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MS171: Interview with Elizabeth Travis

Elizabeth Travis Ph.D.

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TEXAS MEDICAL CENTER WOMEN'S HISTORY PROJECT

Elizabeth Travis

Natalie Garza
October 31, 2014
Michelle Kokes
Pickens Tower

NG: This is Natalie Garza. It is Friday October 31, 2014 and I am interviewing Dr.

Elizabeth Travis in her offices in Pickens Tower. Okay can you begin by telling me your

full name?

- ET: Elizabeth LaTorre Travis.
- NG: And are any of those a maiden name?
- ET: LaTorre is my maiden name.
- NG: Okay when were you born?
- ET: September 29, 1943.
- NG: Okay where were you born?
- ET: Pittsburgh, Pennsylvania.
- NG: And did you grow up in Pittsburgh?

ET: I did, I did. I went to college and Master's degree there.

NG: Can you tell me what it was like growing up in Pittsburgh?

ET: You know yeah I can. So it wasn't actually in Pittsburgh I say Pittsburgh because people know where that is. It was in a little town outside of Pittsburgh and this is a time when the steel mills were still up and running. A lot of little towns along the rivers you know the three rivers had some kind of mill like where I lived a little town called Wilmerding had the Westinghouse Air Brake and so that's where most people were. It was a town of about 5,000 to 7,500 people, something like that. Very diverse, very diverse. I always laugh when I think about it because we had every ethnic club you can imagine. We had the Italian club, the Serbian club the Irish club, the Polish club we had them all so it was a very diverse upbringing and that was true in Pittsburg as well. When I went to London for my post doc I was out somewhere for dinner and I think it was a very authentic Chinese restaurant and a woman said, "Liz how do you know this food?" I said, "I was raised in Pittsburg you ate not only Italian," I'm Italian, LaTorre is Italian by descent, "but you ate everything." So from that standpoint it was you know a nice place to grow up.

It was like I say a small town. My family owned a small family-run business and it was kind of one of the places where everybody went and it was Italian food and pizzas and fried shrimp on Fridays and spaghetti on Thursdays and Fridays. We all worked in the business. My dad worked there for a long time, my mother would help out, and I too on Saturday mornings would go up to work in the kitchen and peel potatoes or whatever needed done.

For a small town the schools had a great reputation and they were academically very good. I went to a small school. The school had a little creek running down it. It's funny we should be talking. I was just there last weekend. I was at my old undergraduate school and spent Saturday and Sunday in Pittsburgh and we went to my hometown which has changed dramatically of course. But it has this creek running down the middle. So on our side of town school only went up to 4th grade and our side of town was a lot of the immigrant families. Usually, well my grandparents were born in Italy but immigrated here. My parents were all born here. So that side of town was very diverse.

The other side of town was a little less diverse and then 5^{th} grade we went over to that side of town and that's when we still had junior high school. So you went 5^{th} , 6^{th} , and then 7^{th} , 8^{th} , 9^{th} , and then high school. But the schools were very good, the teachers were very good. I remember a lot of them even grade school [my] 3^{rd} grade teacher, Miss Bishop, made a lasting impression.

It was a good education and it was a nice town to grow up in from that standpoint. My high school class we had then what they called the college track and the business track. I was on the college track. There were a small number of us in the class but we all went into some kind of... engineers, there's one physician, myself. We pretty much all went onto college from there and went on to various and sundry careers. I thought it was a nice place to grow up. It wasn't a big city although we went into Pittsburgh. I mean Pittsburgh had a lot to offer, it had an opera, it had a symphony. In fact my first opera was I think it was in junior high they took us to the opera in Pittsburgh and I loved it and still. In fact tonight is the opening night for *Così* so we have season tickets to the opera here. So it was a nice place to grow up plus my family was a very large extended Italian family and I was raised in that and it was a nice way to grow up.

NG: I want to touch back on a couple of things you said. You said that there were like ethnic clubs. Did you mean for the town or your school had?

ET: No for the town.

NG: The town okay. So did they have like halls and things like that?

ET: They did, indeed they did and there was a big Italian festival at the Catholic Church in the summer and I mean it was interesting. They had the Serbian club we had

them all. It was a little club and they had halls and they would do dinners at the Italian club or dinner at the whatever club.

NG: And how did your parents get into owning a restaurant?

ET: It wasn't my parents it was my mother's parents, my grandparents.

NG: Okay.

ET: Yes that's a good question I don't think I know the answer to that other than my grandfather my maternal grandfather was a master carpenter when he came from Italy that was the first thing he built he built the house and he built this restaurant. The restaurant was on the first level and the family lived upstairs. I guess it was a way to make a living you know. And then he went on from there he moved to Florida and built a motel in Florida. In fact we used to spend a month every summer in Florida because we'd stay in one of the rooms at the motel with my grandparents and I developed a great love of Florida and still do. I never wanted to go back home. I wanted to know why we couldn't move to Florida. And then he built the motel and he built homes there. So you know I don't... it's a good question and unfortunately my mother and father are both deceased and so I can't even ask that question on how that happened.

NG: And so your dad worked there then the whole time?

ET: My dad worked there up until I, I think it was when I was in college or right before I went to college and then he left that business and he actually ended up finally running a nice bar and restaurant and he was kind of the manager of the bar and really enjoyed it. My father had a great capacity to listen to people and like bartenders listen to people, yeah he was able to do that and shake his head, etc. And so it was you know not,

certainly I'm not from privilege. There wasn't ever a lot of money but somehow you never felt that.

NG: And your mom you said she helped out in the restaurant other than that, did she ever work outside of the home?

ET: My mother was quite I think an incredible woman. She actually I didn't know this but she was on the switchboard when Pearl Harbor was bombed and she never told me that but my sister was talking to her. So she worked and then she got married. But she always worked from inside the home. She was a beautiful seamstress and she used to make all of our clothes. She used to tailor clothes for people and fix clothes for people and then she sold dishes and pots and just anything she could do to help make money. Then finally when my sister was a little bit older, my sister is $4\frac{1}{2}$ years younger and when she was in high school I guess my mother did get a job in a boutique where she excelled because she had a great sense of fashion, great taste (taught me everything she knew) I credit and blame her for my closet. So she started then and continued. She was really very successful there. She was kind of one of the managers, she was very successful. She just had a real sense of you know what looked good on people and what didn't. She would take my sister and I both when she was going to make us our new outfit for the start of school or the holidays. She would take us both. She'd help us, show us patterns, she'd help us pick patterns and she'd say, "No I don't think that will look good on you but this will." Then she would help us pick the fabric. She'd say, "No that fabric isn't good for this kind of dress or this skirt but this is." So you know we learned an awful lot from her. I can't even sew a button on. My sister on the other hand is great. I cannot do it. So she did [work outside the home] but not until I was almost in college

that she then went outside the home to this place called Fashion Spear. And in fact the son of the owner still keeps in touch with me.

NG: That's nice.

ET: Yeah it is nice to have those kind of connections throughout your life that go way back.

NG: You mentioned Miss Bishop and that she made quite an impact, why is that? ET: She was this tall thin rather stern but just a great teacher and there were some girls that I grew up with that when we have our reunions (which we still do) it's like we go right back to where we were all those many years ago. But we used to fight a lot, I don't know why. It is very interesting because I found out just recently at the last reunion. I said, "Why were you guys always picking on me?" I was the smallest. They said, "Well we were jealous of you." You know none of us had anything, I said, "Why were you jealous?" "Because you had the best clothes." Because my mother made my clothes. Unfortunately my mother was deceased by then and she would have so much appreciated hearing that. I had no idea but Miss Bishop made us get our act together and she was a great teacher, she was stern but very nice.

NG: Do you know about what the size of your high school was?

ET: My graduating class was 143.

NG: And you talked about the opera so that was something that was introduced by your school it wasn't your family introducing you to those kinds of cultural things?

