TEA WITH TRAILBLAZERS
SPEAKER: Dean Nancy Andrews
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TEA WITH TRAILBLAZERS NO. 6

ADRIANNE LEONARDELLI: Welcome. Thank you everyone for coming to the 2011 Tea with Trailblazers. We have a wonderful program for you today. We are honored to have such a distinguished speaker as Dean Nancy Andrews. Before we start, I want to mention that there is a guest book in the back of the room. We hope that you'll sign it so that we'll have a record of your attendance today. Also I want to let everyone know that we are recording this event. If you ask a question or share your story, we'll ask you to sign a consent form so that we can make this recording available to historians and researchers. Consent forms are located next to the guest book in the back of the room. Before we go any further, please let me introduce myself. I'm Adrianne Leonardelli, and I'm a librarian here at the [Duke] Medical Center Library. My colleagues Jessica Roseberry, Adonna Thompson, and Rachel Ingold will be my cohosts today. Will you ladies please stand? Please. (*laughs*) We are the planners of this event. Now I would like to introduce our opening speaker, Dr. Ann Brown. Dr. Brown is the Vice Dean for Faculty at the Duke University School of Medicine. She is also the founder and medical director of the Duke Academic Program in Women's Health. Please help me in welcoming Dr. Ann Brown. (*applause*)

ANN BROWN: Good afternoon, everyone. Well, welcome to Tea with Trailblazers, and thank you to the Medical Center Library and Archives for all of your hard work in getting this wonderful exhibit together. I just love the posters; I think it's just—they are just really powerful

posters, so thank you. And as we celebrate and honor women's achievements in medicine at this event, I have the great pleasure of introducing Dean Nancy Andrews. She came to us in October of 2007 from Harvard, where she served on the faculty since 1991. At Harvard she built an impressive track record of both leadership and successful research. Almost from the moment she arrived there, she served as director of the Harvard-MIT MD-PhD program. That was between '93 and 2003. And then as dean of basic science and graduate studies at Harvard from 2003 to 2007 before we stole her away. Even with the additional challenge of leadership work, she maintained her coveted Howard Hughes Investigator status for an impressive thirteen years, from 1993 to 2006. She's been recognized widely, most recently, as far as I know, recognized for her scientific work by receiving the Ida Green Distinguished visiting professorship by the UT Southwestern Women in Science and Medicine Committee. So she is definitely on the national radar. Further on a national scale, her work has been honored through her election to the American Academy of Arts and Sciences and the National Academies of Science Institute of Medicine. She continues to maintain an active NIH-funded research laboratory studying hemoglobin metabolism in her role as professor in the Departments of Pediatrics and Pharmacology and Cancer Biology. And her informal moniker is "The Iron Lady" (*laughter*) for that reason. Throughout her career, Nancy has been a significant supporter of women in the sciences. Harvard recognized this by awarding her the 2004 Dean's Leadership Award for the Advancement of Women Faculty at Harvard Medical School. Nancy's a founding member of the Rosalind Franklin Society. This is a society of accomplished scientists, several of whom have won Nobel Prizes, that recognizes the work of outstanding women scientists, fosters leadership opportunities, and motivates and educates generations of women who have a calling to science. In 2002 she wrote an influential analysis, published in *Nature Medicine*, of the

reasons women are underrepresented in the biomedical sciences. Now, that's almost ten years ago now. Maybe we need to write another one. (*laughter*) Because the last one that I know about, the last essay, was the highly cited essay in 2007 when you came here, in the *New England Journal of Medicine* about climbing through the glass ceiling, so clearly Nancy has given this issue a lot of thought. Her appointment to the position of dean of the school of medicine got a lot of press, because she was the first female dean at a top-ten research-intensive medical school. And as she commented at the time, "Why should the appointment of a woman dean still be big news in 2007?" (*laughing*) And I hope you'll address that today. (*laughter*) Well, it was big news, and it was good news for us. She's been at the helm for about three and a half years, and these have been exceptionally challenging years for any dean of a medical school with the NIH budget flattening and the economic dislocation of the fall of 2008. But in those years, and even with historic challenges, she has begun writing the next chapter in the history of Duke Medicine. A few of the reasons I'm very proud to call Nancy my dean, particularly in regard to my interest in women in medicine: we look at the new chair hires, of which there have been many, probably enough to support the local restaurant industry for a long time (*laughter*). Mary Klotman, Department of Medicine; [Sarah] Holly Lisanby, in the Department of Psychiatry, who is here today; and Liz DeLong, in Biostatistics. And she has given consistent and very generous support to fellows to attend the ELAM fellowship, that's the Executive Leadership in Academic Medicine fellowship, for faculty, senior faculty. And our current ELUMs, as they're called, include Mary Klotman and Catherine Kuhn, Christine Marx, Jan Richardson, Vicky Seewaldt, Marilyn Telen, Deb[Debara] Tucci, Terri Young, and also Holly Lisanby.

NANCY ANDREWS: And Ann Brown.

BROWN: And me. I put that there, AJB. (*laughter*) It's a fabulous program, and it is through this that Nancy is really building a cadre of women who have gotten some formal training in the skills important for leadership. She also supports women faculty to attend the AAMC [Association of American Medical Colleges] Women in Medicine junior and mid-career development workshops. She has supported the innovative course on scientific management and leadership, which introduces junior scientists to the art of leadership. And she was responsible for creating the research mentor awards, which help us to recognize our most dedicated mentors. And more recently, I've been really impressed with her plan to put together interdisciplinary hire packages to allow us to foster interdisciplinary work, work that crosses boundaries through this mechanism. And most recently she has created and is doing a national search for the chief diversity officer position. So all of these things are reasons why I'm really proud and pleased to be working with you. And as we celebrate and honor women's achievements in medicine nationally and here at Duke, please join me in welcoming our very own trailblazer, Dean Nancy Andrews, a physician-scientist who has consistently lived her values, followed her aspirations, and inspired students and faculty to do the same.

