ORAL HISTORY INTERVIEW WITH THOMAS BASHORE
Duke University Libraries and Archives
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COLLECTION SUMMARY

This collection features an oral history Joe conducted with Thomas Bashore on October 12 and 16, 2020 The 30-minute and 85-minute interviews were conducted in Durham, NC*. Our conversation explored Bashore's interest in visuals and history related to medicine, his pedagogical approach, and his thoughts on program leadership and restructuring. The themes of these interviews include cardiology, medical training, and collaboration in medicine.

This document contains the following:

- Short biography of interviewee (pg. 2)
- Timecoded topic log of the interview recordings (pg. 3)
- Transcript of the interview (pg. 4-34)

The materials we are submitting also include the following separate files:

- Audio files of the interview
    - Stereo .WAV file of the original interview audio
    - Mono .MP3 mixdown of the original interview audio for access purposes
- Photograph of the interviewee
- Scan of a signed consent form

*Due to COVID-19 social distancing protocols and best practices, Joseph recorded the interview remotely via Zoom. At the end of the interview recording, we recorded a self-introduction and room tone for use in a production edit of the interview.

BIOGRAPHY

Cardiologist Thomas Bashore has been on faculty at the Duke University Medical Center since 1985. He's an expert in the treatment of complex cardiovascular conditions, and was instrumental to establishing programs in valvular heart disease and adult congenital heart disease at Duke. His additional achievements include earning repeat awards for his role as a teacher of cardiology fellows. He holds positions as a Professor of Medicine in the Department of Medicine and the Senior Vice Chief in the Division of Cardiology.

Bashore grew up in a small town in Ohio, and pursued interests in art and physics before finding his calling in medicine. He first became fascinated with the heart as a medical student at Ohio State University. When Bashore joined the Duke faculty, cardiologists faced a growing need for the treatment of patients with anatomical heart issues. "They have a lot of surgeries, they're hooked up very unusually," he explains of patients with adult congenital heart disease. At the same time that this patient population grew, medical technologies were emerging to help treat them. "New devices were coming along... You could fix holes in the heart, plug up shunts and things… And there was nobody here that did it," he remembers. Dr. Bashore is among the cardiologists at Duke who made it their mission to fill this gap. In the 1990s, they launched the Adult Congenital Heart Disease Fellowship Training Program, which remains a leading program in the field.

Bashore prides himself on his success teaching fellows. "I'm a clinician, and I've done research in the past. I've had a lot of administrative hats," he reflects. "But I think my legacy will be that of a teacher." He has gained a reputation for using his drawing skills in his teaching practice, and for maintaining a sense of fun and personability. After rounding with a group of fellows, his ritual is to buy them coffee at the Starbucks on the DUMC campus. At these post-work sessions, Bashore lets his sense of humor shine through. It's not unusual for Bashore and his fellows to order under false names--always medicine-themed, of course.

INTERVIEW TOPIC LOG (thomas-bashore-interview1-audio.wav)

00:00 Introductions
01:44 Early life in Ohio; college at Ohio State University
02:53 Early interests in sports, art and, physics
04:57 Pre-career jobs
06:30 Interest in drawing; drawing heart diagrams for patients
11:41 Internship at UNC; fellowship at Duke; early practice in Fairfax, return to Duke
15:30 Work in Duke cath lab
18:55 Pedagogical approach to training medical fellows; humor in teaching
23:12 Tradition of Starbucks trips after rounds
25:11 Approach to interacting with patients; soft skills
27:42 Work with Zainab Samad on WhatsApp and technology in training

INTERVIEW TOPIC LOG (thomas-bashore-interview2-audio.wav)

00:00 Tradition of roasts; humor in training
04:31 Changes made to fellowship program
08:56 Development of adult congenital heart disease program
11:26 Innovations and explorations in treatment of heart disease during early tenure; valve ballooning; Das Angel Wings; reasoning behind focus on adults
17:25 Collaborative work with Marty O'Laughlin, Steve Sanders, Andy Lodge, Vic Tapson, Terry Fortin, Rich Krasuski; importance of surgical support
21:50 Importance of Duke Heart Physicians structure
23:10 Advent of Heart Center and collaborative relationships necessary to develop; relationships with surgeons
32:01 Advice for new trainees and those entering the job market; reflections on why Duke was a good fit for himself
37:53 Experiences in private practice; camaraderie and collaboration
39:47 Professional dialogue and experience on rounds; what he looks for in applicants
44:09 Diversity in cardiology
45:08 Misperceptions about sub-specialty
48:00 Typical work hours and reflections on stress in profession
49:49 Specialization of field; advent of electronic medical records
55:50 Experience creating anatomical drawings
58:45 Collection of historical medical objects
01:07:25 Use of collection in teaching; importance of skepticism
01:12:15 Reflections on Duke culture; advocacy to change mandatory retirement age

TRANSCRIPTION (thomas-bashore-interview1-audio.wav)

JO 00:00
So the date is October 12th, 2020. I'm interviewing Dr. Thomas Bashore, my name is Joe O'Connell. And these interviews are oral histories for the Duke University Medical Center archives, and the Department of Medicine. And the interview that we're conducting today is a remote interview on account of the physical distancing needed during the Coronavirus. So thank you very much, Dr. Bashore for talking with me today. To start out with, I wonder if you could tell me as an entry point, what is your position currently? And if you were to describe it to somebody who's a non-specialist, what would you say that you do on a daily basis?

TB 00:56
Well, I'm a Professor of Medicine and Senior Vice Chief in the division of cardiology, and I mostly am a teacher, I'm a clinician, and I've done research in the past, I've had a lot of administrative hats. But I think my legacy will be that of a teacher, as the primary goal, and it was a goal that I wanted from the beginning.

JO 01:21
Okay, great. And I do want to talk a little bit about how you came to this career, and sort of what some of your early life was like, and how it shaped what you do now. Can you tell me a little bit about your upbringing, where you grew up, and what that context was like?

TB 01:44
I grew up in a really small town in Ohio that had 75 in my graduating class. I played basketball and I played [as a] freshman in college, basketball, and went to Miami University in Ohio, then Ohio State. And then, for my house staff, I went to UNC. So I was light blue. I was a fairly obnoxious Carolina fan. And now I'm a very obnoxious Duke fan. So that's worked out [laughs]. And I went from UNC to Duke for fellowship, and stayed on until '79. And then went into practice for one year and then went back to Ohio State for five, and then came back here in 1985.

JO 02:28
And when you were growing up in a small town in Ohio, what were some of the experiences you had that made you interested in either biology or medicine, or that started you thinking that maybe you wanted to be a physician, or medical researcher, or a medical teacher?

TB 02:53
Well, I wanted to be a pro basketball player [laughs]. At 5'8", that wasn't going to happen. I was interested actually in physics. So my first year I was doing physics, and I wasn't very good at math, that's a problem. So it's hard to be a physicist and be totally right-brained, and have no like zero left brain. So that was always an issue. It helped that I could draw. So, I liked to draw stuff. And a lot of articles that I've published I've actually drawn the pictures for. But I moved from physics because I wanted to do something that you could get a job in, and I looked at what physicists do long-term, and I wasn't sure there was a job market out there. And I sort of liked people. So I thought medicine would be ideal. And it was a perfect choice. So I sort of was influenced by some of the teachers I had during that time at Miami University in Ohio. But I

wasn't driven to be a physician the whole time, I think I started out on a little different pathway, and then decided that being a physician was the way to go. I didn't have a lot of role models. I grew up in a very small town, we were very poor. And so that was when it got kicked off, I guess, as an undergraduate.

JO 04:16
So initially, the people you were looking up to were in the NBA.

TB 04:22
Oh, yeah. Jerry West. I mean, there's a lot of great ballplayers [laughs]. But when you're that age, you just think you're a star, then you realize you're not very tall. That's not gonna work. So I still played basketball up until in the '60s when I finally ended up with two ankle replacements after school. But anyway, that was the initial goal. And it was a silly goal, but I was always a good student, so that has helped. I think I evolved as an undergraduate.

JO 04:57
And I always ask people what other jobs they've wound up having on their way toward what they do now. Do you remember any other summer jobs, or things that you did for money?

TB 05:13
I waited tables, I was an RA in a dorm, I baled hay. I did a lot of manual-type work for almost nothing. So, most of the jobs I had were very manual, made very little money while doing them. At one time, I was a draftsman. My brother owned a company out in California where they just made screws. So, I'd have to draw screws as a draftsman, so I'd had some draftsman experience. I went out there, and I sort of drew the mechanisms that they made the screws with and drew the screws. Now, drawing a screw's not very hard. So I spent a summer out there. And this is in Los Angeles. Unfortunately, every friend I had in Miami came and visited me, and I think I spent every dime I made up there, we all went down to Tijuana every day, and I sort of blew it [laughs]. But that was a fun job. And it was using some art skills, which was good.

JO 06:20
So everybody back in Ohio wanted to come to LA to visit and hang out.

TB 06:25
Yeah, just so we could get down to Tijuana and watch bull fights and the silly stuff that you did back then.

JO 06:30
That's interesting that you were drawing, doing sort of technical drawing at that early period. It seems like visuals have been kind of a through line in a lot of your work and your interests. And I wonder how did you get interested in drawing and sort of visual representations?