ET: No although my father loved to dance and I loved to dance and a great love of music so we always had music in the house. He liked Enrico Caruso. They had never been to operas. That was just not... my dad loved the ball games, football, baseball that

kind of thing. No it was the school that introduced us to those things. I wanted to play the piano when I was young because my cousin who's five years older than me almost to the day whose name is also Elizabeth, she was kind of my idol and she played the piano. But we lived in a small apartment and there wasn't room for it and so my mother took me to dancing lessons instead, which to this day I still dance. We spent a lot of time with family, a lot of time we went to Florida. Didn't eat out much, only on like my mother's birthday we always went out, Mother's Day, our birthdays, a lot of family meals. Every night my father was home for dinner every night. We ate early and we were expected to be home for dinner unless you had a really good excuse or a really good reason and it better not be that you were in detention. So it wasn't them so much but music was always around the family.

Do you have any idea where in Italy your grandparents were from? ET: Yeah I do I've been there actually. They are from southern Italy, south of Positano a little village called Agropoli and it's beautiful. So I did my post doc in London and my parents came over and they had never been out of the country. Well they had been out of the country but they hadn't been to London, hadn't been to Europe and they had not been to Italy. And so they came over to London and we went to Italy and we went and visited the family which was a very, very special experience to do it with them. I realized why my grandfather loved Florida because where he lived, where he was born and raised was a lot like Florida, beautiful water, and my grandfather loved Florida he couldn't wait to get to Florida. It was very lovely. My sister was there just a couple of years ago and it's changed a lot a little more commercial but it was very charming and not as many of the family are there. I think there were still a lot of them alive [when I

NG:

visited with my parents], this was in 1977 so a lot of them were still alive and my mother's, my grandfather who was still alive at the time his brothers, one of his brothers was still alive, one of my father's uncles. It was a very special trip.

NG: And you've mentioned a sister was she your only sibling?

ET: My only sibling, Carolyn who lives in Florida now. I have a good reason to go to Florida to see my sister. Then she said, "We'll come there." I said, "No I'll come to Florida." She was a social worker in the school system, she just recently retired. I have one nephew. She has one son and I have one son.

NG: So did she retire in Florida or where was she working?

ET: No they moved to Florida I moved here. I came back from London in '79 I was at the NIH for a couple of years. I moved here in '82. They moved to Florida about the same time.

NG: Okay.

ET: They were in the northeast they were in New Hampshire before then. So they've been in Florida since almost as long as I've been here. Then my parents actually moved there my nephew was born in 1983 and they moved there when he was born.

NG: Now what about your interest in the sciences did that come while you were on this college track in high school or did it develop afterwards?

ET: I think it developed before then actually. Because I remember going to... so one of the things the school did is they used to take us down to Carnagie Melon and some of the colleges and they had special programs you know for students in math and you know sciences. I remember going to some of those. They were on Saturday sometimes but during the week they would take us and I just liked science. I had no idea what being a

scientist meant. It was really in 10th grade my teacher, Mr. Smith I remember him very well, who was a total bundle of energy and he taught biology. I think for a lot of us in my class he was the one that really got us into the science you know the STEM fields if you will. So I really developed a love of biology and an interest and a passion of it with him because he was so passionate about it, about teaching it to us. He also formed a square dancing group. We went around the state performing and every Wednesday in his garage at his house we would all go and practice square dancing. We had all our skirts, etc. You know he really built, he connected all of us in the class and we really were a cohesive group and we went all the way through. Like I said now you know I graduated in 1961 that was a very long time ago and we still remember all those days and we are still close because of that.

NG: Were there expectations finishing high school that you were going to go to college?

ET: Yes I guess when I was in junior high one of the junior high teachers told my parents that I really should and needed to go to college and they were very much in favor of that because my father always wanted to go to college. My father was not, not as well off. His family worked in the coal mines. He in fact worked in the coal mines for a little while. But he always wanted a college education. My father read voraciously. And I picked up that habit from him. I have always read all the time. Loved to work crossword puzzles. So I love working crossword puzzles. We also used to play scrabble. Sunday nights we always played scrabble. So he was very, and so was my mother. Very intent on you know having both my sister and I have a college education. Now it was a little different. Their goal for me was because you know you, well you're going to get married

of course so you need to get a college education and be a teacher because in case something happens to your husband you'll be able to support your family. So we had a little difference of opinion. But they were okay with it. But yeah there was an expectation. There was an expectation to get good grades, there was an expectation to study hard, there was an expectation to go to college and be successful.

NG: And when you were like embarking on the college experience and all that did you already have in mind that you didn't want the plan of getting married and being a teacher?

ET: I did. That was not my plan because I had worked in a research lab the summer of my junior year. Well that was in college but even before then I didn't know what being a scientist involved. You know I didn't know what that really meant as a career because there was nobody who had done that. So all I knew were science teachers so I thought I would teach. But in college I did work in a lab one summer and at the University of Pittsburgh and I knew then that, that's.... and I love the lab anyway I just didn't know what to do with it and how to do it. But I had another teacher in college who actually then worked in his lab. I was a teaching assistant for him who really helped me visualize what science is like if I didn't want to teach do this. So he talked to me about graduate school and going to graduate school and continuing on for a higher degree, etc. I did work again you know it's so much of life is about opportunities presenting themselves and taking the opportunities.

So I was a junior and I was taking a course in radiation physics and radiation biology and I mentioned it to my father and his personal physician always would ask about my sister and I. My dad said, "You know she is taking this course in radiation. I

don't know what she is doing. She likes it." He said, "Really?" He said, "I have a lab at the University of Pittsburgh with Joe Watson my collaborator it's in radiation biology. Do you think she'd like to come and work for the summer?" So I went there I said, "You bet!" (Even though I had no clue what this meant.) It certainly wasn't dissecting animals or anything like that, although it was because it was working with animals. But you know I went and that kind of got me on to the next part of my career what was I going to do? So that really then I knew that I wanted to do science, get a Ph.D. eventually and have a lab and be a scientist.

NG: So because you had that experience you knew what it meant to have a Ph.D. and what kind of possibilities there were for you?

ET: Correct that's right.

NG: So how did you decide upon Indiana University of Pennsylvania?

ET: That was pretty much decided for me because of financial constraints. It was an Indiana State college at the time. It still prides itself on being the highest rated one. It was the most difficult to get into. And also my parents were very comfortable with it because my cousin (Liz that I told you about) she had three brothers who went there. So my parents knew about that through you know my aunt and uncle. My parents, my father in particular was very comfortable about it. I wanted to be in the big city. He wasn't having any parts of that so he shipped me off into the countryside effectively. It was only about an hour and a half, it's not even an hour from where we lived. Then they would come up often but it was easy to get back to Pittsburgh if I wanted. So it was pretty much decided for me.

NG: And what town was that in?

ET: In Indiana, Pennsylvania, Jimmy Stewart's home. It's the home of Jimmy Stewart. There's a Jimmy Stewart Museum I was there last weekend. I'm on their [Indiana University of Pennsylvania] advisory board for their new building. They are building a new building for natural sciences and math and I'm on the advisory board for the building and working on the curriculum and so which is really kind of a nice thing to do. It was the school and continues to be now a university that most of the students are the first to go to college and I was you know at least in my family, that side of the family. I was the first woman to go to college, my sister the second.

NG: So what was the experience like there?

ET: Probably too much fun at first. I remember fondly you know I do. One of my roommates from college actually moved to Houston right after I did. So she is here. I was named the distinguished alumn a few years ago and one of my roommates lived in Pennsylvania and she and her husband came. We invited them to come and join us for that. So I remember the days fondly. I mean their schedules weren't quite as rigorous as mine of science so I was the one who was always up late studying you know I always had 8:00 classes. They did everything possible to avoid 8:00 classes. But it was a nice experience. It was a small school. You know nobody had a lot of money. One of my roommates had a little more than the rest of us but we were all in the same boat. We all had a good time. I thought it was a good education. You know like I said probably the first couple of years, second year I loved it that's when I had this biology teacher, actually it was molecular biology and really enjoyed that year, again the science piece of it. So it was you know just your normal homecoming and all the rest of it. NG: What was it like being away from home, living away from home?

