BARNARD COLLEGE CLASS OF 1971 ORAL HISTORY COLLECTION

The Reminiscences of

Beryl Benacerraf

PREFACE

The following oral history is the result of a recorded interview with Beryl Benacerraf conducted by Frances Garrett Connell on September 18, 2015. This interview is part of the Barnard Class of 1971 Oral History Project.

The reader is asked to bear in mind that s/he is reading a verbatim transcript of the spoken word, rather than written prose

Benacerraf -1 – Index

Barnard Alumni Class of 1971 Oral History Project

Interviewee: Beryl Benacerraf Location: Jamaica Plain, Boston

Interviewer: Frances Garrett Connell Date: September 18, 2015

00:00:00 Q: This is an interview taking place for the Barnard College Voices, Class of 1971 Oral

History. I'm interviewing Beryl Benacerraf, who is in her apartment in Jamaica Plain, Boston.

Today is September 18th, 2015. And the interviewer is Frances Connell.

00:00:21 Q: Okay, Beryl, again thank you for letting me come in and being part of this project.

00:00:28 Benecerraf: Sure.

00:00:29 Q: We're going to start, then, by asking you to talk a little bit about your childhood, your family, things that were particularly significant for you growing up.

00:00:37 Benecerraf: Well, I grew up in Paris. I'm French and American in dual citizenship. My native language is French, and I always spoke French at home. I came to this country when I was eight, and without knowing any English at all was sort of dropped into a private school and struggled a bit trying to learn English, and trying to make it in this new country where I didn't know anybody, didn't have any friends, didn't know the language and so forth.

00:01:17 Q: Where did you start then?

00:01:18 Benacerraf: In New York. I went to the Brearley School, and I think I was probably an experiment for them because they took me into the second grade without my knowing any English, halfway through the year. Then I struggled through Brearley to a certain extent because I had quite a bit of dyslexia, which was really not recognized at the time. It was an issue that was not recognized until much later, it was not known. But I didn't know how to read in French when I came, and I never managed to learn how to read in English very well. So I kept on going to remedial reading, was told that it was probably because I was bilingual and I was trying to learn more than one language and my reading and never caught up with the fact that I was having trouble in all languages. Ultimately I learned to read well enough to be back into the class, but to this day it's a laborious process for me, and it's one that has made a certain type of learning difficult for me.

So I struggled through school, I did not get very good grades. I was very lucky that Barnard took me in when they did, because I was early decision, and the Brearley School had a very good relationship with Barnard at the time. I think they shared a head mistress at one point. So I managed to get into Barnard without showing any SATS, or achievement tests. I took them subsequently, because it was required, but I got a 423 in the verbal. But nonetheless they took me in and I actually took a class in poetry for my English requirement, because I thought the poems were going to be short and I would get through it. So my time in school was very colored by this dyslexia that I didn't know what it was at the time, but I knew I had a problem and that I had to get around it. I think one of the things that I'm most proud of during that time is how I got around it, and how I managed to mainstream my education.

So then during my time at Barnard I was very happy. I was not sure what I wanted to do. I was actually working at three different radio stations at the time, including WKCR which was the Columbia radio station. But I had a very good time during my time at Barnard, for which I am very grateful to them. I ultimately decided to go to medical school, and I had taken some time off in Italy because being European, being French I still wasn't sure where I wanted to end up long-term. So I lived in Rome for a while, and during the time that I lived in Rome I decided to take the MCATs [Medical College Admission Test]. Of course, predictably, I was going to do very poorly in the MCATs, but I had to take the test in order to apply to schools. I went ahead and took them, came back to this country, and lo and behold the Italians lost my MCAT scores [laughter], so even though I had known what they were I did not have a piece of paper and they could not find me in their computer.

So I then applied to the only school that didn't require them, which was P & S Columbia [Columbia University College of Physicians and Surgeons]. With the help of my father who was a well-known scientist I got in there, off the waiting list ultimately. I then ultimately transferred to Harvard [Medical School] into the second year. And then as I went through, again learning medicine, there was much more emphasis on being in class, listening, seeing patients, judgment and the ability to understand disease. That really took me through it rather than being a bookworm. So that's my story about going into medicine.

00:06:29 Q: Could you talk a little bit about the family, even further back, in Paris, you're born, you're a little kid there.

00:06:34 Benacerraf: Sure. My mother is from a well-known Jewish family, called the Dreyfus Family. The Captain [Alfred] Dreyfus Affair was my cousin, and a distant cousin.