(*applause*)

ANDREWS: Thank you, Ann. I'd rather just sit and listen to you. (*laughter*) No; thank you for that very kind introduction. As some of you, maybe many of you know, when I have a choice, I am not a very formal person, and so I don't have a formal talk prepared, but what I'll do is just give you a few thoughts and then open it up to questions. I generally prefer answering questions and hearing other people's stories rather than talking about myself. But I'll tell you a couple of things that I've been thinking a lot about lately. Ann sort of alluded to those in a way. Two general areas: how can we encourage young people to be interested in science? Science and

medicine, but usually the interest in science comes first. Not always: we have some outstanding physicians who didn't come through a science route. But when I think of myself and my own career aside from personal definitions of myself as a daughter, wife, mother—if I had to characterize myself in one word, I think it would be *scientist.* So I think a lot about how we can encourage young people in science. And then I've also thought a lot—not that I have answers—about leadership and what kinds of things prepare people for leadership roles, and what kinds of attributes select out people who are going to be leaders. So I'm going to try not to go on too long; I'll talk a little bit about the science first and see how much time. I don't know if there's a clock, and if there is, it's probably an hour behind anyway. (*laughter*) But I'll try not to go on too long, because I'd really rather have much of this be a discussion instead of me talking. So I think, starting with myself, I honestly don't know what got me going towards science. And I think about that a lot, because we desperately need young people to be interested in science. And we particularly need young people who traditionally haven't been as well represented in the sciences. Women and members of groups that are underrepresented in science and medicine generally. We need that brain trust. We need a lot more people to drive forward in what is a very exciting time, particularly in biomedical science. So looking back at my background, there was really nothing, probably, that would have set me out as somebody who was on a track to become a scientist. My mother was a social worker who—is actually a social worker, at eighty, she still is—who always had a particular interest in those people that society wanted to try to avoid for one reason or another. And she has worked as a social worker in a number of different ways, but I think the defining feature is that she cares about people that most of society has pushed aside. My father is—actually, still is at age eighty-five, although only a little bit—a lawyer. And his particular interest was in helping children or teenagers who got in trouble,

college students who got in trouble, and early in his career, when I was growing up, people who didn't have access to legal services. And so I came from a family that was very service oriented, very focused on social issues and not at all on science. I have no near relatives who are physicians or scientists. And I think I started out assuming that I would go down a path similar to my parents. But I always had a very intense curiosity, and I still do. And Google is my downfall, because (*laughter*) it lets me be curious about a lot more things than I ever could be curious about before. But I just like to know things, and I think that was part of what got me started in science. Early on, I did some of the kinds of things that scientists do: I set up a little lab in our basement where I didn't really do much other than take off—so if you think about a traditional light bulb, I would take off the metal piece at the bottom, wash out the powder, and turn it into what looked like a flask that you use in a lab. And I did a lot of that. I would not recommend it to anybody's children these days. First, they're not very useful because they have a round bottom, and they don't stand up; second, it's pretty hazardous trying to take off the metal pieces; and third, with the mercury bulbs, it's probably particularly dangerous. (*laughter*) But it made me feel a little bit like a scientist. I also had a rock collection which was the kinds of rocks you get in a hobby store, stuck on a piece of cardboard from all over the world. And when I was young, I never imagined I would go to the kinds of places that these rocks came from. And I think one of the advantages of a career in science for many people is, you travel a lot. You go to present your work in interesting places. And I guess one f the benefits is that the meetings are often in interesting places. But growing up in Syracuse, New York, it never occurred to me I'd get any further than Rochester if I was lucky. (*laughter*) And so that was kind of a dead end as far as science goes. And then I had a tremendous creative drive. I always had to be making things, and I made all sorts of weird inventions that were also largely useless, but I had fun doing

it and building things, and I think that that part also persists today. I'm a pretty intense cook, and I like inventing things, if you like, in the kitchen. I felt as a kid this huge creative urge. And I would think that that would also be a characteristic of people who go into science, because it's a lot of fun to follow your nose and get into whatever area your science leads you to. Especially if it presents an opportunity that's going to be useful for people or useful for society. But I don't easily know, just thinking back on my own experiences, I'm not sure how to nurture these kinds of things in kids. I worry that the kinds of courses that kids get in elementary school and junior high school or middle school when they're thinking about what they're going to do when they get older aren't very inspiring a lot of the time. It isn't the kind of science that I do as a kind of professional scientist, and it's not very similar to the kinds of that I see every day. And I think that we need to as a country, as a society, try to find ways to get kids much more excited about science and engineering. I might've been an engineer if I knew what that was when I was young. (*laughter*) I didn't. That might have fit better with all of my weird inventions. But I think that this is a really important thing in the interest of this country and in the interest of society in general. And one of the thing that is most disturbing to me about the stagnation or dislocation—if I'll borrow Ann's word—of federal funding for science is that it's discouraging a generation or several generations of young people from becoming scientists and using their drives and their talents to do things that are really ripe, to discover things that are ripe to be discovered and push forward areas where we're very close to understanding and treating bad diseases, to solving problems through technology. But we need young people who are going to get excited and move in that direction. So I don't have answers. I worry about this most directly at the level of trainees here in the school of medicine. Our medical students—I think Duke attracts medical students who are very interested in using their skills in science but also in public service, and

that's very important. And also our graduate students, our residents, fellows, keeping them interested in research, in finding new things, learning new applications for knowledge. And much of what I think Ann is focused on in her new role as vice dean for faculty is really nurturing those interests in our young people and making sure that they can develop careers that are much richer than what they might be if they didn't get exposed to great research. So something we're very lucky to have here at Duke. The other thing I think about is leadership, and I think in part because, as Ann mentioned, I've had to recruit so far eight new department chairs in my time here. I'm very pleased that we've quadrupled the number of women chairs, as Ann pointed out, but always by going for the very best people that we could get. And so it's not because we were deliberately trying to have more women chairs; that's what happened when we went for top talent and when we made a big effort to have a large a pool of talent as possible. I think what has been part of the problem in the past in recruiting women and members of underrepresented groups into leadership positions has been not seeing the talent that's there. Not making the pool as big as it needs to be. So I think about leadership a lot. Because of that, we actually have three ongoing chair searches now and a couple of other leadership searches. And I'm not really sure what it is that creates a strong leader. I've seen so many different models of it, and I think if you look at our chairs, eight new chairs, they're all very different people. Tremendously talented, but they go about it in very different ways. But I think for me in a sense personally, one of the defining things that made me move towards leadership positions was running into problems that I couldn't stand seeing unsolved. And I think that that makes leaders out of people under many circumstances. Originally at Harvard it was the MD-PhD program, which was in some disarray. I had been a student in that program, and when I joined the faculty I was worried that it hadn't improved since I was a student. And I couldn't stand to see that

problem unsolved. I'm not quite sure how that got me to being a dean, except that some of that was being very serious about trying to solve problems and feeling a responsibility for trying to make things better. And somehow over the years that translated into moving into higher and higher administrative jobs. That's still a huge part of what I do: trying to solve problems and trying to make this a place where all of our community can thrive and can find their great potential. So. I still can't see the clock.