ET: Oh I didn't have any problem with that. In fact that's one of the reasons I didn't want to stay in Pittsburgh if this was the only place I could go. If I would have gone to the University of Pittsburgh I would have had to live at home and I said, "Okay I'll go to Indiana." No my parents always said they couldn't keep me home and they couldn't get my sister out of the house. So for me it was great, it was great. I really enjoyed it.

NG: Then you said you were encouraged to go on to get your Master's and you went right away didn't you?

ET: I did go right away. So I went back to Pitt and I was working in the lab where I did that summer. I went back there and worked in the lab and was working on my Master's degree in radiation physics and radiation health and then I got married and I couldn't finish. So my husband was an officer in the Navy (my then husband was an officer in the Navy) and he was stationed he had to go to Charleston South Carolina. I couldn't finish my degree in the science so I did all the science courses but to get a degree I did education again. So I had a Master's in education from there and because those were the days when you know now a lot of my colleagues they live in different cities because you go where the position is when you have a dual career couple. Well that wasn't so accepted. You know in 1966 or '67. So I went to South Carolina with him. But again a series of... I taught school for a year, so I was lucky. I thought to myself, "Okay the teaching degree really did come in handy," because I didn't know anything about Charleston, South Carolina and taught school. I actually really liked it and I still am involved with students in one way or another. It's kind of been a thread throughout my career and really enjoyed it.

I wanted to get back to the lab because I missed being in the lab and I went to the medical university of South Carolina looking for a job. "Does anyone need someone free even for the summer?" They sent me over to the radiation because they knew I had radiation background. They sent me over to the radiation department. They said, "Oh yes perfect we need somebody to set up a lab for us to do radiation biology." I said, "Okay I'm only going to work the three months of summer." I said, "That's fine." They offered me the job half way through the summer to keep it full time and I said you know, "I don't have a Ph.D. I can't do this job." They said, "Yes you can you're doing it you can do it." Long story I turned the job down and I went home and I said, "You've just made a huge mistake." The next day I went back in sheepishly and said, "If I can have that position I'd love to do it." So I didn't go back to teaching and what they said is you can work and you can get your Ph.D. So that to me was key was being able to finally get my Ph.D. and to continue working and it was great it was really great. I finished it.

It takes a little longer when you are working and doing a Ph.D. but finished that up and then went to London on the post doc which was again a very critical part of my career to do that. It really positioned me for where I am now at MD Anderson. Again I didn't know anybody at the lab. I had not been to Europe or to London. I just gave my dad my car and put everything in storage thinking I was only going to be there a year. I stayed three years. I had a great time. I have fond memories. In fact one of my best friends from London from the Gray Lab was here a couple of weeks ago because as it turns out her nephew lives about a half a mile from me and she said she was coming over to see her nephew and I said, "Where does he live?" She said, "Houston." I said, "Well Houston's big." She said, "He lives on Lake Street." I said, "That's not very far from

where we are." So I just saw her a few weeks ago we had dinner with her. So I love having all these connections in your life with people who from different part of your life. It kind of weaves a story about your life that you never... I think and my best friend from high school moved back to Pittsburgh and usually I see her when I'm up there. So I just find that a very... for me it's a nice way to live my life that even though I'm not anywhere near where I was raised I still have ties to all these pieces of my life that make up who I am today.

NG: Right, yeah it's nice to have those connections still.

ET: It is.

NG: The interest in radiation did that come just from working in the lab or how did you decide that this is what you wanted to do?

ET: It came first of all from the course I took. I thought it was interesting and then going to the lab I thought it was even more interesting and then you know just deciding and that was really it. It was the course and then the lab and I liked the lab I was in. Joe Watson and the physician's wife I can't remember Spitzer was his last name. They were really great people to work with, they mentored you, they were really terrific. So for me it wasn't only radiation as an interest but working with really nice people you know who mentored me and there was another woman in the lab who was also going to graduate school, mentored both of us. That was really important.

NG: So can you tell me, explain what is it about radiation you were drawn to?

ET: I guess it was at the time there was a lot going on. There was the scares about should there be a bomb dropped, etc. and I think it was just the biology and nobody knew very much about the biology of it. I was thinking of going into microbiology and

physiology but when I went into this lab at Pitt and the work we were doing with radiation about radiation injury, etc. it just peaked my interest. Then when I went to South Carolina and I did my Ph.D. I did it in experimental pathology and I did it because I wanted to look at the effects of radiation from the standpoint of the normal tissues, particularly treating cancer patients. Because when you treat patients with any modality (drugs or radiation) normal tissues are a problem. You cannot cause irreparable damage to normal tissues and radiation kills all cells. It's not selective. The same as the old drugs they are not selective. They kill the tumor cells but they also kill the normal cells, so that's the piece that I was interested in. It's very interesting because now they call that survivorship because patients now are living longer and there are morbidities caused by radiation and/or drugs. It was interesting because of the perfect time.

There was a pathologist at MUSC [Medical University of South Carolina] who before I turned down the job that I then asked for he told me, "Liz if you teach me about radiation I'll teach you pulmonary pathology." So what I really ended up doing was marrying my radiation biology with the pulmonary normal tissue and pathology and putting those two things together which is what actually positioned me for the offer at the Gray Lab in London. Because it was again one of those fortuitous things, instances where I realized that although I had a good education there were some real holes in my education even in my Ph.D. and I said, "For me to run a research lab I'm still not ready for that." And I knew that because I started going to national meetings and so you have to be really kind of very cold about it in a way. You have to be very clear that what you have and what you don't have and fill in those holes. So I wrote to about 20 institutions including this one for a post doc and one of them that I wanted to write to was in London

and I thought, "Oh they'll never take me. I'm not from an Ivy." It was the best lab in my field. The absolute best lab in my field and I was talking to my father and he said, "Elizabeth they can say yes and they can say no but if you don't write you certainly won't get there." So it turns out they did send me a letter. I had an offer from Stanford and an offer from The Gray Lab in London and my parents knew without my even telling them that there was no way I was staying in the states with an opportunity to go live abroad. You know some people are very clear about their [careers]. I say I had the long and winding road. I didn't have a very linear path here. I went here and I went here and I went here. But I think it was taking risks, you know accepting the risks, taking the opportunities and just kind of jumping in the deep end of the pool. I

went to London it was a great experience, the best thing I ever did for my career. My parents were kind of concerned because I lived in a very... the first year I got there it was a horrible place to live and they happened to come that year of course and they said, "You have a Ph.D. look how you are living!" I said, "I promise you, I promise you I know what I'm doing this is really going to pay off." I said, "I know that." And it did because the lab was the best in the field. Everybody who was anybody in the field came through the lab. The head of the lab he realized that he didn't need to talk to these people he talked to them all the time. He needed them to talk to his trainees and his post docs because we were the ones who would need the positions. So we met all these people and they knew all of us. So I came back they recruited me back to the NIH for a couple years I was there and then I was recruited here.

NG: And it was called The Gray Lab?

ET: G-r-a-y.

NG: Okay.

ET: It's a measure of Hal Gray who or the very famous radiation physicist who started the lab and the Gray the unit dose of radiation is measured in Gray it's named after him.NG: Okay.

ET: So it has a lot of history, a lot of history. Some fantastic scientists were there when I was there. It's pretty much, it's still there but its halcyon days are gone. All labs have that, it happens and it happened to them. The halcyon days are gone. The head of the lab who was actually my mentor still lives in London. Next time we go we are going to try and see him. He too is in his 90's, not that I am. He is.

NG: And so they were doing what kind of research were they doing?

ET: They were doing radiation biology and they had radiation chemistry and radiation biology but the radiation biology they were doing was mostly mouse work about tumors in mice or tumors in vitro. So they weren't interested in normal tissue complications. The head a lab realized that that was something he needed his lab to get into and that was the reason. I just had the right combination of enough knowledge about radiation and pathology and normal tissue damage that I was just a perfect fit for him at the time. It's like my dad said, "You know you never know" and that's what I always tell faculty, students. "You know if you don't ask you're not going to get it. You may not get it if you ask but you certainly are not going to get it if you don't ask."

