we have to work with industry to make that final difference. The discovery can occur in an academic lab but the industry is needed for the translation to the patients. I think industry knows how to do it and we've got to learn to partner with them. There's a fine line when working with industry: you've really got to maintain your integrity as a scientist, because it's a slippery road, and one can easily be perceived as working for rather than working alongside with industry. That's another lesson that I learned along the way through this drug development program for Pompe: that you can maintain that distance but still work very closely with industry to make this happen.

ROSEBERRY: How do you maintain that distance?

KISHNANI: First of all, I think I have very firm beliefs in what you can and cannot take from industry, and I've limited my consulting agreements with them so that nothing's perceived as a conflict of interest. I have complete open disclosures every time I present. I, in fact, have it on our consent forms what I receive or what Duke receives from industry so that there is no perception of dishonesty that a patient may perceive from an incomplete disclosure. I've really felt this distance is very important, and I think I've managed to do it pretty well.

ROSEBERRY: One of the words that—phrases that comes up a lot when I do these interviews is *translational medicine*, and I wonder if you could talk about—obviously we've been talking about that very thing, but kind of what that looks like at Duke or the culture of translational medicine?

KISHNANI: The term translational medicine if often used, and when someone called me a translational researcher for the first time, I didn't quite understand. But, as I see it now, I think this translational medicine is learning from the bench and taking it to the bedside; I always have this concept that you may learn from the bench and take it to the bedside, but without the bedside the bench, the laboratory experiments make no sense. The bench is the lab experiments. I still believe that the patients teach me the most, and even after the development of this therapy if we hadn't looked at the patients carefully or learned carefully from them, then the next wave of advances would never be possible. For instance, we would not have been able to develop the immune responses trying to develop a second generation of enzymes so that it can better target the muscle without having taken our first step so carefully. To me, translational medicine is the ability of the

physician to take lessons from the patient, take it back to the lab, learn from the lab, and bring it back to the patient. I think Duke, in particular our group, does a very good job with this. I'm definitely not the only one at Duke who's doing this, and Duke I think gives a lot of flexibility and a lot of support to allow this kind of work to occur.

ROSEBERRY: Well, I know that you also are involved in some clinical trials with Down syndrome patients, is that correct?

KISHNANI: Yes. So I've been involved with clinical trials with Down syndrome and a number of other genetic conditions and inborn errors of metabolism. My passion for Down syndrome stems from the children themselves; anyone who's met a child with Down syndrome can tell you that they're absolutely delightful. Our clinic, staffed by Dr. [Gordon] Worley, Dr. [Vandana] Shashi, and me, follows about 1200 patients here at Duke with Down syndrome. Our whole goal has been to try and improve cognition of children with Down syndrome. Down syndrome is a condition with a whole extra chromosome, chromosome 21; it's not a single-gene disorder. The principles that one applies to a treatment, say, for Pompe disease, it's much more difficult to do for someone with Down syndrome. However, if you understand metabolic pathways, and that's I think once again the role of where the geneticist is, the ability to see the interplay between different pathways or of genes that may be upregulated or downregulated. We are trying to look at strategies to enhance cognition by changing the availability of certain neurotransmitters to the brain of these individuals with Down syndrome. In fact, I say with a lot of excitement that we were the first group that actually did a clinical trial in Down syndrome with an agent where there was a scientific rationale; we actually continued with this trial all the way to the first ever conducted multi-center trial for Down

syndrome. It had never been down before. This revolutionary study has really opened up the field to the idea of clinical trials for Down syndrome; there is a way to do it, and there is an infrastructure to do it. In fact, we are now on our way to new drug targets for Down syndrome also in collaboration both with other researchers and with industry.

ROSEBERRY: You had mentioned gene therapy a little bit earlier. Can you tell me is that kind of the future of where these are headed, perhaps?

KISHNANI: Ultimately, yes. Gene replacement therapy is a one-time fix, a one-time treatment if it works. I think that a lot of progress has been made in the field of gene therapy; however, there are still many, many challenges. One of my collaborators right here at Duke, Dwight Koeberl, is working on gene therapy for Pompe disease, for glycogen storage disease type 1 to Pompe disease. And so clearly that is the future, that is the ultimate goal, but we're not there quite yet. There are still several hurdles to cross before then.

ROSEBERRY: So both of these options that we've been talking about with Pompe and with Down syndrome are treatment options, and then—.

KISHNANI: Correct. Correct. Correct. These are treatments, they're not cures.

ROSEBERRY: Okay.

KISHNANI: Yeah.

ROSEBERRY: Is there anything that I have missed that you're working on that you'd like to talk about or tell me about, anything—?