MARGARET HUMPHREYS: It's ten of.

ANDREWS: Okay. If nobody minds, I think I would love to turn it over now to questions or comments or stories. I love hearing people's stories about how they have moved into what they're currently doing or how they sometimes didn't have access to what they really wanted to do.

LEONARDELLI: If you have a question or comment, if you would raise your hand, and Beverly will pass the microphone to you. Please state your name before you speak. Thank you.

BROWN: Ann Brown. I wanted to ask if—when you first came here in 2007, all of the news was the first female dean. And so I guess I wondered three and a half years later whether you still feel like the first, or whether you ever felt like the first female dean. (*Andrews laughs*) And that's—because it doesn't seem to me that that's necessarily been an overwhelmingly important part of who you are and the job that you do. And I mean that in a good way. That I see you as a strong leader, not necessarily do I think of you with the adjective *female*.

ANDREWS: (*laughing*) Hmm. (*laughter*) No, no; I know what you mean.

BROWN: Yeah, I'm trying to say it in the nicest possible way, but if it doesn't sound nice, then ignore it, but take it in the nicest possible way.

ANDREWS: Yeah. No, it's true, I don't walk around and think, I'm a woman dean. So there actually were women deans before me, and that was why that extra phrase *of a top-ten medical school* got added on, so that we could get picked up by AP and Reuters and everything else. (*laughter*) But I think when I became dean, there were maybe eleven—something like that—women deans among the 126 medical schools in the US and Canada. And so I wasn't the first, I was the first of a school that ranked in the top ten, and, if you won't tell anybody, tomorrow may be ranked in the top five. (*audience murmurs*).

AUDIENCE MEMBER: Is that basketball?

ANDREWS: (*laughing*) The medical school. But no; it's true. I think actually, up until the time I came here, I had many reminders of being a woman scientist or a woman doctor or a woman in administration, because I felt a lot of subtle disadvantages or times when I was treated slightly differently. I haven't felt that at Duke. At least not within the Duke community. Occasionally when I go someplace on the outside, I still do. And for me that's been a really good sign about this place. And so I do feel like a dean and not a woman dean. I think that women in science and medicine have traditionally faced many obstacles and disadvantages. And we were talking a little about this a little while ago about how those are now a lot less apparent at junior levels, among students and fellows, but still very much there as women rise up in the hierarchy. And I think that, as we were talking about before, it kind of compounds over time. A little disadvantage at each step gets bigger and bigger as time goes on. But also as we were talking about out in the atrium, I think there's been a tipping point, and I think over the last couple of years, something has perceptibly changed. So that now I see the potential trajectory from here on as being much steeper towards getting to parity for women. I was very depressed a few years ago when I learned from a colleague, actually a man, who was very interested in

women in science and medicine and saw the exclusion of women, deliberate or not, as he called it, the global warming of medicine. He saw it as a huge issue, and I agree. But he had some data that at the current time—this was probably around 2007—women would reach parity—around fifty-fifty with men—for being assistant professors, I think it was something like—oh, I can't remember, but associate professors it was 2038, and full professors in 2058, which I probably wouldn't live to see. And that was really shocking to me. I don't think that's going to be true anymore, and it's going to be a few years before we know, but I think things have changed. And the curves are getting steeper, and it may be critical mass, it may be that there's been a change in the younger generation, in how they view people who were not traditionally included. I don't know what it is. But I think that this is a really good sign. So. I am a woman dean, and I a happy to use that anytime it will help promote (*laughter*) women's careers. But at the same time, it's not something that's really part of my day-to-day psyche. Um, Margaret.

HUMPHREYS: Margaret Humphreys. I'm in medicine and in the history department. I want to talk about "the baby question" a bit. But before I do that, I'll go back to a time—you and I both trained at Harvard, a couple years apart, in medical school, but just a few years after the class action suit that radically increased the number of women in medical school so that, by the time I entered medical school in 1983, it was 37 percent women, a few years later it got to fifty-fifty, and other schools did this at varying paces. So we're now whatever we are years out from that. And the women are correspondingly older and so forth. But I want to share a couple of anecdotes—you like anecdotes—from being a medical student and working with residents. So now these are residents who are maybe four years further along than I am. One was at Mass General; I was the lowly medical student running around. And Linda Emanuel, who's a fairly well-known medical ethicist now, was pregnant, very pregnant. And Linda was very thin, and so

she looked even more dramatically pregnant. I think that Linda wanted to prove to everybody that being pregnant would not slow her down, so we walked from the second floor to the seventh floor routinely. And if you couldn't keep up—I mean, you know, here's this pregnant woman, and here you are huffing and puffing. That was one attitude of, I'm not going to be weak just because I'm pregnant. Another friend of mine finished her twenty-four hour shift as a senior resident, and then went down to labor and delivery and was several centimeters dilated. She was not going to stop her—she didn't care, you know. She would've had the baby in the ER, but she was going to finish her shift. And I contrast that to a third resident I worked with who was also pregnant, but we loved her, because we'd round in the morning—it was on internal medicine—then about 10:30 we'd all go to the cafeteria to sit down and eat while we talked about the patients, because she said, "I have to eat every two hours; I'm sorry." (*laughter*) You know, so I guess I tell all these anecdotes to raise the question of what do you do about—or what do you personally think ought to be done about this sort of macho culture of medicine where the senior resident says to the intern, Call me if you're weak. Which is still, I imagine a fairly traditional attitude. When it is women who are going to have babies if they're going to happen, and that is an inherent state of weakness and disability. I mean, at some stage in the process. So how do you—what do you do about that?