NG: So is that what your dissertation was on the impact on normal tissue?

ET: It was about mass cells in the lung with radiation. So we were looking at the infiltration of mass cells and how that contributed to what's called radiation pneumonitis which is an inflammatory response in the lung. So that's what my dissertation was on, it

was on radiation injury in the lung and then I went to the Gray Lab and that just totally expanded all that with what I learned there and what they were doing and it was just an absolutely wonderful experience. I encouraged my son to go study abroad but he's not in science and medicine. I did my best but it didn't work.

NG: Now throughout this time from undergrad up to doing your post doc how many women were in your classes and your labs with you and all of that?

ET: Very few, very few there weren't very many. I think that in some ways I was a little bit protected from it. At Pitt, my mentors at Pitt, Joe Watson... Drs. Watson and Spitzer kind of protected Judy and I the other woman who was in the lab. Then when I was at the Medical University at South Carolina there weren't very many woman but I was part of the radiation therapy department then and they kind of you know protected me in the sense that they too mentored and made sure that I was doing okay and... I didn't feel a lot of the issues around women at the time. There was a time in graduate school at Pitt when one professor didn't know why there were two women in his class because, "After all we were taking the place of men. Oh by the way you are just going to get married and have kids and you are taking the place of these men." So I had the perhaps it wasn't such a nice thing to do but he was at one of our professional meetings years and years and years later and I went over and introduced myself to him, reintroduced myself to him. I said, "I don't know if you remember me" and then I told him I was at MD Anderson and doing research, etc. (My last name had changed by then) but anyway I just wanted to let him know that women can actually succeed and do succeed. So there just weren't many.

When you are a trainee you are a little more protected than when you get out in the real world. And even at the NIH, the NIH there weren't many women. I was the only woman on the faculty there. All the radiation oncologists were men, I was the only woman. But I never... I mean we were just like a family there when I was at the NCI [National Cancer Institute] I was in building 10 in the clinical building in radiation oncology and I'm still good friends with them. That was, I was there from '79 to '82 at the NCI and I didn't feel any kind of bias there either.

I think you feel it more... When I came here Margaret Kripke (whose picture is up there) and who was the department chair for immunology she was the first woman department chair here. Anyway she put together a group of 5 of us and we looked at salaries and equities and we looked at salaries for all the faculty and we found that the women were underpaid and from that point on I've been very involved with equity for woman and making sure women are recruited, promoted, that we retain them, that they are on committees, that they are in high profile positions, but I didn't feel much of that.

There was one incident that there was discrimination. Again it was when I was interviewing to go back to Pitt as a graduate student but other than that I didn't' really feel it because I think it's just as a trainee you are kind of protected by the group by the community if you will. Once you leave that, not so much. Once you leave that everything changes and it's interesting because a lot of the women here that felt as assistant professors will say, "Oh no we don't feel any that there's any bias at all." Then we say, "Great." Then they become associate professors who are in my office who say, "Something's changed and I don't know what it is." So I think you just made me reflect on that I think that's the way it has been. You are okay when you are in this kind of

position where you need mentoring and nurturing but I think once you get up to where you are really competitive is when it rears its head. That's when you see it.

NG: Do you think it's because you are competitive do you think it's because you are seen as a threat? Or what is that?

ET: I wish I knew, quite frankly. I will say we have there are always people who have certain ideas and biases. We all have biases. And I encourage everyone to take the Harvard Implicit Association Test and find out what your bias is because it drives your decisions and you don't even know you are making decisions based on these unconscious biases. But we have we really have overcome a lot of that in this institution. And you know it's been a lot of work starting with Margaret Kripke and then she became the Chief Academic officer. As the Chief Academic officer she could kind of look at the landscape and see how women were doing, recruiting women, etc. So I don't know what it is. I don't know if it's because its competition, if that's just some unconscious bias that people have that women won't be as good. I think there's a lot less of that here. I really do.

I think that most of the women feel (even associate professors and professors) feel that there is not as much bias. Where you see a lot of it is women in leadership. That's been a focus for me in this office is to get women into leadership positions because you know when you have everybody who looks the same whether they are men or women around the table it's not a very diverse group the thinking isn't very diverse and the ideas aren't very diverse so I think the data shows that the more diversity in decision making the better able we are to solve complex problems. So for me it's always ever since I opened this office I was asked to open this office it's been about really putting women in leadership because they bring a different way of thinking they bring different experiences

and that only grows everybody. And I think that's changed a lot of people. We have we are at almost 30% of our leaders are now women and 7 years ago, 6 years ago we were at 14% so it's been a very targeted, focused. Bring women in, get them to the table, get them interviewed. It has really changed. And the women themselves say they feel a change in the organization which is what is most important. I don't know where it stems from. You know if you ask people they don't know either. But even people who think... Have you ever done the Harvard Implicit Association Test?

NG: No I haven't.

ET: You should do it. Somebody who is here it's a woman who thinks she was not at all biased against women took this test and called me she said, "I can't believe it." She said, "I really failed this test." It's not a pass/fail. You end up on a gray scale of you know being very bias choosing men over women for science for example choosing women over men or even being neutral about it. Well she was way over on this end of choosing the men only that men could only do science. She said, "I'm appalled." I said, "The important thing is that you know it."

NG: Yeah.

ET: I said, "You know that that's something in your head so you have to think about it when you are picking people for committees when you are recommending people you know for positions. Think about it. Look at your list. If they are all men rethink it." But I don't know. I talked with my other half and we don't know. I said, "You know it must go back to Adam and Eve or something, the temptress. I don't think anybody knows. NG: When you went to London were you still married?

ET: No so my marriage didn't last very long. We got divorced not long after I started at the Medical University full time because we really wanted different things and we were much too young to get married in the first place. I mean I was what 22? I knew what I wanted I just didn't know how to get it at that point. I never could see myself as the stay at home wife and obviously with South Carolina I got a job. I had worked since I was like 12. I was always doing something to make money [like] selling Christmas cards. I mean always I always wanted to have my own money and be responsible for me. So it didn't last very long because he really wanted somebody who was going to be a wife. He was going to be a hospital administrator [so a wife] to a hospital administrator and do those things that they do and that was of no interest to me at all.

NG: Yeah.

ET: So I mean it was fine we went our separate ways we had no children so it was fine. So no I was divorced by then.

NG: Also the environment during time this time throughout the time that you were in school there's a lot of social movements going on, Civil Rights Movement, Women's Movement, anti-war. Were you aware of those?

ET: Very aware?

NG: But how did it impact you or were you involved at all?

ET: You know I wasn't involved and I think it's because I was just in front of the you know the main part of that and I think again it's because I was so caught up with first of all I was married from what 1966 or '67 I can't even remember to probably '66 to what '69 I mean we really weren't married very long. And so I was involved with being married, working, getting a divorce, working on my career. So I was aware of it for sure,

the Civil Rights Movement but I was not engaged or involved in it. I was in the south as well. Of course the feminist movement, I knew about that but it wasn't enough on my radar screen I guess because I was so focused on I wanted a Ph.D. and to get a Ph.D. and work took all my time.

NG: Right.

ET: I just was not. My brother in law and sister were much more engaged. My brother in law was a couple of years younger than me. My sister was four years younger than I am. So they were a little more engaged and aware of it. I was aware of it but not engaged.

NG: Okay. So you said you were recruited to come to MD Anderson can you talk about that a little bit?

