Interviews of the Margaret MacVicar Memorial AMITA Oral History Project, MC 356

Massachusetts Institute of Technology, Institute Archives and Special Collections

Nancy Berman – class of 1958

Interviewed by Jacqueline Shen, class of 2018

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MIT Libraries

Margaret MacVicar Memorial AMITA Oral History Project

Nancy Berman (SB Mathematics '58) was interviewed on June 3, 2017 by Jacqueline Shen (SB Biology '18) at the George Washington University in Washington, D.C.

Berman – a biostatistician who earned her Ph.D. from The American University in 1980 – has worked at the National Institutes of Health (NIH) and KingDrew Medical Center. She is Associate Professor of Biostatistics and Pediatrics Emerita at UCLA's School of Public Health and Department of Pediatrics.

Berman's work focused on the application of signal processing techniques to modeling of hormone secretion and metabolic systems. Her objectives were to better describe the process in order to uncover biological mechanisms and to develop parameters that could be used to compare populations and characterize treatment results. She collaborated with investigators in endocrinology, psychiatry and neurology, publishing papers in all of these fields. Her teaching was often been geared to physicians and scientists in need of additional training in statistics.

In 2016, Berman co-authored "Planning Clinical Research," a Cambridge University Press book that looks at how to determine the best design for a clinical study.

SHEN: Thank you for joining us today. First, we'd just like to know some background. Where were you born?

BERMAN: I was born in Cambridge, Mass.

SHEN: Is there anything about your family that you feel is important to your personal history?

BERMAN: I'm second-generation American. My parents were both born in Cambridge, and I was born in Cambridge. My parents – one's family was pretty wealthy, the other's family was pretty poor. But they always pushed education.

When I grew up, I think for most of the kids that I went to school with, there was this sort of track that you went on. There wasn't any question that we would go to college – everybody went. And that's what I did. My parents expected me to go to college and thought very highly of it.

SHEN: What were your parents' occupations?

BERMAN: My father was in real estate, but not high-end, and my mother was a secretary. My mother was very, very bright – she really was. But she didn't get a chance. She lived in a very poor family. She was the oldest child, the oldest girl in a poor Jewish family, and she was expected to go to work and help the family and everything. But she was very, very smart. And I was lucky: I had two good parents. They both encouraged me to do what I wanted. My father was a very nice guy. He died when I was 14, so I wasn't able to get an adult's view of him. He also supported my mother and respected her. So that was very nice.

SHEN: That sounds like a lovely dynamic.

BERMAN: It was a nice family. I have one sister.

SHEN: I was going to ask what made you want to go to college, but you've already said--

BERMAN: Yes, you went to college. Even if you were a girl, or even if you went to college, if you were a girl my age [graduated high school in 1954] – generally, as a girl, your options were to be secretary or a teacher or a nurse or an airline stewardess, if you were good looking enough. You understand? Those were basically your choices, which were a little limiting.

SHEN: Did you have any goals in your childhood at all, or did you just think, "Wherever life takes me, I'll go there?”

BERMAN: I guess "Where life takes me" – but I really didn't want to be a teacher or a secretary or anything like that.

SHEN: So it was a process of elimination?

BERMAN: Yes, process of elimination. It means, "Take typing in high school, because you've got to get a job." I didn't know what I wanted to do until I started. When I started in high school, I took algebra. We had K through 8, and then your high school system. And math – math was arithmetic, which was a pain in the neck.

[LAUGHTER]

I really made mistakes, you know? And it wasn't until I took algebra that I realized I like math. I really liked it. It was fun and I could do it. So that's when I— Basically, when I was a freshman in high school, I think, I decided I was going to be a math major.

SHEN: You told me previously that you moved from pure math to statistics. Can you describe that journey?