ANDREWS: So I wish that I had a better answer. I'm not sure how it currently is. I think many more women get pregnant during medical school or graduate school or residency now than used to be the case. It's I'm sure still not easy for them, and it's still not easy for the people whose schedules are altered because of it. But I think one of the things that we may be moving toward—and I'm not trying to dodge your question, it's just I'm not close enough in with the current residents to really have a sense of what things are like—but I think one of the important

steps forward is an increasing recognition—and I think this is really happening—that family isn't a women's issue, it's a people's issue. And that young men—in fact, there have been times I some of my roles where more young men came to see me about how they were going to balance their family and their career than young women. And I think it's really important that we not see it as a women's problem, because it just perpetuates the inequities, I think. And that's one of the things that I think Duke has been pretty good, and Nancy Allen is sitting back there smiling, because she's been a part of this. But I think that having a culture that is more accepting of families in general and of people taking responsibility for their families and wanting to spend time with their families. And there's a huge generational shift, and I always worry talking about generational shifts in front of Ann, because she knows this much better than I do, but I think that young people care a lot more about having that personal time and feel less of the—what I was told after I got here—was the Duke Marine culture where work has to come before everything else, and there's a tremendous kind of macho about work and loyalty to work rather than loyalty to other parts of life. So I think it's coming no matter what people want, because there are rising generations of people who are set on having time and energy for their families. So that's sort of a nonanswer.

BARBARA BUSSE: Hello, I'm Barbara Busse. And I just wanted to make a historical note that Doris Howell, who was here in the fifties, went on to lead at the Women's Medical College of Pennsylvania, and she was also a pediatric oncologist and hematologist, and so I just think it's kind of neat to make the connection.

ANDREWS: Thank you. And I like the fact that I share with Wilburt Davison being a pediatrician. I'm glad Duke has a strong history of pediatrician deans. Ann.

BROWN: Ann Brown—and I wanted to—I noticed in putting together your bio that you were a founding member of the Rosalind Franklin Society. And so I've ordered her biography. But I wondered if you could tell us a little bit about that society which is meant to support women scientists and tell us how it does its work and what your experience has been with that.

ANDREWS: Okay, certainly. So Rosalind Franklin was part of the team of people that—although I'm not really sure they functioned as a team—(*laughter*) that determined the structure of DNA. She was one of the investigators who made a major contribution to understanding the double helical structure of DNA. But was not one of the Nobel Prize winners for that discovery. And so I think the use of her name for the society—she died many years ago—but the society was started in her name because her contributions weren't, in many people's view, properly acknowledged. So this is really driven by a publisher, Mary Ann Liebert, who publishes a number of journals, lives in New York, and had been bothered—scientific journals, maybe others as well, but I know the scientific journals—had been bothered by the fact that women weren't being recognized with major prizes to the same extent that men were. And so what she did was to organize I think it was initially about fifty of the leading women scientists, a few physicians, a couple of men, but they basically had to win a Nobel Prize to get into the club, so primarily women to come together as the Rosalind Franklin Society. She sponsors it, and she asks those women to nominate friends and colleagues and got the group up to about a hundred people, and I think it's grown since. And what it does, still largely on her initiative—she's really a remarkable person—is every time a major prize is announced and there isn't a woman winner, so when the Nobel Prize is announced and no women win, which was the case or nearly the case this year. Last year women did quite well, got a bunch of the Nobel Prizes. She'll send out a press release, and she'll contact the organization, and she'll nag them. (*laughter*) And say, This isn't right.

And I read all of the press releases, and it's one of the benefits of being involved with this organization. And it's really shocking how many major prizes have never had a woman winner or have had very few women winners. And I don't think the reason is that there aren't qualified women who should be winning these prizes, I think it's just somehow they're not making it onto the final list. And that's Mary Ann Liebert's point, one of the points of the Rosalind Franklin Society. And so it's really an awareness, consciousness-raising, if you like, organization. But I think it points to a problem that is more general and not just related to the awarding of prestigious prizes. That it's very easy when somebody is trying to think of someone to nominate for an award or a high profile society or for an important committee, I think that it's natural for many people, men and women, to just mentally make a list of men. And excluding women and excluding people of color who may be just as qualified. And I noticed myself doing that a number of years ago, because the people who pop in your head are always the same characters that tend to get the recognition all the time. And my personal solution was to deliberately make a list of people, look at lists of people from societies that were related to the area that the nomination had to be in, or find lists in other ways. And deliberately try to expand the list beyond the usual cast of characters. So I think that is what the society is agitating to do. They have meetings in general once a year. The meeting last year was cancelled because it was a time when not very many people could come. And the program varies. It's a lot of fun to get together with a bunch of very intense women and a few men with Nobel Prizes and (*laughter*) talk about the issues.

CHRIS TOBIAS: Chris Tobias. I was wondering what you think your greatest accomplishment has been so far or what you hope to accomplish as dean.

ANDREWS: As dean?

TOBIAS: Yes. Well, or you can even comment on your whole career, if that's easier.

ANDREWS: Boy. I think it's probably too early for me to say what my greatest accomplishment as dean will be. I think the thing that has taken the most effort and something of which I'm proud—it's actually not a very exciting thing. I think we have navigated a horrendous financial time relatively well. We—everybody has felt it, and everybody has had to do things a little bit differently, but this could have been a disaster for the school of medicine. And it hasn't been. And we've managed to keep moving forward, keep doing new things. Not on the scale we might have otherwise. And so probably the most valuable thing that I've contributed to the institution, along with great people that I work with, is keeping the ship on course. And helping us get through this tough time in relatively good shape. Beyond that, I think I'll need some time to let things simmer and see where they get to before making a claim.