TB 07:00
Well, I used to draw everything in Mad Magazine when I was a kid. And sort of drew that [inaudible]. And there were a couple in my family that were pretty good artists. And I just did it

on the side just for fun. I think even since high school time, I liked to draw a little bit. When I was in college, I'd always take the notes. You know, you'd get $5 if you went to a class, and the other guys didn't go. I'd always make little drawings on the side and stuff like that with the notes. So, that was another way to make a little bit of money. But it's been helpful all along as I said, I've actually drawn pictures for articles. I used to get asked, as we go along, I've been involved in an adult congenital program, where these hearts are all very complex. So people would ask me just to see the patient just so they could have a drawing on the chart [laughs]. They didn't care what I had to say, they just wanted the drawing. So I used to go out and do that. It's actually been a very positive thing. I've never had any formal lessons or anything like that. I've used it a lot. We did a cath lab academy series for the cath lab last year that was 20 chapters, and I drew almost all the pictures for those. So in a way it's been a release. Wouldn't want to make a living at it. But it's been fun.

JO 08:24
That's really interesting. So when you're talking about people wanting you to see the patient, just so that you could draw up sort of like a diagram or a visual for their heart, are you talking about other cardiologists who would ask you to come and see one of their patients?

TB 08:43
Yeah. And I was one of the people that started the adult congenital heart program here, back in the '90s. And so I was familiar with, they get very complex hearts, because they've had multiple surgeries and they often don't have one chamber, or they have a variety of different ways they're connected nowadays. And that just presented an opportunity. So they would want an opinion, but they mostly just wanted the drawing, I think. It's been very helpful on rounds as far as teaching to kind of draw [inaudible] dynamics for people and draw the anatomy when it's complex, so I think I've used that as part of my teaching. And I've done it even when I talk outside of Duke, actually. It's been a valuable skill.

JO 09:38
So, someone with congenital heart disease, their heart might be laid out differently than someone else's.

TB 09:49
Yeah, you only have one chamber, they may have all kinds of hookups, multiple surgeries when they're children to get them to adulthood. There are more congenital heart patients as adults now than children. So it's becoming more common. And we have one of the earliest adult congenital heart disease programs. I was part of the responsibility for setting it up. So it's been an asset, it's been kind of fun.And there's no pressure because I don't, obviously don't make a living at it.

JO 10:27
So somebody who's seeing a patient for the first time, they might want you just to help them get an image for how..

TB 10:40

How it's put together, yeah. But that used to be when you had charts. So nowadays, with everything computerized, it's more difficult.

JO 10:53
Yeah, that really speaks to how important that visual information is, actually being able to picture what's going on inside the organ.

TB 11:06
A picture is worth 1000 words. And those folks in particular, because they may have very complex anatomy, is very unique to them. It's important that people that take care of them really understand what they're dealing with. So that's been an advantage, I think. It's been a good advantage. But that story goes along with the whole goal of being a good teacher.

JO 11:31
Right, being able to actually communicate the knowledge that you have.

TB 11:36
Makes it easier for folks to see.

JO 11:41
So, going back to some of that experience that you had, as a student. I think you mentioned it was at Ohio State that you're an undergraduate. Is that right?

TB 11:56
I was an undergraduate at Miami in Ohio, and then I went to Ohio State. And I think at that point I became interested in cardiology. Cardiology was very strong at Ohio State. And I went to UNC, my wife wouldn't let me come to Duke, because the call was five out of seven. She said, "You're not doing that." And unfortunately, when I got to UNC we rotated every third night. And then one guy dropped out and I was on every other night. She still hasn't forgiven me for that [laughs]. But we were a very close group at UNC. In fact, we've had multiple reunions, just our internship group, because it was so strong. And then I came to Duke in '75. And at that time, the way the fellowships worked, is that you were tied to a particular faculty member, cardiology fellowships are pretty early on. And so I was tied to the electrophysiology group with a guy named John Gallagher who was here, and I only did one year of fellowship. I did one year of fellowship, and then they needed somebody to run the heart cath lab at the VA. And so they said, "Well, you go do it." I said, "I've never done a cath!" So that would change. So I had a three month crash course [laughs]. You couldn't do this anymore, not with the ACGME stuff. So one year is all I did for this fellowship. And then I went to the VA and ran the cath lab. Three of us ran the cath lab over there, or ran the whole VA system for a while. And then when I started to leave the VA, nuclear cardiology was coming along. So I decided wrongly, to go into practice up in Fairfax, but I trained in nuclear cardiology quickly and then brought that to the northern Fairfax area. I was unhappy there. The group was so, honestly, so money-oriented, it just didn't fit. Gene Stead, who was a very important person here, and I got to know each other really well. And he wanted me to take what was called the Duke Database at that time, the Duke Databank, up there. Because he wanted to see if it would work in a private setting. So I took that, I did morning report with the

Georgetown house staff, but I wasn't happy. And pretty quickly, I wasn't happy. So I went from there to Ohio State to run their nuclear lab as their nuclear cardiologist. So I dropped out of cathing and did nuclear cardiology and echo there. And then I stayed at Ohio State for five years. We were very happy there. Our families are all in Ohio. They treated me wonderfully. But my career really took off and Joe Greenfield who was here -- first at the VA, then as chairman and chief of cardiology, then as chairman of medicine -- he called every year and said "When are you coming back?" And my wife said "We ain't coming." [laughs]. We were pretty happy there. Then finally, he said I needed to come back and run the cath lab, because it was a mess. And it was. I mean, I said, "I can't screw this up." It was really a mess. At that time there were two cath labs. There was one they were trying to start doing interventional cath. And then there was a diagnostic lab. And he needed to get the volume up. And so he made me one of those offers, you can't refuse. You know, almost a blank check -- "Do whatever you want, you got it." So I came back in '85 to run the cath lab, and did that for 10 years.

JO 15:30
That was the same cath lab at the VA?

TB 15:33
The cath lab at Duke. I've not been back to the VA. So the cath lab at Duke, there were two cath labs at the time. Richard Stack was running one that was starting one that was intervention, coronary intervention, and then upstairs I was [inaudible] And in that lab we started doing a lot of research stuff that were related to imaging and related to valve disease. There was no valve program here at Duke at all. And so I got really involved in developing a catheter-based valve procedures for the mitral valve and aortic valve. And that really started it all here. We had a very large imaging center where we did some good stuff in developing imaging in the cath lab, working with contrast media. And that sort of got me on the national scene, if you will. And then I really liked the people in the cath lab, we did a lot of really good stuff. I mean, when I came part of the deal was I got to take all the staff, to the heart meetings, take a group of staff to every heart meeting, the two major heart meetings each year. So that was really good for rapport with the staff.That really helped. And I was recruited from that several times. And every time I got recruited, I made sure that if I stayed at Duke, that was okay, but the staff got something out of it. One time, they gave all the staff two and a half percent raise. Pretty good. And it was little things like that we would on their anniversary or something, we'd send one rose. One flower, I mean, but the goodwill that created was just amazing. Because that was a big part of the cath lab at the time. The staff had a lot of turnover. So that was one of the better things I've ever done, stuff like that, making sure that they got a benefit. And that really worked out well. So I did that for a decade.

JO 17:41
You were really trying to build a team of people that were committed and that were going to stick around.

TB 17:48
[Inaudible] I mean, they told us we couldn't send the rose anymore. I said "Why, it costs five bucks?" You know, you get hundreds of thousands of benefit from $5. Yeah, so that was

ridiculous. But it was a big system, you weren't allowed to do that. But then after that, I took over the cardiology fellowship program. Because I really think that every 10 years, you should change your job description. I've done that for 10 years, it was really time to move on. So we did that. And running the fellowship program was probably the most fun, and the most beneficial thing I've done here. And I did that for 12 years. And I really enjoyed the fellows. I think that's a time I really got very involved in the teaching at a very high level. We really changed the fellowship program around a lot. We made a lot of changes on the fellowship program. And that worked out really well.

JO 18:55
I've read a lot about your successes training fellows. And I know you've gotten awards for your teaching repeatedly. Can you tell me a little bit about who taught you how to teach, and how did you learn how to become a good teacher?

TB 19:18
I learned that if you don't know something, the best thing to do is to teach it. And when I first came to Duke, I figured I was probably the dumbest person they ever took. And so I got to learn, so if I could teach something that I didn't understand, then I had to really know it. And then try to bring that down to if I really understand it, then the idea was to help them really understand. And the positive feedback from that is fantastic. I mean, it's just been wonderful to get. And it's happened not only at Duke, it's happened nationally, too. I was on a lot of National Board reviews, and conferences, stuff like that. And I always tried to add humor in it too, half my slides are joke slides. [Inaudible] on purpose, because you know, most people just bored to death when they're [inaudible]. So I always tried to add a lot of kind of silly stuff.

JO 20:19
What are some examples of joke slides? Or what are some of your greatest hits, of joke slides?

TB 20:25
At the end of the year, I would always do a roast. And I would spend hours on this thing. And each fellow, I would try to take pictures off the internet that would be really fun. And everybody knew this was coming. So when we would do the end of the year, every faculty member and every fellow showed up, because they knew I was going to be silly. One of them that has stuck, [inaudible], who is a faculty member here, [and] one of the other fellows was, they were kind of going together, and she wanted to get married. And so it was about the time The Lord of the Rings came out. So I did an entire skit on Lord of the Ringless [laughs]. "My precious." And so we did this whole thing, trying to get a ring, a ring from him. So she still remembers that, she's probably never forgiven me [laughs]. But you know, Gollum was perfect, man.

JO 21:31
Was this a skit with costumes and everything?

TB 21:38
No, we just had slides. It was just silly, but people kind of remember, it's amazing. It's like having your own wedding, you'll only remember the stuff that screws up, or that is really funny,

or out of character. So I always tried to do that. We did, at the end of the year, people had to retire at age 70, which we might get into. But they got rid of that rule. But the guys are retiring. So I brought this guy from Raleigh, who was a cross dresser and he dressed up like Marilyn Monroe. And it was one guy's birthday, he was retiring. It was a crowd of 500 people, or so. I had this guy walking around. And then when he was ready to come in, we turned the lights down, shined a light on and he came in and sang Happy Birthday, dressed like Marilyn Monroe, and sat on this guy's lap. I think 90% of that crowd thought that was actually a woman. It was not a woman. I kind of remember that, too. I think there are a few instances like that, that were just kind of fun.