BERMAN: Well, I got a bachelor's at MIT and then I went to graduate school at several different places: Yale for a semester, Rutgers and finally American University. I went to American University because they were the only place that would give me credit for the previous study I had done. I had a baby. I was taking pure math, which I really liked, and I especially liked linear algebra. But I realized at one point that I really couldn't do it. I wasn't into it enough to do it when I had kids and all kinds of stuff going on. And I was thinking, "Well, I don't really want to do applied math" – which sounded like engineering.

When I moved to D.C. I was working for Beltway bandits [private companies near Washington, D.C. that provide consulting services to the U.S. government] on computer programming and data management.

I started working on a contract with NIH to provide data management and reporting on a study called the Collaborative Perinatal Project, which was an NIH project. It was a long-term study of children, one of the first major studies that took advantage of computing power. Prenatal, natal and childhood data was collected longitudinally on over 55,000 children from prenatal to 8 years of age. The study looked at the relationship of pregnancy and perinatal factors on the physical, neurological and psychological health outcomes of individual children. Among the reports we provided were statistical analyses under the direction of an NIH statistician. This was doing statistics; it was doing statistics for health research purposes. And I said, "I like that. That, I can do. I can do it. I like doing it. I feel good about doing it."

Then I began taking graduate courses in mathematical statistics. I worked for another big medical study at Group Operations, where I was a project manager and statistician. And then I worked at Harbor [UCLA Medical Center], which was a hospital. So when I found statistics, it was a form of applied math, it was useful and interesting. I learned a lot doing it. And so that's how I wound up there. My middle granddaughter likes statistics, and says she's going to be a bio-statistician.

SHEN: There you go – someone following in your footsteps!

BERMAN: That would be nice. But she can change her mind, too – I told her that.

SHEN: So let’s back up a bit. You said college was for certain, but why MIT? When did you realize that you wanted to go to MIT?

BERMAN: I didn't go there my first year. I went to BU, for a lot of reasons. But actually, it was him [points to her husband, Arnold Berman '57, Electrical Engineering and Computer Science] and a friend of mine-- I had met him then, and I was talking

to him and a friend, and I said that my mother had suggested I go to MIT. I said, “I’m not that cool.”

[LAUGHTER]

I was talking to him and a friend of his, and he said, "So what are you studying?" And I said, "Well, I'm majoring in math." And they said, "You're going to be a mathematician going to BU?" and then proceeded to harangue me for about three hours on how I couldn't possibly be a mathematician going to BU. So I said, "Oh, I'll transfer." And I did.

SHEN: Wow – was that difficult?

BERMAN: I just applied, and they let me in. My generation – we were a fairly small cohort, so there wasn’t tons and tons of competition. Getting into schools, you still had to make the cut, but it wasn’t six thousand people competing. I remember when I was taking classes in Maryland, and one of the classes I signed up for was full, I was shocked. In a sense, we were very lucky.

SHEN: Did you have any mentors in high school that you were particularly grateful for?

BERMAN: No, no. The high school was considered one of the better high schools, but compared to what I see at my kids’ school – the breadth of courses they can take and the teachers and the opportunities they have to get into different things – it was not that exciting. I didn't have any mentors.

SHEN: Do you feel like it prepared you well for MIT?

BERMAN: I think so, yes, because I learned how to work.

SHEN: Makes sense. So let's talk about MIT. Where did you live on campus?

BERMAN: Oh, I didn't live on campus. I lived at home. I lived in Brookline. It was only three miles from there, so I lived at home.

SHEN: That was convenient, I guess, especially because not everyone was mandated to live on campus.

BERMAN: Right. Everybody in this day and age lives on campus, seems like. You weren't? [Asks her husband.] Men weren't mandated to live on campus, were they?

HUSBAND: I don't remember if they mandated it, but everybody did.

SHEN: Yeah, now it's mandated only for freshmen.

BERMAN: Oh yeah?

SHEN: Yes.

BERMAN: But no, it wasn't for women.

SHEN: Well, I was going to ask if there was segregation between the genders, but it sounds like there were no women on campus. Is that true?