MARGARET HUMPHREYS: I thought you might finish that up with the new building. (*Andrews laughs*) And so I thought I'd ask you how you see—I mean, to me, the new building—I'll finally be able to say, There's Duke Medical School. (*Andrews laughs*) Which has always been sort of a problem. But (*laughter*) where is it? But the—how do you see the new building as changing Duke Medical School, aside from shiny new labs and everything. But how does the new space change the teaching process?

ANDREWS: So I love talking about this, and I think it's a great accomplishment for Duke. I can't personally say it's my accomplishment, because it's come about from hard work of a lot of people. And Ed Buckley, for example, vice dean for medical education, has really driven this, and gotten people to think very creatively about what the building is going to be like. And it will happen on my watch, and I'm very pleased about that, but it's all of our building in a way. So right next door to here, at the very heart of Duke medical campus, if you look at it on a map, our

faculty and students are distributed in ninety-six buildings around Durham, most of them very close to here. If you look at just those that are physically on the Duke campus—we lease a lot of off-campus space—the new learning center next to this building is right at the heart of it. And what it will be is the first new home for education at the school of medicine in eighty years. The last time a building was built for education was when the school first opened around 1930. And the Davison Building, which now is a nice place to have an office but now falls far short of what we need for modern medical education. This is a building that could come about in spite of the very difficult economic times because of a wonderful thirty million-dollar gift from the Duke Endowment, some much smaller but still very, very much appreciated gifts from our alumni. And several estate gifts from former alumni who—two actually—who left money to the school of medicine in their wills. That all comes together to get us almost all the way there to build a building that will be, I think, a very exciting place for education because it's going to have all of the current—2012, when it opens, or beginning of 2013—state-of-the-art technology. It'll be flexible so that it can accommodate many different learning and pedagogical styles. And it's going to be flexible also, I think, so that it will stay modern and stay exciting for decades afterwards. We're deliberately building it knowing that we don't know what medical education will look like. And we need to have it be flexible enough that it's going to work for a long time. Some of the important features of that building: first, maybe the most important. I want it to be a place that's welcoming to all learners on campus. So not just medical students: nursing students; but also physician assistants; physical therapy; graduate students; residents; fellows; other degree students; the faculty; and hopefully also, at least under some circumstances when it's appropriate, patient families. I want it to be a place where people can come together around learning and gather to share things and to interact in ways that right now we really can't because

there is no dedicated space for learners, particularly not near the center of the campus. But really very little at all. I said there were going to be two important things about it—yes. The second one is that we're not building quite the whole building in the beginning. It's going to have six floors, and the top floor, added because it is cost effective to add it now and because it's aesthetically nicer to have it added now, the top floor will be shelled. It won't have anything in it to begin with. It will just be an open shell that can be filled later. And that's part of not knowing where things are going, not knowing what we'll need in the future for medical education. So it gives it even more flexibility over time. I'm very proud of that building, and I'm very excited that I can be dean while it happens, but it's many people coming together to do it.

SARAH TRENT: Hi, my name is Sarah Trent. I had a question—when you were talking about parity. There's definitely a stigma that women are making less money in the world, with similar jobs. And I'm wondering if you could speak to that a little bit at Duke, within Duke Medicine.

ANDREWS: Yes. So I think that is true in the world in general. Duke Medicine has three different financial entities: the school of medicine; the health system; and then the private diagnostic clinic, which is the physicians' practice. I can really only speak to the school of medicine, because that's the place where I have budgetary authority. In the school of medicine we work very hard to make sure that there aren't inequities. And that means fixing them when we see them and looking over and over again to make very sure that inequities aren't developing. I think part of the reason that women's salaries often become lower is that it happens over time, and, if people aren't watching, what begins as a very small difference will grow. I saw that in my own salary at Harvard. There were three times while I was on the faculty at Harvard when I suddenly got something like a twenty percent or thirty percent pay increase. And the reason was

because somebody had gone through and checked and realized I was making less than men at a comparable level. One shocking story that I probably shouldn't say related to one of those three times. But anyway, it's something that we worry about a lot and that we have to be very vigilant about. Because it creeps up on you very easily. What often starts to cause the inequity is that somebody makes noise about their salary and gets an increase, and others who have similar qualifications don't increase. And in my experience women are somewhat less likely to make the noise about their salary than some of the men. But this is part of what Ann pays attention to, and I know Nancy [Allen] does also for the university. I can't speak to what happens in the PDC and the health system, because I don't see their books. But I hope that they're similarly vigilant.

JOHN HAMILTON: John Hamilton. My question, Nancy, revolves around your decision to obtain the PhD as well as MD. The background is this: shortly after I came to Duke, I was in the lab doing my bench-related lab work. And it occurred to me that perhaps I should return to school and get a PhD. And I actually went to see the then-chairman of medicine, Dr. [James] Wyngaarden, whom I'm sure you're quite familiar with, to ask him should I do that. Because I was pretty serious about lab work. And he said no. So I'm wondering if you would just reflect a little bit on what the process was whereby you decided the answer was yes.

ANDREWS: Yes. So I went to college thinking that I was going to be a scientist, and I had kind of an aversion to what I perceived to be the premed culture, whether it was true or not. Others might know better than I do, because I didn't ever join into it. But I went to college thinking I was going to go into science, and it was towards the end, right around the time I needed to apply to medical school that I first met some—I was at Yale at the time—I first met some MD-PhD students. And I thought what they were doing was fascinating. They were doing very serious science, but they were doing it thinking about human biology and thinking about disease. And