KISHNANI: We actually have developed what we call a center within the Department of Pediatrics for development of treatments for rare diseases. And when I say rare diseases it's not because I don't want to work on common diseases; it's more that I think rare

diseases often pave the path for more common diseases because the lessons learned from rare diseases have applications to the general population. As an example, if you have someone with a rare disease with poor bone density, once you target and establish a treatment there the lessons learned can have a broader application. But I think the rare diseases are in a way easier to manage because you know—if you know the gene that's involved, you know then the pathway that's involved. For more common diseases there are a host of factors, both environment and genetic, so it's more difficult to target. The rare diseases are actually an easier, more low-hanging fruit. And I think people are recognizing that today, in fact with an office for rare disease within the FDA, within the NIH—at all levels. Even if you look at industry, there are partnerships with a rare disease sector which never existed before. If you look at leading biotech or pharmaceutical companies like GSK [GlaxoSmith,Kline], Pfizer, Sanofi, they're all looking for partnerships with companies or biotech firms that work in the rare disease sphere. We are working towards—as I was coming back to it, we now have a center for development of treatments for rare diseases, with our next goals being to get a therapeutic target for glycogen storage disease type 3 and type 1. We are working on the antibody responses to therapeutic proteins using Pompe as an example, but once again the findings it would have a broader scope. Additionally, we are working on gene replacement therapy for some of these diseases. We have a whole portfolio that we hope will better the lives of our patients in the near future.

ROSEBERRY: Well, you touched a little bit on the idea that clinical trials for rare diseases might be a little bit different; they're smaller. Are there other ways that they might look different or need special considerations?

KISHNANI: There are—there have to be special considerations. For instance, the natural history is often not known or it's very limited, and the heterogeneity, or the differences, are quite a few. Even in the design of the clinical trials it has to be very, very carefully thought out, because you've got small numbers, and you need to show that there's an impact of the therapy. The "endpoints," as we call it, within the clinical trial have to be very wisely contemplated in order for that trial to succeed. The Orphan Drug Act, which gives exclusivity and protection for seven to ten years once a product gets developed, is a way to encourage industry to take an interest in rare diseases. This is what I mean by this field being he low-hanging fruit. Other specialties do not have this kind of exclusivity or protection of being the only drug on the market for a certain period of time if you've successfully developed it. I think the field is wide open right now for the rare diseases. The challenges are, as I said, statistical: you can do some of the power analysis as you would do for someone who has obesity or hypertension or another cardiovascular condition in comparison to someone with a rare disease. I think a different mindset is needed when considering a rare disease, because you need very tangible endpoints. For instance in Pompe it was a no-brainer: if you say someone's going to die or live it's completely different than saying the cholesterol's going to improve by 10 percent.

ROSEBERRY: Will you continue to work on Pompe disease?

KISHNANI: I believe so. I really think this is a commitment I've made. As you can imagine, if one develops a therapy, you feel responsible for the next phase and for those surviving children and adults, so yes, I think I will continue. It's part of me now. (*laughs*)

ROSEBERRY: Let me switch gears just a little bit and ask you about kind of the culture for a female in science and/or medicine; what has that looked like in your career?

KISHNANI: Well, people often talk about the challenges that females or women face in academia or in any industry. I have to say that I think I've been very fortunate. Clearly I've had to work extremely hard. Also having come from a different part of the world I did have to prove myself every step along the way, but that's not a bad thing. At some level, maybe, there could be differences in terms of salary at the outset, but I think if you prove yourself it's hard for someone to not recognize it. With that, I don't think one should use that as an excuse and say, "Because I'm a woman I can't succeed"; but rather the other way around: I am a woman and I will succeed. That's the way I've always looked at it. And I don't see myself as any different or being treated any differently at this point. Along the way it may have been a little bit more challenging, but nothing that presented itself was impossible to overcome. It's a different balance if you're looking at it as a woman, because you've got your home and you've got children and you've got other responsibilities, but I think that it actually just helps you organize yourself better, and in my opinion it's made me a better parent, better wife, and a better person at work because I've just learned to balance my time very efficiently.

ROSEBERRY: So you can focus on each one of those aspects of your life?

KISHNANI: I can. I can, and I've really found a way to do that.

ROSEBERRY: Well, is there any question that I should have asked you today that I didn't ask you?

KISHNANI: No, I think you've covered this pretty well.

ROSEBERRY: Okay. Well, thank you very much.

KISHNANI: Well, thank you.

ROSEBERRY: I appreciate it.

KISHNANI: Yes.

ROSEBERRY: Thank you.

(*end of interview*)