BERMAN: There were no women living on campus. But yeah, they were in the school. Did you ever go to Margaret Cheney Room [the Women's Community Center, Building 3, Room 310]?

SHEN: Yes!

BERMAN: That was our hangout, because that was a place-- They had a kitchen, and they had a living room and bedrooms and everything. So in between classes, we'd go sit and talk and get to know each other.

SHEN: That's so cool, because I know that it's a women's-only room, and previously it just seemed like another room with a restriction. But to know that that was the one hangout for women suddenly gives it so much more meaning.

BERMAN: We had a Christmas tree. That was my only time I … because I lived at home and I got my mother's car. I was on the Christmas tree committee because I could get a car! I'll tell you, I never decorated a Christmas tree in my life, so that was fun. There were some people there then, men particularly, who were not sympathetic to women, really thought they shouldn't be there and were kind of nasty. They might have been-- I mean, some of them were probably kind of nasty to everybody. But there were a lot of people there, men and professors and others who were happy to see women there and encouraged it.

SHEN: Hmm. That's good to hear.

BERMAN: Yeah. I didn't feel like anybody was against me. And I don't say mentor, but I had people I could talk to and help handle everything. I liked it very much. I liked the small-school aspect of it: just a few girls who live all together.

SHEN: So it kind of felt like a little club--

BERMAN: Yeah, in the middle of the school. Just like a small group. I liked that.

SHEN: Cool. Well, that's gender. What about race? Was there racial segregation?

BERMAN: Probably. Probably. There weren't very many black students. There were Asian students. There were a few Spanish students, but there weren't a lot of Hispanics in Massachusetts anyway. I don't know what the experience of other people was. There weren't very many blacks students.

SHEN: How many women were in your class? Do you remember?

BERMAN: Six. Eight.

SHEN: Oh, wow.

BERMAN: Well, there were more that started, and some of them dropped out and everything. So I think it was six or eight. That's probably with women in different classes. I mean, there was no-- It was our class sticking together, especially once you got out of the freshman year. I don't know if you do it now, but have all the basic courses and everything, and then you go out into your department and take courses.

SHEN: Yeah. It's the same way. So what was the total number of people in your class approximately? Do you remember?

BERMAN: I have no—

HUSBAND: What I remember was there were 40 women and 4,000 students.

BERMAN: Yeah, something like that.

SHEN: Oh, wow.

BERMAN: Actually, it was maybe a little more, but yeah.

SHEN: So you were a math major. What was Course 18 like?

BERMAN: There was no Course 18 identity that I was aware of.

SHEN: Oh, really?

BERMAN: Yeah. Maybe it's changed. It's been 60 years, almost. And then a lot may have changed. You had a set of courses that you had to take, a few courses you had to take. Actually, I took statistics there. Well, number one, we didn't have computers.

SHEN: Of course.

BERMAN: So if you had to invert a four-by-four matrix without a computer. I mean, forget it! And the other thing was that the book that we got, which I think was a very good one, but we got copies on the mimeograph paper. They were still writing it. And you couldn't find anything and it was confusing. So I really did not like [actually taking] statistics.

SHEN: Yeah. That's understandable. Statistics without computers sounds very difficult. Well, you already talked about the faculty a little bit. Do you want to talk a little bit about what your social life was like?

BERMAN: Well, I met my husband when I was a freshman, so he was my social life. [LAUGHTER] But we had friends and went out.

SHEN: Would you say you mostly hung out with the other women, or was there mixing between the genders?

BERMAN: There was mixing.

SHEN: OK. What were some of the challenges you faced?

BERMAN: You know, at that age-- How old are you? I'm sorry--

SHEN: I'm 21.

BERMAN: You're 21. At that age, you don't necessarily see things as challenges. You just do things.

SHEN: That's a good mindset to have.

BERMAN: You know? Yeah, getting up and getting to class and taking tests and everything like that, it was all challenging, but I didn't see it as a wall in front of me to be scaled or anything like that.

SHEN: That's good.

BERMAN: I just did what I was supposed to do. I think some of the teachers were very nice.