for me that was a great fit. I liked working with people, I liked the idea of doing some medicine, and the idea that you could do both science and medicine was really exciting for me. I remember going to one of my interviews at another one of these top-ten schools that ultimately withdrew my application from and having the interviewer say to me, "You seem like a people person, and I'm sure you're not going to end up doing science." (*laughter*) And I was so shocked that I just immediately terminated my application. But for me it was more of a question of should I do medicine. And I'm very, very glad that I did. I was fortunate to be part of a program where you could do both somewhat simultaneously. I could do in seven years both my medical degree and my PhD. I've always been very glad that I did do medicine, and I think I have a much richer world. And I think for me personally have potentially much more to contribute from the route that I went than I would have if I hadn't gone to medical school and hadn't become a clinician as well as a scientist. I think part of it for me was that I've always had sort of an addiction to the lab. Once I got far enough to realize what lab work was like and what science was like, I really couldn't let it go. I spent a lot of extra time in college in the lab. When I got to medical school, I was feeling withdrawl, and I was the only student who got attached to a lab and couldn't give it up. Same thing during residency. I was the only resident in my group that went to the lab on weekends and holidays, because I truly felt a strong compulsion. I just loved it that much. And I think I'm one of relatively few deans—there are others, I'm pretty sure—who still do lab work. And it's the same thing, I just couldn't give it up. It was too much fun. But I didn't have to have a PhD to become a lab scientist as well as a physician. I think things have changed over time. There was a generation, a wide generation of people who became physician-scientists because they had an objection to going to Vietnam, or they chose not to go to Vietnam. And they instead went to the NIH [National Institutes of Health] to do science. And had outstanding training in

the years of the Vietnam War through the NIH. And many, many of a particular generation of physician-scientists came through that route. And benefitted a lot from it. There is not currently an equivalent, and I think now it can be a lot harder to get the training you need in science without having done the PhD. It's still possible for sure, but it takes a big commitment of time and energy to learn enough about science and how to think as a scientist to have a broad career as a physician-scientist. I think if you're interested in clinical investigation, which probably at least in current times doesn't benefit most of the time from having a PhD, or interested in relatively narrowly defined areas of science, it probably doesn't make much difference. But I think for young people now who want to be able to move from problem to problem across a broader range of scientific areas, it's very difficult to do if you don't put in the time somehow. And a PhD program is a well-organized way to get that all together. Some people do it very effectively during their fellowship training. But it takes longer to get that breadth now than it once did. I don't think you made a mistake by not doing it, but I think that currently it's a lot harder. When I started in medical school, the PhD students at Harvard Medical School sat in the same class as we did and had the same core—I was a few years ahead of Margaret [Humphreys]; I started in 1980. And had the same core scientific knowledge that the medical students did. But that's not been true for a long time now, and so now there's a big divergence between the core training for PhD students in the biomedical sciences than for medical students. And it's an awful lot to bring together.

RACHEL INGOLD: Hi, I'm Rachel Ingold. I'm wondering what your advice is for young girls and young women who are interested in science and what kinds of struggles they might encounter. And I'm also curious your thoughts about how we as community members and

librarians can help foster that interest in young girls, young women, other underrepresented groups.

ANDREWS: Yeah, I think it's a very complex issue. I think part of the answer is not scaring people off. And that happens in different ways for different people. For me I was just oblivious; it didn't hit me at all that none of the scientists above me, or very few of them, looked like me. You know, it took a long time to really realize that. But I think that's a little bit unusual. And I think that having people who—young women, young students can look to and say, That person is somebody I identify with, and they're doing it, and they seem to be enjoying it; makes a big difference. And that's something we can offer now much more than we could at one point. I think some of it is not getting talked out of it. For me, I—maybe this is part of being oblivious, but it never occurred to me that I couldn't do it. And now I think I've heard many stories, and I hope this actually doesn't still happen, but it probably does, where young women would be told in college, It's not for you, you know, you can't do that, you have a family, you can't do it. For whatever reason. And I think that women and members of underrepresented groups have felt—and I've felt this, too—that they had to sort of superachieve to be viewed as the same. And that's a tough thing and especially when someone is telling you, either directly or indirectly, that you can't do it. And so part of it has to be getting rid of that message. And part of it I think is helping young people know what science is really like, what's fun about it. I mean, there's a reason I'm addicted; it's not because science pays particularly well. And that's not really the reason for most people. Because if you want to make a lot of money, it's not necessarily the place to choose. It's not because it's an easy life, because having to continuously get grants and worry about how you're going to pay for your own job and your own salary, or at least a piece of your salary is tough. I do it because it's fun. And I think if we can show young people how it's

so much fun, that counts for a lot. So a natural question might be, well, what about my own kids? I have a daughter who's eighteen, and she's a freshman at Duke and a son who is fifteen. And I've always tried hard not to make them feel like they had to go into medicine or go into science, but I'm sure that some of the excitement about it is hard to hide and probably comes across. And with my daughter, she finally, at the end of high school began to get a little interested. And what I did was to bring her into the lab with me occasionally on the weekends. It was great for me because I could actually do science with my own hands, which I don't get to very much anymore. And it was great for her, because I think she could really see what was fun about it. So I think making those kinds of experiences available—and I think one of the experiences I'm very proud that the medical school does—again through the initiative of others far more than me—is to bring kids in from the community and show them what can be fun about science and medicine. And we do that—a number of people at the school do it in a number of different ways. I helped out with one of those programs which was for middle school girls from Durham who came one morning—. It's a program the undergraduates have run every year now for quite some time. And it was a lot of fun talking to this huge group of girls who were taking their weekend to come and learn about science. It was fun until my son told me it made YouTube. (*laughter*). And having my son say, "Oh, I watched you talking to those girls on YouTube" was a little embarrassing. If I'm on YouTube, I try not to know it. (*laughter*) So I think that's what we need to do. We need to show that it's not dry, that it's something that isn't just for a few special smart people. It's something that anybody who's interested can do. It takes no special—I mean, you have to work hard and you have to be smart, but I don't think science is really any different from many other fields in that sense. And so we need to show young people that they can do it and that it's a lot of fun.

NANCY ALLEN: Nancy Allen. You've already used my name a few times. You and I as Nancys have gotten each other's e-mails occasionally.

ANDREWS: Yes! I only keep the good ones. (*laughter*)

ALLEN: I don't send you the bad ones. So I have just a couple of comments. One is having served on your search committee, I'm very proud of your being here.

ANDREWS: Thank you.

ALLEN: To see women as leaders here at Duke makes such a difference. It's wonderful. I've been at Duke since '78 and on the faculty since '82 in the biggest department in the school of medicine at a time when there was less than 5 percent women on the faculty. I was the lone person in the room a number of times. But women as leaders here at Duke have clearly made a big difference. Think about Kristina Johnson in the Pratt School of Engineering who more than doubled the percentage of women faculty, and you, who have already quadrupled the percentage of women as department chairs. So it's really terrific to see you succeed.