JO 22:54
So you could kind of push the envelope a little bit.

TB 22:53
I pushed it probably too far sometimes [laughs]. But it was fun and people, I think they got a kick out of it. Because, when we did those kind of things, they didn't know what to expect. And they sort of expected something really silly was gonna happen. And usually it did. But there's a couple examples for you [laughs].

JO 23:12
Thanks for sharing those. Yeah, I saw a short video that was produced about, about your career and about your teaching that was on YouTube. And I think you said that when you're rounding with, with trainees, it is important to make it fun. And, do you have any other sort of favorite things that you do, or that you say when you're rounding?

TB 23:50
The patient should always be comfortable. You really comfort patients by talking to them directly, finding out about their lives. And having fun with them, too. A lot of them have a great sense of humor. So when we round, I really try to keep it light. There's one rule that I always had, that I think might have been on the video where, at the end of rounds, we take the whole crowd and we go and get coffee, at Starbucks. And you can have anything you want, but you cannot use your own name. And so you have to pick a theme. And it's better if the Starbucks people can't spell the name. And it's better if they call it out. It's funny. Like we just this last couple weeks, we had everybody pick the virus, but one gal picked herpes, so she called out "Anybody got herpes?" [laughs]. Stuff like that. So we have a whole crowd that comes down, and they've kind of gotten into it. But that's the idea. It's just to keep it light, keep it fun, and then you talk to the folks and you find out what they're about. And it's a way of making rounds a little less dull and a little more fun.

JO 25:11
I'm really curious when you're, when you're interacting with patients, and you're oftentimes probably talking about very serious health issues. But it sounds like you still manage to somehow balance that with being cheerful. How do you approach that?

TB 25:39

Honestly, with patients, I always try to ask them something about their lives that's, you know, personal and stuff that they're worried about. And I keep that in my note, so that when I see them back, I often see people only once a year, I then bring that up, and they think I remembered it all year, I hadn't remembered it at all [laughs]. But I put it in my note that they're having a wedding coming up, or their mother's turning 100 or something, stuff like that. So I always try to keep little anecdotal stuff with patients too. A lot of patients I see come from a long distance. So a lot of them travel to Duke from quite a distance. So I think it's good to spend time with them and get to know them a little bit. Rather than them just come in. My patient population is complex, it's valvular stuff and adult congenital stuff. So there often are not resources for them where they live. So they come quite a distance. And I think it's always good to have something personal which you can kind of attach to them. And I think that helps them. Patients love that. I think they feel that you're caring a little more about them than just their disease state. And so I try to relate that to the fellows too, you need to learn a little bit about these folks. Some of them live in very difficult situations. And some of them live in situations, way beyond, well, really tough environments. And so you have to take that all into account. And I think that's really important to take care of patients. So you get a step back and see what their home situations are, what they're living, what they're dealing with, because it's going to affect their care. And so you don't give them medicine that they can't afford, that's not going to work. Things like that. So I'm hoping the fellows learn that piece by rounding and by being in the clinic with me.

JO 27:43
There's another part of your teaching that I noticed. I saw that you published a little bit about using WhatsApp in the training context. I thought that was an interesting experiment.

TB 28:02
That was really Zainab Samad, who was head of the echo lab here and one of our trainees, who's now chairman of medicine at Aga Khan University in Pakistan. She left it to be chairman, first woman chairman of medicine. But it was really her idea. She wanted to use WhatsApp to share interesting echoes, more than anything at the time. So all of us sort of jumped in on that. And it was a way of sharing interesting cases. And I do that, I keep a list on my phone of every really interesting case that I see. Because you think you remember and you don't. So I have a list of about 700-800 cases. I used to have twice that but I was fly fishing and iPhones do not like getting wet [laughs]. So I lost about 500-600 cases. No matter what they tell you, putting iPhones in rice does not work. Didn't like it. But I share those so that when fellows see an interesting case or they see something I have with me a record of another one that they can look at to get an idea. That's actually been helpful.

JO 29:22
Wow. Okay, so you all were sharing echocardiograms?

TB 29:27
Yeah, mostly echoes.

JO 29:30
Would that be a video, then?

TB 29:35
It would be a video image.

JO 29:39
You would have on your phone.

TB 29:41
That was an idea that was Zainab's.

JO 29:46
And so the kind of records that you're talking about keeping on your phone, so it's sort of like an archive of different echocardiograms?

TB 29:56
Yeah, well, that is just the names in there, medical record numbers, so that when it comes up again, I can quickly find them. It's very helpful doing talks and things too, you're trying to find patients with certain unusual diseases in particular. I always keep, like "The biggest I've ever seen." You know, if a guy says "I has the biggest I've ever seen." I can show you a bigger one. I got one here [laughs]. So I tried to save a lot of those on the phone and that way I have access to them. And I do use it quite a bit actually when some rarer diseases come up that nobody's ever seen hardly. Often I'll have one on there, and I'll just show them what it looks like.

TRANSCRIPTION (thomas-bashore-interview2-audio.wav)

JO 00:00
What were some of the other sort of things that you did at roasts that you remember?

TB 00:13
Oh geez, are you recording yet or not [laughs]?

JO 00:15
I am recording.

TB 0:21
About at the end of every year, I really spent a lot of time on the internet just looking at really silly slides and tried to incorporate them into what each of the fellows had done. I'm trying to think of some of the other really silly things I did. And it actually became quite a big deal, all the faculty would come, and I think they really did want to see how politically incorrect I could be. And I frequently was, but it was always funny. I always thought that it's a good way to have people go out with something really silly. About the only one I could think of offhand is the one with the Lord of the Ringless. lists. Right? Yeah. She ended up marrying him, by the way.

JO 01:17
Oh, okay. Well, your performance didn't hurt them.

TB 01:23
Oh, yeah, didn't hurt. She got a ring out of it [laughs].

JO 01:29
So this is something that you were doing as your trainees were finishing their training?

TB 01:31
Yeah, what they would do is at the end of the year, I made a big deal of it. And I tried to really make it fun for everybody. So we would list where they were going and training, where they had been. And a lot of these people had really been accomplished before they got here. And then I would always list where they're going, and what they're doing. And then in the process of that I tried to incorporate really funny slides that would sort of just emphasize different portions of what they had done and where they're going and stuff. I always tried to make it as part of the conversation because that made it more fun. And everybody that knew where everybody was going after they finished their fellowship. We have 40 fellows at any one time. And so there are eight a year that come, and they spend four years. And so you get to know him pretty well during that period of time. And there's always some quirk that they have that you can really emphasize. And most of the room knows it. And what we did was then we would have the fellows also do a roast of the faculty. I got pretty roasted pretty good at times. I thought it was funny, I really enjoyed it. Some faculty may have enjoyed it [laughs]. And they still make me do that. I mean, there was a couple years ago, we were looking for a new chief of cardiology, and I guess it's 2016 because it was during that election. So they dressed me up like Trump, I had to wear a hat,

you know, "Make Duke Cardiology Great Again." I wore a wig. Put a little orange on my face [laughs]. And dressed up like Trump and then they interviewed me as a new faculty person.

JO 03:36
So they interviewed you in character.

TB 03:39
In character, so if I was good to be the new chief of cardiology.

JO 03:46
[Laughs] So what kinds of things would you say in character as Donald Trump?

TB 03:50
I hate to put that in the record [laughs].

JO 04:02
Offensive things, then [laughs].

TB 04:03
Oh, yeah. Because he's a good example of being offensive. It went off pretty well, it was pretty funny. But they had kind of initiated all that. And they knew I would do it [laughs].

JO 04:23
Sounds like it was give and take.

TB 04:31
Yeah, it was give and take. It was just meant to be fun, you know, just to be silly. But the fellowship program was really important to me. When I did it, I made a lot of changes. After I'd run the cath lab, I took that over very much on purpose, and we made lots of changes at that time.

JO 04:52
Yeah, do you want to tell me what it was like before and after and what were some of the challenges of making those changes?

TB 05:02
Well, initially, when you came here as a Duke fellow, the cardiology program had just been started in the late '60s, early '70s. And you were assigned to a faculty person, like I came to be assigned to a guy named John Gallagher, who was an EP [electrophysiology] guy. And then during the whole 70s, that's what you did. There were up to 17 fellows a year that would come here. So it was a really big program. And then I came back to run the cath lab in '85. And then did that for 10 years. And that was really a positive thing for me. And then after that, I wanted to change directions a little bit and was asked to run the fellowship program, and the fellows were all fired up about it. So that was a good thing. And then we went from a three year program to a four year program. So I made that change right away. And then there was two years of research.

So they had to do two years of research and two of clinical. And that's kind of how it ran. The requirement was just to do three years, but we wanted to try to recruit people that wanted to do some research. Initially, they did a year of clinical -- two of research and a year of clinical -- then they would finish clinical and they were good. But ACGME told me we couldn't do that. You had to finish in three years, which was very annoying, but the program has stayed that way now. And so they still do four years, with two years of required research. But that was good. I think it attracted the right kind of people we wanted, because we were trying to train people to go into academics. So that was a big shift. That was a big change at that time. And it took some doing, to do all that. But they've kept it so I guess it's still working [inaudible]. But I think the way we did it originally was good. We also, in early '90s a guy named Tim Garson was here, and we started the adult congenital heart program. And so we also needed to incorporate them into the fellowship. So that was different. We got the pediatrics and the adult cardiology card programs nationally, you had to do three years, in each. And so we convinced the pediatric boards that it would be okay for them to sit for pediatric boards if they only did two years, and they shared a year with adult cardiology. And so that was a five year program. We did that for a while. And we trained seven or eight people, we did one a year at that time. And every one of them ended up in academics, which was really, really positive. That's what we're trying to do. The [inaudible] stuff was pretty new at that time, brand new to Duke. So started that, as I said with a guy named Tim Garson and a guy named Steve Sanders. And that program really took off. And now we have one of the bigger adult congenital heart disease programs. And a couple of years ago, I was involved nationally in getting them to be separate boards. And so because we had been on a long time, and I was sort of on all the guidelines, and things for that, and we ended up [with] it's now a separate board. So that it's a two year program nationally, that people can train to do adult congenital. I think that was a good thing. Started that, and helped get that off the map, not only here, but then nationally. And that was good. And so that has grown. And now we have the two year program, we have one adult congenital fellow each year.