ET: Sure I was working at NCI and they were bringing in a new Chair of the Department here of Radiation Oncology the big department, the division and the department I was going to be in was Experimental Radiation Oncology. I had published an awful lot by then and was well known in the field by then because of being at The Gray Lab and by being at the NCI and just working all the time you know doing science and publishing. The person who was taking over, Lester Peters was his name who they were recruiting for head of the division I knew and he knew me from meetings and giving talks, etc. He called me when he was here and he said, "I'm in Houston" and MD Anderson I always wanted to come here, it was my target to come here and do science. He said, "I'm here and you know you've probably heard that they are recruiting me here for chair for Radiation Oncology. Gilbert Fletcher was stepping down and I'd be interested in having you come we'd like to have you come and interview here and head

up the normal tissue, reinvigorate the normal tissue part of the department," because it had kind of disappeared with an individual who left a year or two before he [Lester Peters] came here. So I told him that I would think about it which I did, and I called him back and I said, "Okay I'll do that." I mean I had to come and be interviewed and present seminars and do all that and they offered me the position and I negotiated to be an Associate Professor. I'd never written a grant. I had published a lot, well known in the field already. But I had never written a grant so they took a chance that I would get grants which I did. So I negotiated I was never Assistant Professor. I came here in 1983 as an Associate Professor. I was tenured in '86 which was the year my son was born. I was a professor in '88. I've been a professor since 1988. So I missed that whole Assistant Professor piece. I figured I did part of that in London and part of that at the NCI and they gave me credit certainly for the NCI years. I knew some of the people here again I knew the department so it was an easy transition here.

NG: What about moving to Houston, how was that?

ET: Well you know when I came to interview they kept driving me up and down around the fountain and around all that beautiful part of Houston but I had been here giving talks actually so I knew a little bit about it. For me it was a great place to be. I came here for the institution. I came here because it is MD Anderson. It had a great name in my field. One of the best departments in the country in my field and that for me is the draw. I had no other attachments anywhere else. I loved Washington. I really liked it as a place to live but I figured I'm still working on my career and Houston was a great place to come and do that. For me it was okay so I drove my car down here and moved all my stuff down here and I've been here ever since.

NG: What was the Texas Medical Center like at that time?

ET: You know that's when the Shamrock Hotel was still here. It's hard to even think about. I'd have to go back and look at the pictures because I've been through the whole evolution of it just like Margaret Kripke has and it was very tiny. MD Anderson was very small. I don't even know how many faculty we had at that time it was so small. The Smith building down on the South Campus you would have thought that was miles away or something there was nothing down there besides the Smith building. Houston was very small not anywhere near the population. But you know it had the opera even then. It had a lot of the arts. I mean I actually like Houston. It's not very pretty we can all acknowledge that. It has its pockets but I like being here. I love the water so for me that was an attraction too. It's closer to the water at least. But it was just a small town. It felt the medical center was really small. But again my life was in this place, not here but in a building that's still over there. My lab turned into something else but that building is still over there.

NG: So where was it? What building was it located in?

ET: It was located in what is now called the main building it was the research piece of the main building on the yellow zone I think it is still the yellow zone. I still have an office over there, although... I'm still part of that. My faculty appointment is still in Experimental Radiation Oncology and Division of Radiation Oncology so I am still part of that community. My lab is closed. I closed it about a year ago. It was open for about the first five or so years I opened this office. So I am still part of that community, and I still give talks. I'm actually going to Oxford in early December, It's going to be very cold, I'm the external examiner for one of their Ph.D.'s. They have a different system

than we do. I still give talks about science and I still meet with students. I do some work in the division I'm on their promotion tenure committee and you know I'm still involved. NG: And what about partnerships between institutions was that really not taking place at the time?

ET: No not very much at all, no.

NG: Okay so how do you think that has changed over time?

ET: I think it has dramatically changed. I mean we partner. I know that we have some partnerships with Baylor; we have some with UT. I mean everybody still. Well first of all science is now team science. It's big team science. Big team science. So I think that explosion of knowledge with all the new technologies and particularly the place where if you want to do clinical trials and you have patients it became very clear that we all just couldn't sit in our little silos and do our own work. Particularly in this institution because one of the things that I always liked about MD Anderson is that I never felt that I was excluded because I was a Ph.D. So here you are always a part of the community whether you are a M.D. or a Ph.D. you know and part of it was because you know my department was in a clinical division but even the basic scientists who weren't in clinical divisions we were all just part of MD Anderson and it didn't matter if you were a MD or a Ph.D.

This institution was started with teams in terms of patient treatment so it's always been a collaboration within the organization. In the past 20 years at least the past 20 years I think we've all become aware of [the fact] that we just can't live in this little silo. We have to reach out not only within our organizations but you know form partnerships outside the organization and [form] collaborations on for example grants, collaborations

for clinical trials. I think it was kind of organic. It just got to the point that, that's how you had it if you were going to survive that's how you were going to do this. If you are going to thrive you had to [collaborate]. You might be able to survive otherwise but I think it would have been difficult.

NG: Your responsibilities when you moved here and you took the position here you were doing research and teaching is that correct?

ET: A little bit of teaching. We don't have, we are not associated with the medical school.

NG: Okay.

ET: So we don't have medical students to teach. We do have graduate students to teach. So I taught the graduate program. Had graduate students in my lab had post docs in my lab, had visitors in my lab. So the teaching was mostly at the bench but still always had students and kind of took care of them. I had a couple of them that were from Canada at two different times. Anyway they both got sick so I just said, "Okay you're coming to my house they came and lived with me until I got them well again." I said, "Okay now you can go back to your apartment." I kind of took care of them when they needed it. That kind of thread of still teaching developing young people I think it was important to do that and I had a lot of fun. I mean I wrote grants, wrote papers, I did some great work. I partnered with some of the clinicians in doing some of the work.

It was good and then when Margaret Kripkie... and I take it this will be your next question. "How did I end up doing what I am doing now?" I will pre-empt the question. You can continue I will let you ask me the question. So I was responsible basically for contributing to the mission of the institution in my case it was trying to understand

normal tissue damage and what we can do to intervene. How can we reduce it? And I worked on the lung I worked on the gut I worked on skin. What can we do to reduce it? What can we do to mitigate it once it gets going? Can we protect the tissues from radiation, protecting the normal tissue? So I was always trying to make the complications less and the whole survival-ship issue. So that was my job. My job was to do this and to add to the literature and to be part of the PO1's.¹ I had projects on the program projects grants and on our SPORE's [Specialized Programs of Research and Excellence] that were aligned with what they were doing clinically and other places in the lab as well. So there were people in the department who worked on tumors and I was on the normal tissue side.

NG: Can you talk a little bit about what some of your outcomes are of the research of how we can protect the normal tissue and those kinds of things?

ET: Yeah well it's a lot about dose delivery where we've made the biggest advances is actually learning how to give the dose in different ways. Before we used to treat big ports you know anterior/posterior maybe three ports. So we've learned to do what's called intensity modulated radiation therapy which is to treat... give a little bit of dose to a lot of regions but a lot of dose [to the cancerous tissue]. And a lot of that came from physics rather than the biology, it was the physics understanding the different treatments. What we've done we do have protectors that are useful. (Not as useful as you'd like them to be.) That particularly became an issue with bioterrorism and the issue of dirty bombs and if people would inhale radioactive materials. A lot of the advances have been in understanding the effect of treating a big volume of tissue versus a small volume of

¹ PO1 is the National Institutes of Health (NIH) activity code for grants applications in cancer research program projects.

tissue. I mean there have been a lot of molecular advances and that's kind of where I ended what I was doing in the lab at that point.

The last seven years or so before the lab closed I was working on the genetics and trying to understand why some people... So you can take a group of patients and you can treat them all the same way and yet some of them have the same disease - and I say same but it's always different - but there will be some who will get almost no complications and then you will have some who get a lot of complications and so the goal became to look at why. Can we understand and then be able to identify those people who are extremely sensitive to radiation compared to those who aren't? Because what that allows you to do perhaps is to first of all get these people who are sensitive out of the population. Know what the dose, you know how much dose to give them and maybe look at other ways to treat them. But what it really could allow you to do is take these people who aren't as sensitive (normal tissue wise) and give them more radiation with a greater chance of curing their tumor. So that's what we were doing working on the genetics. We, and in fact, one of my graduate students is still continuing to do that and she took that and made that her career which is great. We haven't identified the genes yet. We've identified the places and we've narrowed it, but we haven't identified the genes yet for the radio sensitivity. There were drugs that radio-sensitized the tumors and drugs that protected the tissues as well. For me that latter part of trying to identify the genetics of it was really very exciting and really very interesting.