SHEN: So what skills would you say you acquired through your MIT years?

BERMAN: Math. [LAUGHS] Math skills, studying. Problem solving, to a certain extent, because we had these problems and we had to solve them. You know, this is a long time ago.

SHEN: It is. What about any social or political skills?

BERMAN: There wasn't much political stuff going on. There was the fall of – whatever it was – Vietnam, and people were talking about that. But [apart from that, there] wasn't much political discussion at that time.

SHEN: If you were given the choice today, would you choose the same university to do your undergraduate degree?

BERMAN: Oh, yes. I should mention, I did apply to Radcliffe, but I didn't get in, because I never took Latin. [LAUGHS] That was what life was like.

SHEN: That's such an arbitrary requirement.

BERMAN: Well, that was the Ivy League. Believe you had to have Latin. Yeah, so that was pretty funny.

SHEN: Would you have done anything differently?

BERMAN: That's hard to say. I mean, I probably should have gone in my first year instead of my second year. My mother kept telling me, "Why don't you go there?" My mother was really funny. When I left here, she said she wanted an MIT sticker for her car. I said, "OK." She says she wanted there so people could say, "Does your son go to MIT?" And she could say, "No, my daughter does!"

SHEN: I like your mother!

BERMAN: Yeah, she was great. She died several years ago.

I had an aunt who lived down the street who had young children. And I talked to her and friends – I think this still happens – they say, "Oh, you're majoring in math. Oh, I was so terrible in math." It used to drive me crazy.

SHEN: Your aunt would say that?

BERMAN: No, not my aunt, but her friends. Girls would talk [that way], and they still do. I mean, "I was just so bad in math." And it's not just women; men, too. I always want to ask them, "Can you read and write?" You know? So that bothered me. And with my kids, even one time I went to school and they said, "Boys are doctors and girls are nurses." And [other such comments]. So my kids, I try to tell them it's not the way the world works. You do what you want. And I think that worked pretty well.

SHEN: What exactly about that bothered you? Just the way that--

BERMAN: The way that they were, in front of their children, saying, "It's really good to be bad in math. It's charming. It's feminine. It's graceful." And men would do it, too,

sometimes, but not as much. It's like this idea of geeks and nerds, you know?

SHEN: Yeah. It sounds like also a way to be able to justify not being good at something intellectually, maybe?

BERMAN: Yeah. I didn't like it. That was nasty. It still bothers me. I still feel very irritated. I mean, people say it like they're proud of it.

SHEN: I know--

BERMAN: Like, "I'm stupid. Look at me!"

[LAUGHTER]

SHEN: I see.

Could you tell me what you did after college?

BERMAN: After graduation, we moved to Connecticut. I went to New Haven – Yale. I went to Yale for six months. Then I was working as an engineer in Bridgeport. And then I didn't finish with Yale because I was pregnant and there was a lot of driving. And they didn't give you credit for a semester. I had to take a whole year, so I don't get any credits for that. And so I had a baby.

[LAUGHTER]

We moved to New Jersey, and then I went to Rutgers. I had two babies in New Jersey, but I was taking classes at Rutgers. It was all pure math, basically. I did take the stat class there. Rutgers was a nice place. And then we moved to Washington. We lived in Maryland. I took some classes at the University of Maryland, and had another baby.

[LAUGHTER]

SHEN: Yeah, just between the graduate schools.

BERMAN: Yeah, like when I was here before, I was working, as I said, at a Beltway bandit place. And I went to Maryland and then I decided, "I really wanted to finish this." And I looked at GW and I looked at American [University]. American was the only one that was going to give me credits for the graduate study I had had. So I went to American and finished my doctorate – and I didn't have any more babies.

[LAUGHTER]

SHEN: You had four?

BERMAN: I had four, yeah – and my youngest one went to MIT. My youngest daughter [Rachel Berman] went to MIT. She was an engineer like my husband, and graduated in 1988 with a B.S. in Electrical Engineering. Recently she decided, after 20 or so years, that she disliked engineering and wanted to be a nurse. She just finished nursing school and has a job, and likes it a lot.