JO 08:56
And what was it about adult congenital heart disease that made you want to develop those programs and to grow that field nationally? Was there something in particular about those cases that made you think that this was an area where there needed to be more focus?

TB 09:16
When I came back to Duke we really started the valve program, the valvular heart disease program. I was part of that lab and that research. And then adult congenital heart disease, the issues are all anatomic, they have a lot of surgeries, they're hooked up very unusually. And there was nobody doing it anywhere, hardly. And the number of patients that had that really began to grow. And Duke didn't have a program at all. Tim Garson who was here at the time, Tim went on to become dean at University of Virginia, and he's at Texas now. He approached me and said "Let's think about how we could do something like this." And we did. I was still in the cath lab a lot. And new devices were coming along, but you could fix holes in the heart, plug up shunts and things in adult congenital people. And there was nobody here that did it, or did any of those. He brought a guy named Martin O'Laughlin, who is a wonderful individual, from Texas. And so he and I kind of did that together, to get the program off the ground and to provide something that nobody else was doing in basically North Carolina and the whole area. So that really gave us an

in. And so people could send people here, patients here, that we could really do something with that they couldn't do locally. And that kicked it off in the '90s. That whole area has really grown now, devices and stuff, fixing kids, even putting new heart valves in. A lot that can be done in a cath lab now. But at that time, it was really fresh, tt was really new. So that was fun. It was adding a new program to Duke. So, that actually worked out really well.

JO 11:07
So part of it was driven by these innovations and the new devices, it sounds like. So what sort of innovations are you talking about? What were the things that were new that were coming along at that time, that really opened up the options for those patients.

TB 11:26
People that had blocked valves, we had been doing ballooning open [of] blocked heart valves. And when I came to Duke in '85, that's where that program started in the cath lab, where we could stretch open heart valves that were stenotic, the aortic valve and then the mitral valve. And so we were really involved in that program already. Then in the adult congenital group there were valves that you could stretch open, the aortic and pulmonary valves, in particular. And then about that time, they started making devices to close holes in the heart, particularly in atrial defect. And so a guy named [Gladwin] Das came down here, and he had invented this device that he had sewn together in his kitchen table [laughs]. That's how primitive it was at the time. The Das Angel Wings, and we got involved in that thing. At that there was a group in Boston that was starting to work on devices you could use with a catheter to close holes in the heart.

JO 12:26
Wow, so this device that the physician created, sewed together himself, what kind of device was that? What was it made out of? What did it look like?

TB 12:39
It had two squares on each side. And what it would do, it would collapse into a catheter. And then when you put the catheter across the hole in the heart, it would sort of umbrella open on one side of the defect, and then as you pulled back, the other square would open on the other side of the defect. So it sort of sandwiched the septum, or the wall of the blood vessel that had the hole, the wall of the heart that had the hole. So you sort of sandwiched it in. All the devices worked similarly. Now they're very beyond that, they're very advanced at this point. And that's done routinely in the cath lab. At that time it was a big deal, because we didn't know what we're doing. We were kind of making it up as we go. But that was good. And that gave us some publicity, too. And it allowed that program to start. And then other people came and it's grown and developed. We now have seven people here that have passed their adult congenital heart disease board. So we have seven people, we had surgeons who were very involved, they were very anxious to be a part of this. So that really made that program grow. People that we trained all really did unbelievably. They're running major programs, one gal runs the main program up at the Harvard system, another guy was at the Cleveland Clinic, and he's just come back to join me since I'm moving toward retirement, [Richard] Krasuski, he ran their congenital program for 10 years in Cleveland. We've had a guy that has run it in Denver. So I think we did the right thing. We trained people that could go out and then start programs. That was the whole goal, that's still

our goal really. Most cardiologists don't want to deal with this at all. I mean, these are complicated, and they're complex, and they don't see very many in their practice. So that was a positive thing, and really allowed this program to really get some sort of national recognition.

JO 14:57
So the goal of training people to go into academic medicine and run centers that were doing some of these emerging technologies. Can you explain to me why that was a goal?

TB 15:19
Well, because everything up to that point, particularly in this adult congenital group was just kind of haphazard. Most cardiologists are not comfortable with this group of people, there wasn't anybody that was formally trained. So our goal was really to get a really good training program, and then go train people who could then start their own program and train more people. That's still the goal. But the number of these techniques has grown to where there are many more adults with adult congenital heart disease than children. And part of it is that the surgeons are so good now with pediatric surgery, heart surgery, that the vast majority of the kids get to adulthood. And if you have a 50 year old person, they don't want to be sitting down there with three year old kids in the pediatric office. So an effort was made to transition them, at about age 16 to 18, over to the adults. But there weren't any adults to transition them to. That was a problem.

JO 16:25
And there were more of the adult patients because the treatments were improving, and people were living longer.

TB 16:33
Yeah, they're getting there now. So, there was really a need not only here, but nationally. I think we were very involved in that. I think it was really a good thing to do, and it has kept growing.

JO 16:49
That's amazing.

TB 16:52
It's going to keep growing because more and more these kids are now making it to adulthood, you know, they'll be freshmen at Duke or something, as we'll pick them up when they come here. But they need people who are familiar with their complicated anatomic, and most cardiologists are just not trained in it. That was a real positive. And I think that's continued to be a real positive. So we have a program that's robust right now.

JO 17:25
That's an amazing achievement. Could you tell me a little bit more about some of the colleagues? You mentioned a few names of the colleagues that you really got the congenital heart disease program off the ground with? What were they like as people, what were your working relationships like?

TB 17:49

Well one of the real advantages of Duke is that we've always had a really good relationship with pediatrics and with our surgical colleagues. So it's one advantage of having pediatrics as part of the main Duke hospital. A lot of places a pediatric hospital may be separate. And when that happens, you don't get that much interaction. Here, we even shared cath labs and stuff. So we got to know them really well. It was a really good relationship. Marty O'Laughlin, who was the guy who came from Texas, he subsequently has passed away of Parkinson's. But he was fantastic. He was a wonderful person, and fun to work with. Very smart, very technically skilled, he taught us a lot. So Marty O'Laughlin was a big piece of this to make it work. Steve Sanders was here part time, then he went to Italy, and now he's up in Boston. But he was a director at that time, too. And he also really pushed it ,and really tried to make it happen. And he really helped a lot with trying to convince the pediatric boards to accept our little way we were pulling off [inaudible]. But they were really key. And the surgeons were good. We had good surgeons at the time as well. So that helped, and we still have good adult congenital surgeons. So I think that's really been a help as well, so that we've had good results as kids. And then particularly Andy Lodge now does the majority of the adults that have to have further surgery. But these are complicated kids, and some of them as they get older, they're not going to survive, you know, some won't survive past age 50 or so. So you need people that are really involved and understand their problems. A lot of them have pulmonary hypertension. And one of the other things that developed when this program developed was an entire pulmonary hypertension group here now at Duke. And we were just a piece of that, they were also looking at pulmonary hypertension from a pulmonary standpoint, Vic Tapson was involved in that, from Pulmonary, and then Terry Fortin was our lead into that from Cardiology. And she still does that. And now they have medicines that can lower the pressures inside the lung, which is a really huge deal and we couldn't do in the past. These medicines are super expensive, so you actually have to have a regular pulmonary hypertensive team. But that was the other advantage we had, that pulmonary was developing this pulmonary hypertension team, we had good surgical support, we had really good pediatric support. And that sort of made it all come together.

JO 20:47
And you mentioned that you had a former trainee who is back at Duke now?

TB 20:55
Yes, Rich Krasuski had trained in Boston. And then he did his fellowship here. We had trained him on adult congenital, but he went to Cleveland Clinic, and he was their head of their adult congenital program for about 10 years. Became a Browns fan, which is bad [laughs]. He's still a Browns fan. I grew up in Ohio, so I can say that. They had a parade, you know, when they had a perfect season where they every game [laughs].

JO 21:35
You mentioned that he came on board as you were thinking about retirement, is he going to be running some of the programs that you run now?

TB 21:50
He's running them. He is in charge of the majority of those now. And we brought in several that we had trained here in our program that stayed on with a group called the Duke Heart Physicians,

or DHP. That's the group I'm in. DHP started really when I came here, there was nobody doing valvular stuff. And then Kevin Harrison joined me in 1990. And then we sort of formed this valve disease group. Then in adult congenital, the valve disease thing has really exploded. And so our group has grown bigger and bigger. So we have seven right now in the group that's called the Duke Heart Physicians. That group does the valvular and adult congenital stuff within the hospital, and in the clinics. And we joined that with pediatrics. One of the smart things we did is when we had clinic, we always had an adult cardiologist there, and a pediatric cardiologist. So they sort of learned from each other. And that has really been a real positive thing for patients. But it's for us too, for learning. Rich Krasuski has come back and he's now taken over the program.