NG: And you said this was in the clinical division but you worked with the clinicians that saw patients and things like that?

ET: Well, I ran the lab you know but we talked with them about what we were doing in the lab and how that would fit in with them and they would say, "Here are the problems we are having." so it was a communication. I was focused on pretty much radiation fibrosis and pulmonary fibrosis in particular but also on the inflammatory effects they said, "We really need to think about the pneumonitis," which is the earlier response to radiation in the lung, "and we need to understand that as well." So it was that kind of collaboration then it was discussing what their issues were what we were doing and what did they need to know that maybe we weren't doing in the lab? But also just in my lab just discovery was the thing, the genetic piece. That was very important to them too because if we could identify those patients with some kind of a molecular test that would have really helped the radiation oncologist. We haven't gotten there yet but we are still working on it.

NG: When did you remarry?

ET: I didn't.

NG: Oh you didn't.

ET: I have been single all but three years of my life.

NG: Okay.

ET: My current... Jerry and I have been together 17 years and you know we... he has four kids I had one. His kids he had triplets, they were 16 when I met him. The youngest one was 8 and my son was 11. So we kind of helped raise each other's kids. Now they are all out of the house and married themselves with a few kids. Some of them have kids. My two step daughters have children. But we just never married.

NG: But you said you had your son four years in '86 four years after you got here. So you know I've talked to everybody about: how do you balance your personal life with your professional life? And so how did you do that?

ET: Well I tell the women is buy all the help you can afford. Seriously. I've never been a big fan of cleaning my house anyway. So I've always had somebody come in once a week or something. But for me I needed to have somebody particularly the first five years of [my son's] life somebody there every day and for the first few years of his life I had somebody around the clock except on weekends but they were there 24/7. I mean it was just easier to do it that way. So you have to make choices you know. And then the other thing I say is, "Here is where I worked. [Within] a 5 mile radius, live, doctor everything has to happen because I'm not going to spend a lot of my time traveling back and forth because that's time I could spend either with my son or here working." So it was that and it was also being a professor so I had a little more latitude I had built a reputation already. I had been on this giving a lot of talks and stuff like that and meetings, etc. and I realized that I didn't have to do every single one of those or I didn't have to go to the meeting and be there for the whole meeting. I could go and be there and give my talks that I said I would give and maybe spend one night at most two nights and then come back. So you, that's one of the things you do and you decide.

This child did not ask to be born and actually you want to be with them, it's enjoyable but certainly not without its angsts and always feeling guilty and, "Oh I should be home, I should be over here and oh I should be here." And women say, "What did you do about it?" I said, "Nothing." I said, "You just have to realize that's the way it is and that's the way you are going to feel and so be it you know and they are fine. We

always feel guilty but they end up being usually pretty okay." The other thing was you know I made it home. In the mornings it would be really difficult now because I have a lot of 7:00 a.m. mornings but unless I really had to be at a 7:00 o'clock meeting or an 8:00 o'clock meeting I had breakfast with them every morning. And I was home if I could be by 6:00 o'clock to have (particularly when he was young) to have dinner with him, spend time with him when he went to bed then I would turn on the computer and do some more work. Then when he got older he actually was a big help because he always loved to be in the kitchen and cooking around when I used to cook a lot. I don't cook so much anymore. So when he got older he liked to cook. So the housekeeper would be there and they'd go to the grocery store we lived in West U there was a little market there called JMH and they could go down there and just sign a tab. They could get what they want and charge it to an account I had and they would go and he would start cooking and when he got older and had a car he would call and say, "Mom when are you coming home?" I said, "On my way." He'd say, "No your computer's still on. You haven't even shut your computer off. When are you coming home?" "Okay what are we doing for dinner?" "I'll pick it up on the way home." He'd say, "I'll take care of it." So he would go...

NG: That's really nice.

ET: So he would go. Which is really nice. Particularly he liked to cook the meat and stuff like that. I said, "Okay you do that and I'll take care of the vegetables and salad. I'll do that." He said, "Okay." So he would just go and get it and he would do it." A couple of years ago he did Christmas Eve dinner he cooked the whole Christmas Eve dinner. We were going to go out and I said, "You know I can't go out for Christmas Eve

dinner." I said, "Scott do you want to cook your favorite pasta?" He said, "Okay." So I went to the grocery store and bought everything he did the whole Christmas Eve dinner. He's a great cook. I was over there the other night. He's married now and he's a terrific cook. So that's how you do it.

NG: He lives in Houston?

ET: Yeah. So that's how you do it. You have to I think you just have to first of all there will always be competing priorities but you have to know when one is more important than the other. You have a grant deadline you know it's like, "Okay I won't be home tonight until late, Myra (or whoever it was) will be here. I'll see you in the morning" And that didn't happen often or else I would come home for dinner and then work from home. Or it was like, "No I can't do that my son is sick and I'm staying home with him." I mean even though I had a housekeeper. If he was...the one thing about living close is if he got ill she could take him to the doctor I could always meet them there. I would almost always be able to run out to meet them at the doctor see what was going on and then make a decision about whether I needed to go home with him or whether he could go home I would get his medication and send him home. And when I needed to I went home. There was one time I was at a meeting he got sick I was in Canada actually I came home. You know there's just no question about that. So that's how you do it. And everybody says they worry about it. I say, "You know what? When should we have kids? It's like I can't tell you that. Margaret Kripke was a post doc. I was a professor. You have to do it whenever it feels right for you and you just have to do it." They say, "How do you do it?" I say, "You know what I don't know somehow you just figure it out!" But here are our tips on how to do it and balance isn't a good word

because you never balance. I think you just kind of keep the important balls in the air and then you forgive yourself when you drop one.

NG: Well I think this is good transition then to talk about the position that you are in now because I'm wondering you know are those personal issues beginning to be addressed? Because I read an article that came out this week and there are all these articles all the time about how women are getting their Ph.D.'s and it was focused on Chemistry so a science field and they are getting their Ph.D.'s and then opting out of academia because it doesn't fit the life that they want to have and this is part of it of having a family and things like that. So do you think that within this position that there are ways to change what the demands are at work or to not like change the demands but hours. Is there a way to make that easier or is it up to women to figure it out on their own?

ET: I think it's hard for the clinical side of the house because there are patients you know there are patients. I think for basic scientists we have a little more flexibility I mean you've got to be here to do your experiments particularly when you are first starting out as an assistant professor. You've got to be in the lab. I mean you'll have technical support. You'll have people to help. I mean we have something in place that you can take, if you are on the tenure clock, that actually has a beginning and an end and the end is 7 years you have to be tenured or else you are out. We have a policy that you can extend the clock by two years for new child and family by birth, adoption or foster care. It's one year for each, you can have two children in a seven year period and extend it. We allow them to do that up to six months after that event, after they have the child or adopt the child because we all think we are super women and we can do it all. "Oh yeah

we can do this and macho" and then you get into it and you think, "Hmm maybe not. No I have that grant, etc." So we do that.

I think in fact Jerry and I just had this discussion the other night because he was talking about he is not sure how he feels about this issue that women do take the place of men and then they opt out like you're saying and then they decide that they can't do it. My comment to him was, "Then we as a society need to figure out how to make it easier for them to do that" I said, "Because I don't care what you say if you are losing 50% of your talent you don't have the best minds working on a project or on a problem and I don't care what field it's in." So we as a culture need to figure this out which we are not very good at doing. We have not done this well. I think some places, yes some places have what they call on ramps and off ramps. I think it's one of the big accounting firms have something what they call customized... I can't remember exactly the name you can customize your career and dial up and down depending on other things going on in your life. So that they realize that a life is not static like you start here and you come in and you don't have kids and then you get married and you have kids and that puts a different demand and they allow people do dial down what they are doing but with the expectation that when that period of life is over they will dial back-up. I think it's hard to do that and we aren't very good, other countries are doing it and I don't know how well.