And the other kids, one took some statistics and economics and works for the Bureau of the Budget. And one, my son, is a lawyer. My other daughter is still trying to find a real career. She likes languages and is good in them, but it's really hard to get anywhere in that. So right now, she's translating Yiddish poetry and stories.

SHEN: So all very diverse.

BERMAN: All very diverse.

SHEN: Did you ever compare your MIT experience to your daughter's?

BERMAN: Not really. It was very different. She lived in Senior House and she was very active there.

SHEN: Did you hear a lot about Senior House or MIT life from her?

BERMAN: Not a whole lot.

SHEN: I would just be curious to know if Senior House has the same culture.

BERMAN: It was a little crazy.

SHEN: Yeah.

[LAUGHTER]

BERMAN: They had this orientation week, where you looked at the different dorms and picked one. So we took her there, and we let her look around. We went up to Maine for a few days, and we left her. She was crying, and I felt so terrible and everything. So we came back, and I called her and I said, “We can take you out to dinner." She said, "Oh, no. I'm at Senior House and we're having a spaghetti dinner!"

SHEN: Fitting in already.

BERMAN: And we walked into that place and it was, you know, people were hanging off the rafters inside – all kinds of stuff. And I said, “Oh my god,” and my husband

said, “It’s her!"

[LAUGHTER]

And she liked it. She enjoyed the MIT experience a lot. I mean, she tells me that. Very much.

SHEN: Yeah, I like that MIT has a very strong culture in its dorms.

BERMAN: Yeah.

SHEN: I understand that you were an adjunct professor at one point?

BERMAN: Yes, at UCLA. But I just taught a couple of courses, just to put on my resume, I guess. I was an associate professor at-- I actually worked at Harbor-UCLA center, which was a campus of the UCLA Medical School. They have an organization now called the Los Angeles Biomedical Institute, but at the time, it was the Research and Education Institute. They handled all of the research money and financial business for the researchers at the Harbor-UCLA Center, so I actually worked for them. And I was on the faculty of the Pediatrics Department there, because my boss was a pediatrician.

I did grant-supported research, helped write proposals, did statistical analysis and wrote papers for people in several areas – I worked in a lot of different fields. I also conducted lecture series on various topics about clinical studies and statistics for the investigators and other staff. I was partly paid through a comprehensive grant and partly paid by the institute.

It was fun. It was very interesting, because it was a small place and it was a reasonably coherent place, so I learned a lot from the people I worked with, just on the subjects of their research. And it was a really nice place to work. But I wasn't really in academia. When I was in Washington, I did take a year off and took a TA [position] at American just to get time to finish stuff up, but that wasn't terribly interesting.

SHEN: I see.

BERMAN: At Harbor, I was in an academic center. But I didn't have a department, because I was the only statistician, so I was in the pediatrics department. I did conduct series of lectures about study design and statistical issues for investigators and any other staff that cared to attend, but there were no tests or grade associated with these.

SHEN: That's convenient.

BERMAN: I went to a couple of faculty meetings up at UCLA – but at Harbor, so it was a different job. It was kind of a unique position. It was something called the General Clinical Research Center. It was a NIH-funded program. And what they did is they sponsored at different medical centers a facility to support clinical research.

For example, at our institution, we had a ward with some beds, about three rooms or something like that, and specially trained nurses that could do all of the sampling and testing, and taking care of stuff. And we had a research kitchen that could prepare dietary meals and all and a perinatal unit.

This was an NIH program. There were a lot of these around the country, so that we used to meet and get friendly with other statisticians through that, which was very nice. I think that I Ieft soon. This NIH program stopped and more genetic-oriented programs began. But it was interesting and a good place to be.

SHEN: And around what time was this?

BERMAN: This was in '85. And I think I started working there in '86 or so. And we moved out in 2011. We moved back up here [to the Washington, D.C. area].