JO 23:10
And when you think about the future of the programs and the groups that you've helped start at Duke, where would you like to see them go? What kinds of conversations are you having with people about that, and what do you think that the future is?

TB 23:28
Oh, I think it's fantastic. I mean, Duke has been very supportive. If you look at the things I've been involved with that have started stuff, I mean we started the valve program, that was in the '80s. Now one of the most common procedures is replacing your aortic valve with catheter-based stem cells. That program has exploded, and it's exploded nationally as well. But it really had gotten big and brought a lot of valuable stuff here. Kevin Harrison, who is in our group is basically in charge of that, he's in charge of the Structural program, and there's a separate fellowship for that, too. But I think that's going to keep growing like crazy. In 1992, there were three of us that were asked to start the Duke Heart Center. So Jerry Reeves, who was in Anesthesia, and Bob Jones who was in Surgery, and then me. And Joe Greenfield, who was the chairman of Medicine time said he wanted to start a heart center here at Duke. In any case, we went all over the country looking at heart centers to figure out what we wanted to do. And that was the beginning of the heart center. So the three of us kind of put it together initially. And that has continued to grow and I think it allowed for incorporation of the politics of the whole place around a disease state. So it included surgery, anesthesia, and cardiology. The Heart Center's grown. We tried to get a heart building for a long time. That was the biggest thing we did not get. We wanted a separate heart building. But that never happened. Because we didn't complain enough, I swear. The Cancer Center, they bitched and moaned, and got it [laughs]. We were bringing in so much money. And everybody was pretty happy. And they said, you know, "What's the problem?" So you notice, I mean, Wake got a heart center, Rex got a new building. We got nothing. We got nothing out of it. And mostly because we didn't whine enough, I swear. It really was. Everybody was happy. We should have been more whiny.

JO 25:48
I think you said that the Heart Center brought together the politics around a particular disease.

TB 26:00
What was happening at that time, there were new procedures we were doing in the heart cath lab, that would take the place of surgery. The initial was balloon angioplasty, that's blowing up

balloons in the arteries, and then that evolved into stenting, when there's a blockage in the artery, you put a stent in it. And that was growing. When I came, the valve stuff was here, and there were lots of heart valves that we wanted to start ballooning. And the surgeons didn't, they weren't liking the idea, because, you know "This is our turf" [laughs]. And so part of the reason the Heart Center started was to try to get everybody in a room, and we met every week for a long time just to talk about the issues. At that time, nationally, there had to be surgical backup for all these procedures, because nobody knew what was going to happen. So surgeons were not happy about that, because they had to have an open operating room when we did a procedure. And you know, they got nothing out of it. Eventually, what they found was that as we brought these patients in, a lot of them needed surgery. For instance, when I started with the balloon valvuloplasty program, none of the surgeons would support me, except for a guy named Andy Wechsler who was at the VA. And Andy was super smart, and a really good guy, he ended up becoming Chief of Surgery in Richmond, and he's kind of been a national figure. He did the first heart transplant here. But Andy supported me, we had worked together when I was at the VA. The other surgeons fought me, they didn't want me to do it. So what happened is, as I put all this together, the number of patients that came for getting their valve ballooned open, more than half of them actually needed surgery. So what turned what happened was Dr. Wechsler, who supported me in doing this, his business is suddenly skyrocketing. Well, if you know surgeons, they want to operate. That's what they do. And so suddenly, Wechsler was getting killed all with these patients. And just by having supported us, he ended up doing a lot more cases. Can I be honest? I had surgeons lined up my door saying "Oh, we'll help you now" [laughs]. Because a lot of these patients, their referral doctors didn't know whether they needed surgery or we could fix them, but they just sent them and then the surgery business really took off, it started growing. The heart center tied that together, saying "Look, you know, you help us [and] in the long run, you will benefit because it's going to bring a lot of patients in that we would not have otherwise had." That was really the reason the heart center got started here, because it was trying to, you know, calm down the surgeons that these are the right thing to do. We're going to grow this program. And that really was helpful, because I think then they realized, you know, we weren't trying to steal business from them. We were trying to grow a program. And then they got on board. And once they got on board, and they really helped and the Heart Center then took off. And it's still functioning now, and growing.

JO 29:18
So the political part of it is that surgery and cardiology, which might have been viewing things from different sides of the table, they could actually get together and kind of collaborate.

TB 29:35
Yeah, and it works for everybody. I mean, it worked out great for everybody. And that heart center has kept that together. It's worked for the heart transplant program, it's worked for lung transplant programs. I mean, if you're bringing in patients, even if your initial goal is to do something noninvasively, where you don't need surgery to fix them, a lot of patients will still need surgery. So that worked well. And courses, congenital things are the same way. Although we can fix some stuff in the catheterization lab, a lot of these people still need repeat heart surgery so that the heart center was a way of incorporating the surgeons and anesthesia guys and cardiologists all together. The initial director, there were three of us that kind of founded it and

spent time, but the initial director was Jerry Reeves who was an anesthesia guy, and he was just a wonderful guy, and he just had a way with him. And he was sort of Switzerland. You know, I was on the cardiology side. Bob Jones was on the surgical side. And then Reeves was an anesthesia guy. So he was perfect to be the first director of the Heart Center, he eventually became the chancellor at USC in Charleston. So he left here, eventually, and he became chancellor of the whole place down there. He just retired. He's a wonderful guy. So it was a perfect setup, where we just had the right personalities. In cardiology it was me, and then Bob Jones in surgery, who was also very politically-savvy and a really nice guy. And the three of us got along really well, so the first years of the Heart Center, I think we were able to kind of blend it all together. That's what happened. It started in 1992, I think were the first meetings. And then it's grown since then. Now the Heart Center is, you know, a thousand people. But that was kind of the start of it. And Joe Greenfield, who was the chairman at the time really gets credit. He's the one that saw this kind of conflict cooking. And so he set it up. That was the very initial part of that.

JO 32:01
And what other kinds of advice are trainees seeking out from you? What things do you think are important to share with them on their way towards a career in academic medicine?

TB 32:16
Well, when they're looking at jobs, and jobs are very weird this year, because of the COVID problem. It's a little unusual year. But if I ever gave any advice, every place you go to look at when you're looking at jobs, you should make a list of your pros, make a list of your cons, and then throw all that crap away, and go with your gut. Because really what happens when you go to a place, you get a sense of whether this fits or not. And if you don't pay attention to that you're gonna get burned. I mean, lots of people take a job that they don't feel good about, but they took it because somebody told them that was the job they should take, or something. And it's always wrong. I've told them, you know, go there, get your left brain involved, do your pros and cons. But make sure that overall you're comfortable. If your right brain says, "I can do it here." Go with that. Many of these kids are smart. And they're used to doing things logically. So do the logic, then throw that crap out. And if it feels right, it's probably right. [inaudible] It's kind of like getting married. You date, then suddenly one's right. You can't explain that. This seems like the right thing to do.

JO 33:49
Well, that makes me wonder, using that metaphor, you've been at Duke a long time. It's been a long marriage. When you first came to Duke, did you get that gut sense that it was a fit for you, and why?

TB 34:07
Yeah, absolutely. So, I told you I was at UNC prior to that. But it just felt right, being here. So when I left, I left because it didn't feel comfortable. That was in '79. But I went to this practice job, then I wasn't there two weeks, and I didn't feel right. Even though the money was there, Gene Stead who was head of Cardiology, or head of Medicine here, wanted me to go there, and then bring the Duke Databank into a private practice. He was really supportive. But there was

something about this group that I just didn't bond with them. There are other groups in that Fairfax area that I was in, that I did bond with. But this group I was in was just wrong. I wasn't there a month and I said, "This isn't going to work." These guys are very money-interested. And then I would see interesting cases, and they weren't interested at all. So I was there a short time, then I went to both Ohio State and Indiana, and Gene Stead helped me. His best friend was the chairman of Medicine at Ohio State, he was a former Duke named Jim Warren. And I just felt right there, you know, because we were back home, this was my home. And so when I went there, that felt right. And my wife was delighted, because you know, her family was just an hour and a half from Columbus. But every year, Joe Greenfield would call every year when I was at Ohio State. And he said, you know, "When are you coming back?" [I'd say] "I'm doing fine here." So then finally, Joe Greenfield was so fed up with the cath lab, that he started rounding himself as chairman of Medicine. And he said "You've got to come back and do this, man, because I don't want to do this." And then when I came back, it was the same gut feeling. I said, you know, "I can't screw this up. This is such a mess, there's nothing I can do to make this any worse." But that was the same thing, it just felt right. And that's happened to me multiple times, I've had job offers at a variety of places [inaudible], and every time when you get towards the end of the negotiations, and all that, it just doesn't feel right. And every time -- when I took the job in Fairfax, Virginia, even though I went, it didn't feel right at all. And I said "I will never, ever turn down that gut feeling again." And so I stayed at Duke primarily because when I looked at these other places, it didn't feel right. And it's hard to describe, there's just something. I'm sure you pick up a lot of subtleties when you're there, and you know, is really what I want to do. And the people here have been so kind to me, and nice to me ever since I've been here, that it never felt like I could go to any place that was better.I go to the heart meetings, and I know lots of people around the country. And every time at the end of the heart meetings I come back to Duke and say, you know, "God, I'm glad I'm not where they are. I'm glad I'm here" [laughs]. It reinforces the fact that this is really a great place, and it's in a great location, nice people to work with, just wonderful people to work, nice facility. It's nothing like a lot of people are having to deal with. All those little subtleties you're picking up, listen to them, don't just blow them off, because they may end up being really important down the road.

JO 37:53
Yeah, I was struck by what you said about the private practice and your colleagues in the private practice and how you would see an interesting case, and they weren't that interested in it. And that was kind of surprising to you.