I know in Sweden I think... First of all in this country we don't have any... we have FML, Family Medical Leave, which covers, holds your positions for 90s days but you pay for that out of your vacation, etc. Other places, do have paid maternity and paternity leave it would have to be both ways, but not many because it's always about the money, you know it's always about the money. So I don't think we are doing it very

well. But I'm actually myself not sure how to do it. I think one of the things we could do if women, thinking on the basic science side, we could provide perhaps a grant or something to hire a very senior technician while she is out for the first six months or so that we would cover somebody's salary to do that. I'm not saying "we" I'm saying "we" as a community of scientists not only at MD Anderson but at other places. You know that's one thing that could help because that way you'd have somebody very senior in here running the lab making sure that the experiments were getting done.

I think it does help that we have the inner-connectivity that wasn't there when my son [was young]. I mean we had the old dial up and it would go down and it was painful, really painful. But you do what you have to do. So it's easier to do that today. I know that one of our divisions they started about 5 years ago it's a diagnostic imaging that they are able to read at home. I think everybody has their monitors at home now and they are going to deploy everything so that people will be able to work from home and particularly like you said... It's not only about child care. The single people get really upset and I used to feel this way although I don't get upset. But it is like, "Well what about me? I have other things I want to do with my life." But you know there's elder care. You could have family situations where you have to take care of an ill parent or something. So we are not very good at that kind of social part of our lives and putting in place systems that will help people get through those times.

So what we've done is we do have the stop of the tenure clock that's the one thing we've done and men and women can take that and they do. So that seems to be working. I think there's also something that's innate in all of us (particularly the women) that sometimes they don't want to take it because they think it will be looked on they think

they will be looked on badly because they have taken that year and there may be some value in feeling that way, there may be some reason to feel that way, although I don't think it would be very overt. So I don't know how else... child care on site. I think that only goes so far actually. First of all you can never accommodate everybody. Secondly I can remember when my son was young I wasn't living as close as I finally did and you are always in a hurry to get home or back and I can't imagine picking up my son a toddler who is tired, hungry, sleepy and driving in traffic for an hour. No, not how I want to end my day nor I think they don't want to end their day like that either. We haven't been very creative about it I think has been an issue. California is a lot more creative and able to do things around this than we are. They do have some paid maternity leave. I don't know how they do that but they do. I was out there visiting and their taxes are a lot higher too.

NG: Yeah.

ET: I think that's the other thing is you have to pay for all of this and there is a finite amount of resources and it's like if you do that then you can't do this. So it's the priorities. Now, should it be a priority? I can only say for me it would be a priority. For me we don't start anything before 8:00 and we quit at 5:00. We don't even have meetings at 5:00. We have one because that's when we get the surgeons there, the women surgeons. But mostly we don't start anything until 8:00 o'clock and our last thing starts at 4:00 o'clock to be cognizant that people have kids to pick up at school, etc. or get home to where their kids are. So we try to be cognizant of there are other factors in women's and men's lives. Men are getting, younger men are much more involved in their kids' lives. The one thing that's happening is there are now restrictions on hours that are put

on residents and so on. So that is an effect allowing them to have more time to go home and be with their families. So we haven't solved it. I don't know if we ever will. I think it's not solve-able but we can put some things in place that will make it easier and I think it's about making it easier. I don't know how I could have done that. I could not have done that. You know have taken any kind of time off without I mean my son was born and I think I was back in 6 weeks part time because I had a grant due. So there are some things that have nothing at all to do with you know, "Is there anything in place?" It's like even if there was I have a grant due. I have to get this grant written or else I don't have a job and I need a job.

NG: Right.

ET: So it still remains a difficult problem.

NG: So can you talk about how you got this position?

ET: Yeah it was actually a national search and I applied for it. It was a new position that Margaret Kripke had consultants come in and say, "Okay she was retiring and she wanted to make sure that all of the advancements that she had made for women would not be lost." So they came in and they said that it needed to be somebody's day job. They wrote the job description, the President said, "Let's do it," and I applied for the position. I was ready to do it. Because I had been doing this ever since I came here I had always been involved with our women faculty and getting them promoted, trying to get women into leadership. I was a late bloomer in a sense because the feminist movement happened at least 10 years earlier. But yet I guess it was kind of nascent, then when I finally got into a position and I saw that, you know, there are things that we can do. So I've been always doing it and when this position came up I said, "I can do this now." It's

again it's a different legacy. A different legacy to leave but I think it also follows along with kind of the thread of my whole life of you know helping others achieve whether it's my post docs, my students, whatever. You know helping the next generation go forward, paying it forward a little bit if you will.

So I applied and was given the job and this was November 2006 the office opened February 2007 and I never looked back. In fact I hung up my lab coat in my old office and I never brought it over. When I was over there and still running the lab I wore it because for me it was a way of signaling that I really had made a change. And I've had a great time. I've had a great time. It's very fulfilling. I've had one of our senior faculty stop me just this morning on the elevator. She said, "Oh I'll get a ride down with you" and she said that she had been to a program that we had just a couple of weeks ago. She said it was great. She said, "I really enjoyed it. All the programs you are doing for us we are so appreciative of it." And I think they are. I think it's helping the women. I think we've brought more women as leaders. Now that, we can't do that. All I can do is bring women to the table. All I can do is bring the best women candidates that I can to the table and then they have to interview, etc. But it's also the institution is choosing them because the choice is made by the President and the Provost and the Physician in Chief. So they are choosing them too. So there has been that kind of a change. Plus there have been a lot of women who have been ready for leadership even in the past decade and it's just really getting into everybody's consciousness.

I've seen a big change in just what's being written about women in leadership and women in STEM in the past decade. It's kind of been an explosion of data and getting the data out there. There are no women here. There are very few women on corporate

boards. There are very few women who do starts ups. What is this? Why is this? What can we do about that? So that's how it happened and like I say we set our goals and we've been focused and targeted and just moving forward trains on the track.

NG: So did you have any models of how to go about doing this like how to recruit women, how to present them for leadership positions, do programming? Did you have models of that already or were you kind of creating something?

ET: So there were small pockets Mass General had an office for women. I forget then what the name of the office was and so they were. And Memorial Sloan Kettering they were doing something. So I went and visited all those. There weren't very many but I went and visited them. The difference of this office was number one it's an office with staff. I have 5 staff and then I have a faculty member who is here part time. So I have 5 staff plus a faculty member. And [the office is] full time dedicated to women and women faculty reporting to the Provost so we are not in another division. I report directly to the Provost I have a direct reporting line. That was really different. That's what really different about the office. There's nothing between me and the Provost, there's not another level of reporting up in the neck that gets reported up. So that was one thing that makes us unique and the fact that it's all of my time. Although I was still part time in the lab because a colleague had a grant funded and I was doing the in vivo, the mouse work on the grant I had to continue that.

And I guess you know just doing a lot of reading and looking around what was going on you know deciding what the goals would be and we set those up very early on. Raise the visibility of women and increase our recognition, contribute to scholarship, change the culture, career development and mentoring and those are still kind of our four

pillars that we focus on. I'm a scientist so data is really critical for me it's very important. My first full time hire besides an assistant for me was somebody who handles all the data that's all she does. Mostly mine data, handle our data, help me write things, and things like that. And then a project director to help me oversee everything we were doing. We put on two programs, one program called Women Leading the Way. We bring in very high profile scientists and physicians and physician scientists to give a talk to the whole institution as well as to meet with our junior faculty, our post docs, again get them to meet the people who are coming up so they know who they are. And we try to target something that's really timely. Like this week we had Vivian Ho who is an economist. She's a Healthcare Economist she's at Rice and we had her talk about the Affordable Care Act and its impact and that's really important for us. So we do that twice a year and we partner a lot with other departments to do these things as well.

We formed a lot of partnerships. Nominating women for awards, we've been doing that. So the other thing for me my philosophy is we can't do this alone. We cannot do this without men at the table because as long as you do it on your own it will always be a women's issue and it's not. It's a societal issue. So my advisory committee is 50% men and when we were nominating women for awards and they were getting awards it was a big focus of mine and the guys on my committee said, "What about the men?" And I said, "Well you know you guys aren't my charge?" So they went to the president and the president said, "Liz we think you need to do this for all the faculty" and actually there is one person in my office and now we run what we call the committee on faculty awards that we nominate men and women.