00:06:49 Q: Oh, my goodness!

00:06:50 Benacerraf: There were a lot of very famous relatives, Grand Rabbi of France, a Grand Rabbi of Paris. These were all my grandparents, my grandfather. There was also a very famous judge who was the chief judge of what is the Supreme Court in France. That was my mother's grandfather. So that was that side of the family.

My father came from a very different area; he came from North Africa. He was a Sephardic Jew, and his father was one of many in sort of a ghetto of Morocco, and didn't have any money. His father sent him to Venezuela to join a cousin there when he was fourteen, to see if he could make a fortune or make something of the family. And so my grandfather at the age of fourteen got on a boat. I suspect that he had some degree of dyslexia as well because of his way of thinking, and we can talk about that later. But he got there, he went from being the errand boy to owning the store, to owning a series of stores, to running the factory, and so on and so forth. Came back, picked out a wife, an arranged marriage. That was my grandmother. And off they went to Venezuela.

My father was actually born in Venezuela. But as wealthy Venezuelans did at the time they came back and lived in Paris. So in fact both of my parents went to school in Paris in the early 1940s.

But it was during the war that both families took refuge in the United States. They came over to

New York separately; they didn't know each other. My mother went to Barnard, and my father was put in the special studies section of Columbia. And they met at Barnard and Columbia there during the war. They ultimately married and my father became an American citizen, fought the war as a physician for the U.S.

00:09:05 Q: So he was already trained at the point?

00:09:06 Benacerraf: No, well he trained afterwards. They were married and then he went into medicine. They were married very young. He had a lot of trouble getting into medical school, because he was both Jewish and Hispanic, and his English was not great. He was declined from twenty medical schools including P & S. So ultimately he got into the Medical College of Virginia by contacting somebody who knew him there, and that was how he got in. So, later he was offered jobs at all the medical schools where he had been denied.

00:09:55 Q: Sweet irony.

00:09:56 Benacerraf: And he ultimately became a professor at Harvard Medical School where he was when he won the Nobel Prize.

00:10:03 Q: And what was that work in?

00:10:04 Benacerraf: It was work in Immunology. Basically how it happened was after the war my parents were married, they went back to Europe, and set up shop. My father started working

in research, which is what he wanted to do in France. But because he was now American the French said, You'll never make it around here because we're going to promote the French people before you. And so ultimately he knew that he really had to leave France to have a career. That's when we came back to this country in 1956, when he was recruited to NYU [New York University] by somebody called Lewis Thomas, who was a well-known scientist and philosopher.

00:10:55 Q: He's a biologist.

00:10:56 Benacerraf: Yes, he is.

00:10:57 Q: Right, I've read his stuff.

00:10:58 Benacerraf: Meanwhile on my mother's side there was also a Nobel Laureate. My mother's uncle, Jacques [L.] Monod, got the Nobel Prize in 1965 for Genetics, he was a Ph.D. Anyway, so my father came back to the United States.

00:11:20 Q: He'd stayed in France.

00:11:21 Benacerraf: Yes, he was in France, yeah, he was French. He was French actually. So when my father came back to NYU that's when he did a lot of the research that was so important. He spent a couple of years at the NIH [National Institutes of Health] and ultimately ended up at Harvard, which is where he was when he was awarded the Nobel Prize in 1980.

Then ultimately he facilitated my transferring because I would never have been able to transfer into the second year of Harvard Medical School without his help. So he did pull a lot of strings for me along the way.

00:12:02 Q: What was that like being surrounded by such brilliance and achievement? Your whole family on both sides.

00:12:09 Benacerraf: Well—yeah, and I'm an only child, so. It was a lot of responsibility. And I think I can say it was very difficult because with my dyslexia I felt inadequate a lot of the time. I felt that I wasn't really doing enough to be there [laughs]. You know, unlike perhaps a family where the child is the first one to go to college and go to medical school, where everybody's very proud of that child, I was sort of trying to belong [laughs] in a family that was, I thought, more accomplished than I was. So it was an uphill battle, and it led to a lot of self-esteem issues and problems of that sort. But I was also very ambitious. My father once told me that, "Whatever you end up doing, if you're not the best in the world there's no point in doing it." So I grew up with that kind of background [laughs].

00:13:19 Q: Now do you remember any fun things related to your family, or school, before you dealt with dyslexia?