TB 38:07
They weren't interested. When I went there, I had the database from Duke, which is part of why they recruited me. I also did what's called morning report where the Georgetown house staff, the Georgetown University internal medicine group, would come over to Fairfax, and I got to do morning report, it's called. They would present cases from the night before. In that morning report, it was really cool the way they did, there was a cardiologist, an infectious disease person, a GI guy, oncologist, and stuff. So there were multiple faculty, each representing some area. And that was really positive for me. And after I was there a couple of months, they said “We can't do that anymore, because they don't pay.” But this is part of why I'm here! I was actually brought there to set up their nuclear cardiology program, which we did, and it really exploded, it just took

off. And all the other groups really wanted to be in that program, I thought "Fine, I'll just show them how to do it. You know, we've got plenty of business." And that was another thing they said, "Well, you can't do that. You can't be friends with the other groups." So that happened pretty quick. But I should have smelled all that coming, and I just didn't have enough maturity that time to really see that coming. But they did me a wonderful favor, if they had been nice to me I would still be there. Kind of a boring career.

JO 39:47
It sounds like part of what you value about Duke is that your colleagues share that intellectual interest in understanding unique cases.

TB 40:00
Yeah, and you can talk to them and it's fun for all of us. And a case that's really complex and difficult, everybody throws their two cents in. And that kind of camaraderie is just fantastic, and the young people keep you young. I really enjoy when we round and stuff and they challenge you, say that you're full of crap. You know, that's what you want them to do. They want them to challenge you and say "What are you talking about?" I think that's how you get good. That's how you stay on top of things.

JO 40:41
Where do you take the conversation from there when somebody says you're full of crap? [laughs].

TB 40:47
I like them to do it. But what you do when you round, you have different levels of questions. So, you have one level for the med students, one level for the house staff, and then one level for the fellows. And I just move the questions up another level? And I finally get to where I know they don't know something [laughs]. Eventually you can reach a threshold where they have no idea. But we try to make it fun. I mean, we really do try to keep it fun. But I always, there's fellow level questions, one of their favorite lines is that I give them a 50/50 chance, 85% of the time, they'll guess wrong. So they've used that line on me a bunch of times. Because I'll ask them, "What do you think, 50/50 shot." And almost all the time. I used to play this game with them before a heart cath to try to predict what the outcome would be. And I would always take the exact opposite of what the fellow said, okay, just just on purpose, and about 70% of the time I won. Keeps us all humble. But it became kind of a running joke.

JO 41:58
So the outcome being sort of what you actually needed to teach.

TB 42:07
Yeah, did they have disease or not have disease, and they do the cath. And I would always take the opposite of the fellow. And I said about 70% I would stick with it, no matter what they said. Even if it was clearly obvious. Make a game of it, which I think is good. We have really good people. The interns and residents, and students, and the fellows are just really, really good. And I think being around quality really does keep you on your toes. And it makes it a lot more fun.

Because you can trust them, which is really important. This year, we take eight people a year in our fellowship program, and we normally have about 500 applicants. This year I heard it's 150 or something like that. Because everybody's doing Zoom. But we had grown the fellowship program to where we would get 500 applicants just for eight spots. I think that gives you an idea that it's really competitive. Real competitive programs, so we get really nice people. I always, when I interview those people, I've told them, when I interview a fellow to come here, I don't ask them a thing about their academics and stuff like that. I want to know if they're gonna be high maintenance. So I really do ask them about their family, you know, what do they do in life, what do you do outside of medicine? Are they going to be nice people. Because you know, they're all smart when they get to the stage. What you want is people that are compassionate and can work with other people. And so for running a fellowship training, man, if you get people that are all nice folks, man, it makes it so much easier. God. Some guys come that are just brilliant. But they're not nice folks. There's other places they can go to.

JO 44:09
So in some ways, you've tried to create an environment where it's socially -- people are kind to one another, and supportive.

TB 44:19
And I've pushed to get more women, there are hardly women in cardiology. Because the hours really suck. And we really tried to get more African Americans to because there's not many of them in cardiology, either. So you really look to try to get some diversity. I think that's really important. People are super smart, we just need to get them all in here. And then they can really be role models for others. But I think that's part of what Duke's about, is bringing these folks in that can be role models, and these minorities, because it really helps recruit others to get them in the ballgame. So I think that's been an important thing.

JO 45:08
I wanted to ask you about cardiology in general. What do you think some of the misperceptions that people have about cardiology as a specialty are?

TB 45:25
Most people, I think, respect their cardiologists, and they trust them. There are few bad apples around the country, that do procedures that shouldn't be done, or they do extra studies that shouldn't be done. And I think that gives a misperception from the public, that they're just doing it just to be doing procedures and making money. And there are a few like everywhere -- medicine, and lawyers, and everybody else -- there are a few people like that. There aren't many, though. But there are a few. I think that's a misperception that sometimes these procedures are being done inappropriately. There's also a general misperception that doctors don't really, that they do stuff, like with drugs and things, that are to make sure that patients don't get better. I think the last few years, that's been a real problem, with a group of people in this country that are anti-science. They think that they're doing something just so that they can keep taking care of you. God, it's a lot easier when people get better [laughs]. And it's a whole lot more fun, I don't know where they get that perception, but I think there is an anti-science perception that's really growing out there, particularly in the last four years with this administration. That's been

ridiculous, and it really has hurt and I think it's made people think that a lot of physicians are really not doing things in their best interest. And that's really not true. I mean, you get rewarded when they get better, not when they get worse, right, that doesn't make any sense. So I think that's a misperception that's out there with cardiologists. With cardiologists, they tend to be, we have a lot of procedures now that we can do. We're not just doing diagnostic stuff as it was back in the '60s, the '50s and '60s. Now you're actually doing treatment things. And there are a few people that overdo, but the majority don't. I think Duke in general has been very conservative, which has been the right approach. So it's always been data-driven. Totally. So we've not had to deal with that a lot. But I know there's some perceptions out there. That cardiologists make too much money. But the hours suck [laughs].

JO 48:00
What are the hours like? How would you characterize the hours that you've worked?

TB 48:06
Probably in my whole life, I averaged about 50 hours a week. But some guys are worse than that. I mean, if you're on call a lot, when you're on call at night, you've got to come in and do procedures and stuff. So acute heart attacks, you know, you've got to do right away. So people are on call to come running in, as soon as there's one that's been identified. So there's a lot of night call in the real cardiology world. And here too [inaudible]. The hours tend to be pretty long. And it's pretty high stress for a lot of people. But the rewards are fantastic. I mean, because you really can do stuff to help people, and often that helps them immediately. So they recognize that as well. I think the rewards are really great, but the stress is pretty high. There's some high-level stress in cardiology. Because you can do stuff that really hurts people. I mean, you can get in the lab and you can create havoc. So you don't want to hurt anybody. That's not your goal. So you're under that stress all the time. And sometimes things happen that, it's nothing that you did, out of your control. Stuff happens and then then you really feel bad, because you tend to remember the bad outcomes. You don't remember any of the good outcomes. That's part of human nature, I guess. They really stick with you, they never go away.

JO 49:49
The trainees that you work with, are there things that you would like to be different about their careers compared to yours, are there ways that you would like to see the field change over the course of their careers?

TB 50:07
Well, I think they're getting progressively more sub-specialized. And I'm not sure that's healthy. For instance, people that are doing electrical studies, EP studies, they just want to do electrical stuff. They really don't want to venture outside their little niche. That's not healthy, because people come in with a lot of other cardiac issues that they just they don't particularly want to deal with. And I think cardiology as things get more and more complex, it really is getting to where more and more of even pieces of cardiology is very sub-specializing. That's happening in heart failure here now, and adult congenital, but that sort of was necessary. You see it with transplant, so heart failure and transplant is a big issue. And as people get more and more narrow, into their own subspecialty area, they tend to lose the big picture. So I don't think that's healthy at all,

because patients are going to come in where the issue they're seeing you about is tenth on their list. But you need to look at the whole thing. So I think general cardiologists have always pretty much done that. And that that is an unhealthy trend. The other negative has to do with all the computerization and the medical records being an issue. A lot of cardiologists when these medical records came in, I shouldn't say a lot, but some, just quit practice all together. They weren't to do extra work, because it adds a huge amount of extra work to your day. People thought it was gonna cut it back, but it didn't at all. We used to be able to, you know, you'd sign a sheet and somebody else would take it off and order labs and set it all up for you. And now you have to do it all yourself. So basically, you type your own notes, you do your own ordering, every piece of it is now on to you. And you have to have a note, and it all has to be compatible with billing. Because all these systems are basically built on billing, not patient care. So the notes are ten pages long, and nine and a half of those pages are just crap. They're just stuff that was pulled in from something else in order to satisfy some billing thing. So, that's universal, I think cardiologists have been hit by it. Internal medicine guys, and family practice guys, get hit by it even more. They have to see so many people. And it really honestly takes more time. So I think that's a change over time that has not been good. We're doing more and more procedures and stuff that avoid surgery. And we have more and more medications now that work. I mean, statins work. So there was a time they really cut back. Everybody thought that the number of coronary artery procedures was gonna skyrocket, I was on some of these workforce committees, that it was going to be huge. Because the population's aging, well, the drugs work [laughs]. And so when you keep your cholesterol down, you're not getting recurrent problems. And people are just doing great for long periods of time. So the fact that they're getting more and more better drugs has really helped people with heart disease. And the deaths from heart disease have gone way down. It's still the most common killer in this country, but still going down. Because of all these procedures now that we have. So that's been a really positive thing overall. So I think that's something that cardiologists should be proud of. I mean, when I was starting out, heart attacks, you just put them to bed still. That was back in the 70s. We don't give any of those drugs anymore. Now you build coronary care units and we take care of all these acute heart attacks. And now the coronary care units have almost no heart attacks in it. People come in, they get to go home in a day or two, with a heart attack. Things have really changed. That has all been real positive. So I've had an opportunity to see all that, and I think that's been pretty cool. That's been good. That's really made cardiology grow. And it makes you feel better that you're actually doing something.