NG: So these are not institutional awards that you are talking about?

ET: I'm talking about external awards like Institute of Medicine, AAAS members, Fellows of the American Academy and Association of American Academy of Science. So all those big awards ACR Awards. ASCO Awards. We nominate the faculty and we have a committee that we work with to do that. So you know that and mentoring, we do a lot of career development programs, we do a lot of mentoring programs. We just had a woman come in because one of the things that women don't do that men do that you know we are content experts just like the guys are except we don't write the editorials. We don't write about these things that we know about and how they might impact like the high cost of drugs. There's one of our faculty members a male he really has taken that on as something that he writes about in editorials. So I had somebody come in and talk about writing editorials, to the women. How do you do this? Why should you do it? And we also have a public relations office here that things have to go through them so I had him there too and he talked about the process of doing it. He was very actually very enthusiastic that I was going to get somebody in to teach people and talk about how to do this because he said we need as an institution to do more of that.

So we try to be timely and give them new information, push them a little bit into some of the things they should be doing. We do an internal career development workshop that we just finished. We did one in October for assistant professors. It's taught by faculty who we've sent to external career development programs because I've told them, "You're going there. You need to come back and share the knowledge that you have with people we can't send because we can't send everybody." So we engage the faculty. We engage the chairs of the department and identify women to send to these external programs. So it's really working. The leadership like I said I sit on every

leadership search committee and just getting them to think about and encourage them to take the Unconscious Bias Test. You know encourage them to consider the men and the women with equal CV's we need to talk about them in equal terms. And like I said we are up to almost 30% and we are only 37% of the faculty. So if you think of that and 30% of the leaders are women we are very close to what our representation is you know on the faculty.

NG: How much of this do you think is the leadership at MD Anderson?

ET: I couldn't do it without them as partners let's put it that way. I mean I could bring all the best candidates to the table and if they get up to the front office and they are not chosen it doesn't matter who I bring so clearly it's a partnership. It is a partnership.

NG: What do you see for the future of your career and this office?

ET: Well I hope someday we don't need this office but it probably won't be anytime soon because our experience has taught us if you take the eye off the ball it kind of goes back. For me it's about really getting this into the culture so that there is no question that everybody thinks if not the same that it just has to be part of their culture. We are doing that by we are pushing some things now to the division. Our divisions are our higher order and we have counsels on gender inclusiveness in every division. Like last year every division counsel had to nominate a woman for one of our internal awards so trying to push some of that work down. I had an external advisory board come in a couple of years ago. At the end of 5 years I said, "Okay I need somebody to lay eyes on this and say what are we doing right and what are we doing wrong, what should we sunset and what aren't we doing that we should?" So they came in and they identified one big thing and that was the fact that I was the face of the program the total face of the program.

And they said the bus scenario. "What if you get hit by a bus?" and I said, "I hear you." They said, "You've got to figure out a way to do this." So we are doing that. It will take a while for that really to take hold but we work on that.

We are putting together a coalition of all of the UT components all fifteen components both the academic and the health centers. We call it the – they changed the name because they didn't like "Senior Women" - The Women's Senior Leadership Network. Patty Hearn and I decided that we really wanted to try to do something for the whole UT System and we are actually doing a workshop in January on sponsorship which is kind of something I think is really important for getting women into leadership positions. So I'm working across UT system to try to bring us together as a group and in their individual institutions again pushing it out into the various fifteen UT components. I do a lot on the national level as well.

So it's continuing here to do what we are doing in continuing to work with the Provost. The Provost and I work very closely with him on our leadership searches. Constantly monitoring like this year our hiring is 50/50. Our new hires this year were 50/50 - 1:1 that's a first! You know so that's very encouraging and then it's making sure that they stay and we don't have a lot of problems with retention. I mean we don't have people leaving the place in droves and proportionally we are not losing any more women that we are men. So that's a good thing and then it's getting them up through the ranks. It's getting them from the assistant to the associate to the professor level. Working a lot with the assistant professors you know making sure they are ready when it's time you need to be ready. You can't wait for six months from now. I'll give you six months to

find where all the bathrooms are and then after that you have to have a plan and you have to know what you are going to do and what the benchmarks are and you need to hit them.

NG: Yeah I think that kind of guidance is important.

ET: Yeah it's coaching, it's mentoring. Like I said sponsorship is what I'm really interested in right now is trying to get a sponsorship program going that's what the workshop was on. We wrote a paper about it in Academic Medicine a couple of years ago October 2013. I've been doing a lot of talking about that. You know around the country and at medical schools and organizations.

NG: By sponsorship do you mean...?

ET: It comes from the corporate world. They are doing it. I read about it and I thought why aren't we doing this? What I mean is it's somebody who is in a position of power, somebody who is able to influence decisions who identifies talent and then you know identifies them so if you are at a table and there is some new committee coming up and we all tend to think of the people who look like us. So the men think of men. The whole goal of this is to get the men to think about what a sponsor is and how they should be looking for their protégé and so it's different than mentorship. It's very different than mentorship. And so that they identify protégé's who they are then kind of grooming for leadership positions. We've been identifying women for leadership positions and then grooming them for leadership positions and then compete and they've done pretty well. So I think it works. One of the ways it differs from mentoring is that a mentor can be at any level of the organization, they can be an assistant professor. A sponsor has to have some chips to spend. They have to have some gravitas. They have to have some power.

saying, "I vouch for this person that you may not know very well but I've seen them and I know they can do this job" and they are taking a big risk by doing that. But there are a number of ways that can be done.

One example at a much lower level is my former post doc who I said is working on radiation lung damage and genetics was a reviewer for a professional journal. One of the professional journals and we were in a meeting a few years ago and she said "You know I'm a reviewer but I really I wanted to get on as an associate editor and on editorial board and I can't make that happen." And I said, "Well let's go over and see if the editor is at the journal booth." I went over and he so happened to be there and I introduced him to her and her to him and I said, "Tina would like to be on the editorial board." I said, "She was in my lab I think you know her work. I'll let you guys talk," and he appointed her. He did it because first of all I was the past president of the organization, I've been there a while and they know me, and I have chips because I've done a lot of work for the organization. She's on the editorial board and she's doing a great job. So that's a way again of sponsoring someone, much lower than what the corporations are talking about but that's how you do it. You have, I have chips to spend and I spend them on behalf of people who are coming up and who need that opportunity. I don't need that opportunity, they need that opportunity and that's what sponsors do.

NG: Well I have asked all the questions that I had.

ET: Great.

NG: Is there anything left that you were expecting to talk about or that you wanted to talk about?

ET: No I figured this would be kind of where you started from and all these things in between. I have to say one thing I tell people that I think being a scientist, I can't say about being a physician, but being a scientist is a really wonderful life. I mean really I just think of the opportunities, discovery I mean it's really been a very nice way to live your life. I can almost say that I can't remember any time of getting up in the morning and saying, "Oh I don't want to go in there." (Unless I was sick and just had to come in.) But never did I say, "I don't want to go there." I was always up and out the door and looking forward but then also looking forward to going home. I also want to say that I think the greatest legacy that I will leave is that of having a child. And as somebody that is productive I have never regretted that decision to have a child. It is probably the best decision I made. So those two things are really important to me.

NG: I usually ask everyone what you see for the future of women in this field but I feel like you very well articulated that it is positive and that there is a very bright future that the possibilities are good for women.

ET: They are. I really believe that I really do. Because everybody is more aware of it. Everybody is more aware of this whole issue of diversity is the best way to solve complex problems and I think people are beginning to hear that. Well you know if you have a football team you don't leave half of the talent on the bench. You want your best talent on the field. If you have 50% of the population some of them must be really good that are on the bench. We need them out there on the playing field. You just have to think about it that way that there are good minds that are not contributing to solving all these problems. I don't care in what area you talk about. So yes I think it is bright, I

really do. I'm not a Pollyanna by any stretch of the imagination. I'm pretty clear about some things. I think it's bright. I'm encouraged!