SHEN: I'm surprised that there were so few statisticians at Harbor then.

BERMAN: Well, there were lots of statisticians at UCLA. Harbor was a very small place. I was the statistician, and there was one epidemiologist. I was funded by this GCRC [General Clinical Research Center] program and the Research and Education institute, so I was sort of a researcher and a support person within the place. But there were lots of statisticians at UCLA. They had a biostatistics department, and they had a statistics department, I think, in psychology. They were pretty big.

SHEN: I see. Now, you also published a book recently?

BERMAN: Well, this I wrote with a friend of mine, yeah.

SHEN: Do you want to talk a little bit about that?

BERMAN: Well, it's not a statistics book. It was conceived because of the way I worked. My co-author [Robert A. Parker] was also a GCRC statistician a different places. In this job, you got a lot of these young men and women, you know, interns and fellows, who would come in and say they had to do a study – and they didn't know what to do. I mean, they kind of knew what they wanted to study, but they didn't know anything about randomization. They didn't know anything about what kind of a study do you do – a case control study or an intervention

study or anything. And there were many of these things.

And we felt these guys needed a book that they could look this up in, so we wrote it. It took us a long time because my friend moved and I moved and everything. But we wrote it.

SHEN: And what is it called?

BERMAN: "Planning Clinical Research." Hopefully somebody will buy it. [LAUGHS]

SHEN: I'm sure. It sounds like a very useful book.

BERMAN: I think it is a useful book, but it's not a statistics book. We would say in the book, "There are statistical choices. Go consult your statistician!"

SHEN: It's more about the conceptual framing--

BERMAN: It was more about how to do a study about all these different things, like bias and randomization and what kind of a study do you do. It took a long time.

SHEN: So over the years, do you feel like the workforce has changed to better or worse accommodate women at all?

BERMAN: I think it's definitely changed to accommodate women. I mean, there are a lot of things that are not great. There are a lot of problems and a lot of women complain, but it's definitely better.

When I was in New Jersey, one of my neighbors was a nurse, and she wanted to work part-time. She got another friend who was a nurse and they wanted to get on shift. And they said they could split the shift and then they could each work part-time. They wouldn't let them. Nurses then were very underpaid, very badly treated, because they were all women. And then men started getting into nursing, and you could see the differences. They got better pay; they got more rights. They started bringing in different tiers of nursing and specialties-- You can get a master's in nursing and you can become a nurse practitioner, a nurse anesthesiologist or some other specialty. So they made it into much more of a profession, but I think that was partly due to the men coming in.

SHEN: Interesting.

BERMAN: Yeah, I think things are much better for women. I thought that computers would be a very good woman's field, because when I started, there were a lot of women working in it, and there was not an old boys' network. But I think-- For example, what I hear about Silicon Valley, it's still male-dominated.

SHEN: Yeah, for sure. So why do you think computers was a field more dominated by women back then? Because it seems like the opposite is happening now.

BERMAN: Well, it wasn't-- There were a lot of women going into it. You could basically-- Like I said, there wasn't an old boys' network – women could go into it. It was kind of a learning procedure for everybody.

SHEN: Did you feel as though other fields kind of had an all-boys'--

BERMAN: Probably. I could try [going into those fields].

SHEN: I see.

BERMAN: And I think I was very focused on what I was doing most of the time.

SHEN: So when you say computers, do you mean statistics, or does that include other fields?

BERMAN: When I got started in computers, we were writing in machine language.

SHEN: Oh, wow.

[LAUGHTER]

BERMAN: We were trying to put stuff out there. We were writing in machine language. One summer, many companies were trying to market a computer. Initially, everybody was going to make a computer, including Sylvania, the light bulb company. I don't even know if they're still in the computer business. But they were out on [Route] 128 in Boston.