JO 54:49
Absolutely. I think you mentioned when we were talking about the drawings that you're doing for other physicians. Did you say that that had something to do with the moving to electronic records?

TB 55:04
No. Well, I couldn't do them anymore. Those were on paper records.

JO 55:13
I see, so that's a limitation of the electronic records is that any kind of sketching or anything, there's no place for that there.

TB 55:23
No, there's no place anymore. There's no way to do it. Now, what I do is I have a sketch that we use in the clinic, so that you can explain the anatomy to patients. So they use that in the clinic all the time here. Something I drew. But with electronic records there's no real way to do that. A bummer.

JO 55:50
I did want to ask you a little bit more about the illustration. Just in general, what makes the difference between a good illustration of a heart and a bad one?

TB 56:03
Probably simplicity. A lot of guys put way too much anatomy, they make it too stick-like, they make it too complicated. I think the real difference is, you want patients to understand what their heart is like, you want them to understand their disease, the more they understand, then it's much easier to take care of patients. I think the more they understand exactly their anatomy, what it's doing to them, why they have the symptoms they have, and in cardiology you can pretty much explain it all. So if you can give them a drawing and say "You know, this valve here, it backs up pressure here. And that's why you feel short of breath." I think that really helps. I really do think the more you really teach the patient what they have, the more information you give them in general is good. Because they get a lot of bad information off the internet. And so what you really want to do is say "This is your situation, this is what you look like, and this is why we're doing each drug, and this is how this is working, and this is what to watch out for." So I think that helps individual patients to understand when they should pull the trigger and call you or explain any symptoms that they're having. When patients are educated, they're just so much easier to take care of. They really are.

JO 57:32
And the drawings are a tool for that.

TB 57:36
It's interesting, I had a patient who I did a drawing for literally 25 years ago. And they brought it in, because they knew I was gonna retire. And they said "I still have this drawing." [laughs]. I said "Well, I'll be darned, you do!" This is the F capital. But that's the point. Patients generally aren't stupid, and they want to know what's going on. So I think the more you really try to educate them, the better. The Internet has been good and bad [laughs]. Because a lot of people won't take medicines and stuff because somebody on the internet told them it was bad for them, things like that. But in general, most people I encourage to try to learn as much as they can. Because it's so much easier to take care of people when they understand why you do stuff, and not just accept it. So I think the drawings help there, I really do. And it helps teaching about that, too, because some of these are complicated, so that they appreciate it, too, I think.

JO 58:45

Well, another topic that I want to make sure that I touch on in this interview. So I've heard that you have sort of a rather unusual collection of historic objects. And I wonder if you could tell me about it?

TB 59:04
I have a big collection [laughs]. Years ago I got interested in, I think it probably started with a horn phonograph, cylinder phonographs, and stuff like that. And then I kind of thought the mechanical stuff was really cool. And this was way back probably in the '60s. I was probably still a med student. And so I have several things at home, these old musical instruments. And then when you start looking at old cardiology instruments and medicine instruments, there has been a lot of that stuff going on, for many years. And then I really got interested in old medical stuff, mostly from the 1800s and 1900s. But then I started collecting. And it used to be very cheap. You just would go to flea markets, and they never knew what the stuff was. And it was always really cheap. Then eBay came along [laughs]. But I have a collection that's pretty extensive right now. And when I decided, the three of us sort of were taking over the division for a while, one of the requirements I told them was that they had to build me a display place in my office, I might have mentioned that, for the stuff. So I have like the original EKG machine, at Duke, the original one at Ohio State. I have all kinds of stethoscope collections, and lots of stuff that would shock you. Some of it's pretty cool, it makes lots of noise and buzzes, and all kinds of stuff like that. So I really like stuff that is funny, as well. But I have the original X-ray report that was done in the United States, and a silly thing too, like M.A.S.H. IV pole that has vodka. Did you ever watch M.A.S.H.?

JO 01:01:01
Oh, yeah [laughs].

TB 01:01:03
Stuff like that. And some stuff, like there are these enemas that you used with tobacco. And that's where the term "blowing smoke up your ass" comes from. It actually was used [inaudible]. And I have a big collection of crazy stuff like that. Bleeders. So bleeding was a real popular method of treating people [inaudible]. So I have one device of every way you could bleed, and pictures of where you stick people to bleed them, and all that kind of stuff. [Inaudible]. So, some medical stuff. But a lot of it actually still works. I have some radiation stuff, they thought radiation work, they thought magnets worked, so I have magnets stuff, and cure bottles, things like that. When the FDA came in in 1900, you couldn't put the word cure on anymore. So those are all older than that. But a lot of funny -- cigarettes you smoke for asthma. They have Fiestaware, the orange Fiestaware is radioactive. I actually have -- the color's really cool -- this thing still pops! Stuff like that. Phonology with bumps on your head. There was a thing called water cure at one time. So it was kind of like water torture. And most of it is, it's interesting how we haven't learned. Like mercury manometers didn't come in for blood pressure control until 1900. And before that, they measured your blood pressure and troy ounces. And they did it with, they have this little device you put on your wrist and you smoked cigarette paper and it would scratch on it. So when you went to the doctor, your blood pressure was in troy ounces instead of mercury, millimeters of mercury. I have some really cool stuff with really early cath lab stuff, some really early kind of cardiology devices. One guy had this whole slide collection where he did all these heart caths by

sticking the needle in your back, sticking it in the heart. I actually found him after many years, I showed him to several people and nobody had heard of this guy. And he never wrote it up. But he wrote it up on the slides, 450 cases. But he was a guy in Philadelphia, a radiologist.

JO 01:03:37
So you actually tracked him down and talked to him?

TB 01:03:41
No, he had long since died. He did all this stuff in the '40s. It took me forever to find, his name was on one of the boxes, and we have some visiting professors from all over the country. And I'd always show them, and say "You ever seen this?" Nobody had ever heard of this. I have one kind of interesting book on the first EKG machine they sold, and the thing weighs about 200 pounds. And it's a couple of big parts. You put your feet in buckets of saline. But in the back of the book, I don't have the actual machine, but in the back of the book, it was written in 1927, has everybody in the world that owned an EKG machine. In the whole world, so I thought that was historically interesting. The history of medicine group came through here about a year ago, and they want it all. So when I retire, I'm just going to give it all to them. When I round I often take the house stuff through on one of the days, we go through it all, because a lot of it's funny, you know, they shock themselves. They got a lot of really weird stuff. That evolved to where I just collected devices, mostly. Some people collect books. But I don't get as much charge out of a book. I like something that will shock you. That sounds like more fun.

JO 01:05:27
I think it's interesting that somebody who's highly trained in contemporary medicine would get interested in these older things that might be called maybe a little bit unscientific?

TB 01:05:44
Well, yeah, it's fun. And these are not that old, what shocks you is that this is not that long ago that some of this stuff was used. it really is kind of amazing. And some of it still hangs around, like these magnets for a cure, you still see people putting copper in the bands that you wrap around your knee and all that. That copper's not going to do anything, any more than these magnets did. There's some fun things. I have this Bayer thing, it's an old sign from the '30s where it has a Bayer pill on it. It used to be you'd weigh your pills in grains of barley. So, grains of barley have a pretty constant weight. So, it used to be five grains of barley. And what happened is, guys have spent their whole careers, this one guy came in, he's talking about a dose of aspirin. And he was trying to give me a bunch of crap about how scientific it was. Well, it wasn't scientific at all. What happens is a Bayer aspirin, they found that if they made it as small as five grains, they could stamp their name in two directions -- Bayer -- without it breaking. If it was less than five grains, it broke. So that's the dose of aspirin. Because everybody wonders, you know, regular aspirin is 324 milligrams, which is five grains, and baby aspirin is 81 milligrams. And that nobody ever thinks about why 81, how the hell did they get that? Well, it was a fourth of five grains of aspirin. Sounds like a joke, but it was a whole marketing thing. They wanted everybody to read the name Bayer on the pill, and if they made a smaller one, it wouldn't work. Yeah, that's science for you.

JO 01:07:25
So, all this stuff is kind of funny. And yeah, maybe a little bit primitive. When you show it to your students, in addition to it just being fun, is there something that you want them to learn from that, about the advancement of medicine?

TB 01:07:46
Like a lot of this stuff, people believed in this stuff. It's the same thing that happened, this is what happens on the internet. I was listening to one guy even talking about the Coronavirus thing. Everything was just a testimonial. So they have this testimony after testimony -- "I used this and I got better." Well, if you hadn't used it, you probably would have got better. That's why you need to do studies. The same way with the vaccines that's coming out with all this stuff. You've got to do the study. You can't just use testimonials. Because there's a lot of things that [inaudible] are unrelated. And that's how they sold all this stuff. I have these shock devices, little plastic, or glass, I mean, for every orifice in your body, you pick an orifice, we've got a glass thing we can shove up it and shock it. Well, they have all these testimonials, and these whole books about, you know, "If you get the problem here, this is how much shock to use." "My Aunt Gladys did this and she's perfectly well now." You know, come on. She'd probably be better off if you left her alone. But stuff like that, testimonials don't work. You've really got to do the trials, you've really got to do the studies. Because there's many things that you relate to what you did, and it had nothing to do with what you did.

JO 01:09:15
So is it a reminder to remain skeptical?