ANDREWS: Thank you.

ALLEN: And also to think about Nan [Nannerl] Keohane as Duke's president. That happened to be one of the happiest days at Duke for me personally when the trustees announced she would be president. So I wanted to personally thank you for all you are doing, the leadership and mentorship that you are providing for women here.

ANDREWS: Thank you. Thank you very much. You know, we still have more work to do. I know that we're not tapping a large enough pool of really great, bright young people out there or older people coming in as chairs. I think we've made some progress, but until we get to the point where we don't have meetings talking about women in medicine and talking about

increasing representation from different groups in medicine, until we get to the point where that just happens as part of finding the best people, I think we still have a lot of work to do.

SARAH TIMBERLAKE: My name's Sarah Timberlake. I just started in the nursing school this January. And I come from a background in science research. So I'm hoping to kind of merge those.

ANDREWS: Great.

TIMBERLAKE: On the lines of leadership, though, Kevin Sowers came to speak to us a couple weeks ago, and it seems like your career path and his career path have common features in that you've either been called into a leadership role or stepped into it because you saw a problem that you just wanted to solve. And I'm wondering, based on your experience and your own career and with your recruiting, whether you see there being an increasing need for the formal training. Like MPH, MBA, master's in public health administration. I see these programs coming out more often now. And I wonder if you think that' s going to be more important for coming generations of leadership or whether it's still going to be sufficient to have real life experience and then the desire to learn on the job and to really learn what you need to do while you're—you know, on the fly.

ANDREWS: Yeah. So I honestly don't know the answer to that question. I'm on the fence. On one hand—and this may be a generational thing—the people who in my life I've thought of as great leaders, I don't think any of them had any kind of formal leadership training. It was partly their personalities, partly the problems they saw that they wanted to solve, partly being seen by whoever was selecting the leaders. And then learning a lot on the job. And for sure experience is great, although sometimes coming in without a lot of experience and a fresh perspective is really great. On the other hand, having a little exposure to the ELAM program, for example,

through Ann—and actually I met Holly [Lisanby] first. I was at the ELAM program with Ann a few years ago. And seeing the kind of people who have come out of it and the kinds of skills and confidence that they've gotten from the program, you know, I think that that's been tremendous, too. You know, I haven't ever had—well, (*laughing*) actually in fourth grade I was part of a group that had leadership training, but that was the last time. (*laughter*) Hard to say whether it helped me or not. Maybe. But, you know, so I don't really know. You know, I think that from the perspectives of looking for leaders, one of the things I've learned as I've gone higher and higher up in the system is it looks a lot more obvious from above. Who has leadership potential from among your peers. Or at least for me. I could not have picked out, for example, one of my med school classmates who went on to be a very effective CEO of Mass General Hospital. I mean, I just wouldn't have said, Oh, yeah. That's the guy. And in fact if I had tried to guess, I almost certainly would have guessed wrong. But I think from my current position, I do get to see—and some of it's experience looking for it—the kinds of traits that are showing leadership before it's fully blossomed. And I read recently—Nan Keohane had written—I don't know if it was a book or an article or a series of articles—

AUDIENCE MEMBER: *Thinking about Leadership*?

ANDREWS: Yes. And I read—what I read was a series of essays, but I'm not sure how they got it—

AUDIENCE MEMBER: (*unintelligible*)

ANDREWS: —assembled. And I thought they were very insightful, and a lot of things in there rang true. And so I can sort of recognize it when I see it. But I don't know if the formal training is important or not. I guess it's easy to take advantage of it. Most of us end up in this kind of environment because we love learning, and that might be a reason to do it. But I think for me

myself, it might be too early to say whether it's necessary or not. Well, I don't think it's necessary, but whether it's advantageous or not. I just don't know. You haven't been taping this, have you? (*laughter*)

LEONARDELLI: We'd now like to present Dean Andrews with a gift to thank her for her participation here this afternoon.

(*Roseberry presents gift*)

ANDREWS: Thank you. I love the [Duke blue] color of the wrapping paper! (*laughter*) Thank you very much. Thank you for having me, and thank you for coming and listening, and I've enjoyed this.

(*applause*)

LEONARDELLI: We've had a tradition at this event to ask if there are any trailblazers in the audience. At this time, would all the trailblazers in the room please stand and be recognized? (*trailblazers stand; applause*) Do you want to share anything?

BETTY RIVERS: Do you want us to introduce ourselves?

LEONARDELLI: Sure.

RIVERS: I'm so happy to come today. I started one time not to come, because you know I've got nurses' knees after working thirty-four years at Duke! I said, I don't know whether I'm going or not. But I can't miss it; I might not be here the next time. My name is Betty Rivers. I worked on Osler Ward. And I heard that statement made about Duke having a Marine cult thing. A Marine culture. That means *hard work*! I used to feel so sorry for the med students and the interns. Dr. Eugene Stead turned out some very, very good doctors. And I used to always say if I ever have to have heart surgery, I would trust Dr. [Victor] Behar and Dr. Norris. Norris? Yeah. I remember. Morris! He worked the (*coughs*) out of them. He really did. He turned out

some good students. And I enjoyed it, I really did. Every minute of it. Every time I see something on TV and worldwide about Duke, I just smile. And when it snows, I still smile. Because I don't have to worry about the National Guard coming to get me to bring me to work. (*laughter*)

TRAIBLAZER: Betty Rivers and I were coworkers at Duke. And I would like to say she has a son that is a doctor, and I'd say he's one of the first—*one* of the first black students to come here as a doctor. And I can remember coming to Duke, and I was an LPN. And I got so tired of hearing the RNs saying, I wish they would go to school so I don't have to give all that medicine. I was in the bathroom and nobody knew it. And I remember hearing that Duke was going to send people to school just to take pharmacology. So I was in the first group that went to school to take pharmacology. And when I graduated I was an MLPN (*unintelligible).*

ERNESTINE TURNER: I'm Ernestine Turner. I worked at Duke as an MLPN for thirty-one years in the Department of Psychiatry. Which I learned a lot (*laughter*) as she was stating. About human behavior. (*laughter*) And now when I watch television, I'm just floored with what's going on. I just say, "The world has gone crazy." What we used to talk about with Dr. Keith Brodie, how crazy people are. But now it looks like the whole world is. So the ones of us that's sane, we're having a hard time (*laughter*) surviving. But I enjoyed it. I came in 1967. And that when it was very few of us working in the Department of Psychiatry. They had to do all these interviews I guess to see if you was sane enough to work there. And (*laughs*) so I was fortunate to pass all the interviews and be there for thirty-one years. And I enjoyed it, really, because I learned a lot, as I stated. Thank you.