And they had built a computer and they wanted somebody to make a compiler for it. So we were writing a compiler for it. But you didn't need a computer background to go into it. And some women who went in, they were very smart and managed to get ahead in the field and everything, but it didn't work out that way towards the end. Got to see it [becoming] more male-dominated.

SHEN: Yeah. That's interesting.

BERMAN: Yeah. But I thought it would be for women. I don't know. I mean, compared to what's happening now, in my day, there weren't many women doing anything.

SHEN: So overall, do you feel like you've had any major conflicts between career and life choices?

BERMAN: Major? Well, I didn't have to sell my kids! [LAUGHS}

SHEN: I don't know. Just any crossroads you came to where you faced a dilemma?

BERMAN: I think yes, initially, when I decided to work, because I didn't like staying home. I didn't like doing housework. So I went to work to pay the cleaning lady, basically. It was somewhat frowned upon in the circle I went in. But I don't know if I had a conflict with it. I mean, it would be nice to have been home with the kids. And the kids-- Now that I got older, they told me they were glad I wasn't home all the time. [LAUGHS] And yeah, I'd influence how they felt, but I think it was--

SHEN: So you felt a little bit of external pressure?

BERMAN: Yeah. But I did manage to come home every day, and we went to the various things and the band concerts.

SHEN: That sounds fun.

BERMAN: Oh, yeah.

SHEN: If you were giving advice to young women grads today, what would you say?

BERMAN: It depends what they wanted to know. It depends. I don't go around giving much advice. You know, if they me a specific question, I tell them what happened, what I think they might want to look at, but I don't go around giving advice.

SHEN: What about women who feel that the expected quality of their work is lower, or that they are not valued as much because they're women?

BERMAN: I don't know what to tell them. I mean, I really don't. And I'd tell them to get another job.

SHEN: I think it's a hard--

BERMAN: Yeah. My last job, at Harbor-- I was in kind of a unique position, and I got a lot of respect from people, partly because I knew what I did. But there were a lot of women physicians in there, so I don't know what I'd tell them. I mean, the other women, like one of my friends – she was this great physician, but she was a pediatrician. She said that's all that you could be when she entered the field. She was my age.

SHEN: You mean, that particular specialty?

BERMAN: Well, when you went to medical school, you went into pediatrics. Women went into pediatrics. Another woman went into orthopedic surgery, but she said it was rough. But then the young women that came in more recently, if they were

doing a fellowship or something like that, they could take time off to have a baby.

SHEN: Yeah, that's nice.

BERMAN: Which was really amazing. I thought it was just great they could take time off and have a baby and still get back in their program. I thought that is terrific.

SHEN: Yeah – wow. Your friend who was an orthopedic surgeon-- Just studying the content must have been rough, but did she ever tell you about any challenges she faced?

BERMAN: No, I didn't know her well. She was just one of the people I worked with on a project.

SHEN: Is there anything else about MIT that you'd like to talk about?

BERMAN: It was fun at MIT, you know? I went there and felt good about what I was doing. And I felt good about learning; I like learning. And I was glad to have been there and to be who I was. It just gave me a feeling of having been some place good and gotten a good start. I don't know how else to explain it.

SHEN: No, definitely. I think that's all you can ask for from a college experience.

BERMAN: One of the things I've been doing now, which is fun at home-- There's something called OLLI, the Osher Lifelong Learning Institute, which is an organization that has classes for seniors, for retired people. It's study groups. You can teach some, and you can take some. I've been learning a lot of biology. I learn about genetics and all about the cells and cell biology – how they scoot around and create the body and the body parts and everything. I mean, it's just like, wow, you know?

SHEN: Yeah. No, I agree with you. I'm a biology major, so I find it fascinating.

BERMAN: Yeah. I mean, I think it’s so cool, you know? I think, you know, all of this is going on in here. [Points at her body.]

SHEN: Right. You kind of marvel at yourself.

BERMAN: And it's just absolutely amazing. It's fantastic. So I like to learn.

SHEN: Yeah. That's great.

BERMAN: Well, thank you.

SHEN: Thank you!