TB 01:09:24
Oh yeah. You should always question everything. You shouldn't believe anything. You should always question these things. Because a lot of stuff we did, not that long ago, is no longer done. It seemed like a good idea at the time, or there were small studies that suggested it worked, it doesn't work anymore. Because you do bigger studies and you find out they don't work. So I think the key is to always question everything. Don't ever believe and anytime something doesn't fit, it may not fit. And you need to figure that out. I think that's a really good lesson that they can learn. Just always doubt everything, and make sure that what you're doing is the correct thing, and that there's data behind it. Look how we treated a heart attack, even 20 years ago, 30 years ago, it's really different to now. Because a lot of medicine we thought worked, they don't work, when you really take a step back and really get large numbers of patients and look at them side by side, they really don't work. I think Duke has contributed a lot, the Duke Clinical Research Institute has been a major contributor to a lot of really big trials, and getting people to understand you need large populations in order to make some of these decisions. But all this quack stuff comes out, and it's just that, and so it's just fun. A lot of them are really silly. I mean, a lot of them. It's just pretty wild.

JO 01:11:01
It sounds like a lot of fun. I wish we'd been able to do this in person, so I could check it out.

TB 01:11:08

Come on over sometime. Seriously. Yeah, I don't mind showing it off. There's a lot of history. Yeah, the amount of people that built Duke, in the old days, they've forgotten. I mean, once you walk out of this place, you know, it's like any place, nobody remembers you anymore. A lot of people at Duke were pretty instrumental in developing some of the tools we use today. And people don't remember it. It's too bad. But that's the way it goes. But there are a lot of the people that really built the DUke Medical Center that people have forgotten, but were really important. Anyway, but that's the medical collection. And anything that's really funny, or crazy, I kind of like to collect those. I get to get a kick out of it.

JO 01:12:15
Yeah, that sounds fun. And so as we're winding down, is there anything else that you want to add to this recording, any other aspects of your time at Duke that you feel like would be important to comment on the interview?

TB 01:12:36
I will just mention that being a Duke has been such a positive thing. I mean, I've got a huge number of awards over the time. And that's awards for teaching both both at Duke, and nationally, even. And I think that's just a function of Duke being so supportive of people like me, that like to teach and like to see patients. So it's really a credit, I think, to Duke, not only have they been able to allow people to grow doing research, but [also] people who really want to teach, and want to take good care of patients, and build programs. Duke has been, not unique, but one of the best in the country at doing all that. So I think it's the attitude at Duke that really has kept me here all these years. And I think that continues. And I hope that continues forever, it's really important to not get too focused on some of the craziness going on, and to realize that our goal here is to take care of patients. And teaching people is really the major goal of what the Medical Center should be doing. And I've been rewarded like crazy, I have gotten every award you can get, as you know, from here. So I think they certainly have given me a lot of positive feedback. And that's been good. I mean, I've been a Dukie for a long time [laughs]. And I really think that's important. And I I think that I've been recognized, and that's also been really important. I think the other highlight we didn't get into, but I think after all of this, after all the awards and all that, people are only going to remember me for changing the age of retirement at Duke [laughs]. A thing we didn't touch on, but that's all anybody's going to probably remember me for. When I was here, Duke had a retirement age of 70. And it was put in because they wanted to kind of let a surgeon go away, that was famous. And I was starting to get toward 70, so I said, you know, this doesn't make any sense. So I went around the country, and found I think 54 places, or something like that. I called [and said] "Do you guys have an age limit?" And not a single one did. None of them. And these are all the major places. So we got together 100 people, Dan Mark and I did, got together 100 faculty at Duke that were all professors, and from every department and put them together into a committee and said, you know, "Let's get rid of this nonsense." The PDC, which is the group that runs the practice plan basically here at Duke, said, "Well, you can't get rid of it." And you looked at the guidelines, though, you can, if there's a vote. At that time I think there were only two votes in the whole history of PDC, that started in the 1930s. It was supposed to be a partnership. So we put these hundred guys together, and Dan and I went over, and they made me present to all the chiefs of each department, starting in surgery, on why we wanted to make it a change. So, their argument is "What do you do with a

bunch of old farts who get senile, you don't want to them running around." And that was okay, I agreed with that [laughs]. We don't want them running around. So we put that together. And the more we did it, the more they fought it. And the more I think we said, "Alright, we're gonna do this now, for sure." To give you an example from all that, they would not give us the names of everybody at Duke. We said "We're a partnership, you have to give us the names." They said "No, we don't want those names out." And so actually, Dan went to the state and found out that if you're a partnership, you have to know the names of your partners. That seems like a logical thing. They said "We'll give it to you on paper, but we won't give it to you electronically." Just to be, you know, like voter suppression, like the Trump guys are doing. So what happened is then, that turned out to be a very positive thing. So I made up a drawing of a map of every place that I called and had records that they did not have an age limit because of age discrimination. And I put that together, and we because they wouldn't give us an email, I sent it out in a letter. Guys just click on email, and they just delete, delete, delete, you know. But everybody opened the letter [laughs]. It's probably the best thing we did. Because once they saw a map, where Duke is the only major place in the entire country that had a 70 year age limit, I think that sold it. So they finally agreed to go ahead and put it to a vote. So after I talked to the troops there, I did this kind of light-hearted conversation about it to the guys, all the chairman of Medicine, Surgery, and all that kind of stuff, the chairman at the PDC board, they finally agreed to a vote. Because we could force a vote if we had 20% of all the members, and there's like 1500 faculty at Duke Medical Center. So we forced them to vote. And so they said, "Okay." So they did it over a two week period. And you could vote by email. And after about two weeks, we just had to have one over half the vote for it. After a couple of weeks, finally I got a call from the guy who was the head of the PDC at the time, saying basically that we won. And I said "Well, you know, what was the score?" He wouldn't tell me, he said "All you need to know is you won." And he kind of hung up. And then I got calls from everybody. And it turns out we probably had, I never did hear the final vote, but I guess it was like 97% of the faculty voted to get rid of it. But young people, they don't care about retirement, you know, they're not thinking about that.

JO 01:19:10
What year did all this happen?

TB 01:19:17
That was 2015. It was only the third vote they ever had in the entire PDC. And I think we presented it, we did it the right way because I didn't want any lawyers involved. We didn't want any publicity. Because you just don't need that. And some of the faculty really wanted to get lawyers in. One guy was on 60 Minutes all the time [said] "I've got all my friends at 60 Minutes, I'll call them." But you don't want that. But you want to keep this quiet, man. I'm serious. That was a problem, trying to keep it out of the press. The press didn't know Duke had an age limit, and with discrimination stuff it would have been really negative. So, the smartest thing we did was getting a group together, I think, and then keeping this quiet, keeping it within the rules, and keeping it within Duke so that people didn't know that. But after that I figured "Well, that's all anybody's going to remember me for."

JO 01:20:29
And when you were advocating for that change, the age limit was about to affect you?

TB 01:20:36
Yeah, I was 69. And you know, I'm still healthy as can be. I'm going to retire at the end of this year, the plan was that I would retire at 75. And so that was sort of the goal. But I don't think you can use age as whether somebody's competent or not. We had 60 year olds that were getting dingy. And there's lots of data that you can't -- it's not an age thing. I think you don't want a lot of really old people either, it was particularly an issue with surgery, to be honest. And so, that was legitimate, that you should monitor people when they're getting older, because they may not have all their oars in the water. So I think that's okay. And we were all for that. We didn't want to have any issues there. But this was all put in years ago, when being 70 was a really old person. In my clinic, half of them are 90, times have really changed. Duke fought this, and that was a real victory for us. That was a winner. If you talk to people at Duke, that's probably all they remember me for.

JO 01:21:59
And you think from the perspective of most of the faculty, that that was a positive change?

TB 01:22:08
Oh, it was definitely positive. I mean, for most people. I think the younger people didn't care. And so that's what we had to do, we had to sell them on "Well, I know it doesn't matter now because you're 30-something, but it will down the road." And the fact that Duke was, really, we could not find another place in the country that did it. I mean, and every place I called they all said, you know, "That's age discrimination, you can't do that." And the VA never had it happen, so what happened at Duke is people got to 70, they went to the VA [inaudible]. That's what they did. Because the VA didn't have it. So it just shows you how out of date they were. But I understood. Joe Greenfield, who was sort of my mentor, and just passed away two days ago, by the way, he put it in. He told me the whole story of a particular surgeon. He couldn't figure out how to get rid of the guy. So he just put it. He said "I knew it was illegal when I did it." Typical Joe, if you knew him, he was such a character, he said, "But I knew if I said it really strongly, and told everybody it was okay, then they would go along with it." It's like the great lie, you know? You say it loud enough, people will believe it. They believed it. He said "It's probably illegal." But that was sort of an interesting time. And I must say, the more they said we couldn't do it, between Dan and I we said, "We're definitely doing it." You know, it's like saying you can't vote. I hope people take that to heart and go vote now, because these guys are trying to block you from voting. I think the more they said it, the more we were really anxious to get the thing done. That's a legacy that definitely will go on.

JO 01:24:07
I'm glad you brought that up, because I had heard of that change. But I actually didn't make the connection between you and that project.

TB 01:24:23
Yeah, it was my project. But I think the smart thing was, if I did anything right, I got everybody on board first, got everybody to understand it. All the different departments all across the place, because 1,500 people are going to vote. And then really work at keeping it quiet. Because the

more they heard about it, the more upset they got, and they wanted to go to the papers and stuff, and I said, "Let's really keep it quiet, because we can do it through the system." I think that was one of the smartest things we did, because the public never found out about it. Which we wanted. That was kind of the goal. That was one of the better little coups we had while I was her. It was worth it.

JO 01:25:16
Well, thanks for spending the time on this today. I really appreciate you being part of the project.