RACHEL DAVIS: Excuse me. I fell down the steps. My name is Rachel Davis. I worked here for thirty-seven years. I was the first black clinical nurse manager in the operating room at night.

And I worked with Dr. Ivan Brown, Dr. [Will] Sealy, all the old doctors. And I learned quite a bit. I can operate from the toe to the head. (*laughter*) And dissect also. We didn't have physician assistants at that time. So that was part of my job, being the assistant. And the doctors and I did many cases just himself and me. But I enjoyed it truly, and I wouldn't take anything for it. I wish I would have gone on to be a physician assistant, because with my age I think I could really learn something now. (*laughter*)

TOMMY SMITH: I don't know if you all are interested in male trailblazers, since you're talking all about women. (*laughter*) But I consider myself a trailblazer, too. I worked here at Duke for forty years as a nurse, but I started in '69 when there were very few males in nursing. And I caught hell in school, hell at Duke, and anywhere I went working; it was really rough. But I survived. But it has been fun and hard work. And the important thing is I am still able to have half a brain, half a mind, still functioning. You know, being sixty-plus. So it's wonderful, and I wouldn't have changed my life in any way.

BEVERLY MURPHY: Your name?

SMITH: Oh, my name's Tommy Smith.

QUESTIONER: Is there any scholarship fund to aid students that would be interested in science, since y'all do go to the middle schools?

ANDREWS: So—

AUDIENCE MEMBER: Can you repeat the question?

ANDREWS: Sure. So the question was whether there's aid for students interested in science. Yes, in some ways. So first, our financial aid package is need-blind. So any student who is admitted can come regardless of their ability to pay. But we also have, in addition, the MD-PhD program where students do both their medical degree and a PhD in the sciences or sometimes

social sciences—occasionally humanities—is also a program that provides funding for the education with the rationale that when those students finish, they're headed toward careers where it will be more difficult for them to pay back loans. And so we do try to aggressively provide financial aid to help our students go through medical school and then go into whatever career they feel they were made for. It's not perfect; we still have students who graduate with debt but with less debt than at most medical schools, less debt than at our peer schools. And that's something else I worry about a lot. Because having any debt these days I think is very scary for young people. And we don't have a total solution yet, but we definitely do help them.

LEONARDELLI: It's been a wonderful program today. Now I'd like to ask Jessica Roseberry, oral history program coordinator at the Duke Medical Center Archives to give our closing remarks. Jessica.

JESSICA ROSEBERRY: Upstairs on the second floor of this library are banners created by the National Library of Medicine that honor historical women in the medical field. In this display you'll find stories of important medical women of our collective past, women like Dr. Mary Putnam Jacobi. Dr. Jacobi lived in the late nineteenth century in America, a time when a significant argument of the day was that women should be very restful and calm, that their bodies and minds were not strong enough to handle the pressures that men could handle. In other words, they were to be kept on the hearth while the men strode through the world. But Mary Putnam Jacobi believed that women's minds and bodies were strong enough to stride through the world, too, and she saw science and medicine as unique venues for her to prove women's abilities. She set about to establish that women were strong by both her example and by scientific research. How did we move through the century that stands between Dr. Jacobi and those of us in this room? Through the lifespan of this medical center, who are the women who

have proven daily what Dr. Jacobi knew to be truth? What are some of their stories, their contributions? Remarkable women strode through these halls. Dr. Mary Bernheim was on the original faculty here beginning in 1930. She was a biochemist and flew her own airplane. Dr. Elizabeth Bullitt graduated from the neurosurgical residency at Duke. She wanted to touch the human brain and understand its power. Dr. Catherine Wilfert worked both in America and overseas saving the lives of babies born to mothers with AIDS. Dr. Priya Kishnani specializes in clinical trials for treatments of rare diseases. One floor up in this building you'll see a group of banners that honor women in this medical center who were the first in their respective fields or positions, including a part of the exhibit dedicated to our speaker. It is true that some of the women who have come through this medical center have had struggles. In the 1950s and '60s, Dr. Grace Kerby wasn't paid as much as men of similar rank because the then-chair of medicine saw her as a single, childless woman who wasn't supporting a family, and he therefore thought he could pay her less. There's a book put together by Duke doctors in the 1970s that objectifies women anatomy models as pinup girls. Women have had to weigh family choices against tenure clocks and demanding hours. Some women have felt isolated or unseen. The road through that century, the road from there to here, has not always been smooth. But we are in an exciting time. Dr. Jacobi believed in scientific research, and scientific research is alive and well here. She led by example, and we've just heard a talk by the first woman dean of any top-ten medical school in the United States. (*quiet laughter*) Women like Dean Andrews and Dr. Brown show by their example that women can excel at the highest levels of leadership. We also have new women department chairs, including of the largest clinical department of the medical school, we have women in executive leadership, and many of these hires have been a part of Dean Andrews' legacy. The title of the exhibit upstairs is "Changing the Face of Medicine". And you'll see that

some of us are wearing red buttons that say those words. In fact, you can pick up your own button in the back, if you'd like. As we celebrate women's history month together, let's think about remarkable women here who are still changing the face of medicine on a daily basis. We are striding through common halls. Deans, physicians, leaders, workers, scientists, librarians, social workers, all of us have a part to play in order to keep proving what Dr. Jacobi wanted to prove: that women are intelligent and strong, and that the bench, the bedside, and deanship are agood places for them to be. Thank you for coming.

(*applause*)

(*end of event*)