00:13:26 Benacerraf: I had a lot of fun with my family. They were wonderful people. My mother was an extraordinarily gracious host. She ran a wonderful household, had a lot of dinner parties with very important people, and was really quite a social and charming person, very elegant, and

a great role model for that side of things, although she did not work or have a career. My father was a little more serious, and very, very hard working while I was growing up. So he wasn't around as much. But, you know, when you're an immigrant—we were really a threesome that was very isolated in a sense. We spoke only French at home. I had felt always that I was in a foreign country, and a lot of immigrants sometimes try to blend in and start speaking English at home. My family was completely the opposite. You know you're special, you're French or European, you have so much more to offer than somebody who hasn't been to other countries. I was always made to feel that I was special in that sense.

00:15:01 Q: So do you remember what Paris was like in the '50s, as a young girl?

00:15:05 Benacerraf: Oh, yeah. I do. I mean I loved Paris. I had an incredibly special bond with my grandmother, my maternal grandmother. She was an extraordinary person. Much like my mother, who of course was her daughter, she was a very elegant woman who—she wasn't really beautiful but she was absolutely stunning in her elegance and the way she carried herself. She always was a lot of fun. We used to go bicycling together. I used to stay at her country house for many weeks during the summers when my parents would travel. Unfortunately she died when I was ten, and that was absolutely tragic for me. She was probably the closest person to me in my family outside of my parents.

00:16:03 Q: So who would you say was probably the most influential person in your life?

00:16:06 Benacerraf: I would have to say my father. My father was determined to have me have a career. He would not have been satisfied had I not had a very strong career. He was delighted when I chose medicine. I think he was pushing in that direction obviously. But it never occurred to him that I might not have a very strong career. He pushed a great deal. He was sort of a mentor, and somebody that expected me to bounce things off of him, and made sure that I didn't make any mistakes, and really kept moving the carrot further along [laughs]. So it kept me going. In other words I never arrived.

00:17:09 Q: In terms of arriving in the states and starting the school, were you involved in any activities at Brearley in your years there?

00:17:17 Benacerraf: No, I was pretty miserable at Brearley actually, because I really had this problem of reading, which is very pervasive when you're in school.

00:17:27 Q: Yes.

00:17:28 Benacerraf: [Laughs] I didn't even do well in French. It was my native language [laughs], and I couldn't spell. So, no, I was pretty miserable, I must say. And I don't know, I think Brearley was ultimately the right place for me because it really challenged me, because everything after that was not that hard. I mean it trained me to survive. But it was really a survival. I was on survival mode.

00:17:59 Q: So you must have an incredible memory to be able to retain the information—

00:18:00 Benacerraf: I have a good memory, which is necessary for someone with dyslexia. I lecture a lot about it to colleges and you know places that are looking at students and admissions and things like that. It's actually an asset, as it turns out, if you know how to use it. I think the problem that I had is that nobody knew what it was. I knew I had a problem reading. I tried—in New York a long time ago there was a place called Evelyn Wood Reading Dynamics. I don't know if you're familiar with that. I went there in desperation because I thought maybe they'll teach me. I'm a very, very slow reader. It's not that I can't read but it's very slow and laborious, and I have to be in a quiet room. I thought maybe I could speed up and improve my comprehension. So I went there, and it's a money back Guarantee, and I took the course twice and got my money back [laughs].

So then I knew I had a problem. I knew I just had to get around it. But I also found in medical school that you can get through medical school by going to all the classes, by listening, by watching. The books have a lot of graphs and images, and charts. The fact is that if you're attentive at all at that, reading the actual wordage doesn't add that much, for me anyway. I got around that way, and I ended up graduating from medical school, AOA [Alpha Omega Alpha Honor Medical Society], strangely enough, because I figured out how to do it [laughs], finally.

The asset that I'm talking about, you know is a right-brain dominance, which makes you much more able to think in images, in flow charts, in looking at the big picture. I'm not a detail oriented person, I don't get mired in details, I immediately can step back and assess the entire problem, and boil it down to the three most important things. So I've used that in my career and

everything I do. That's why a lot of entrepreneurs are dyslexic because they have that ability to see the big picture, to see where to go next, to think out of the box. When I was in medical school I was going to be a surgeon, that's what I wanted to be. You're also very focused on hand/eye coordination when you're dyslexic, it seems to be with a lot of artists, a lot of architects, things like that. So I was in medical school and I took radiology, and at the end of my rotation the professor came to me, asked to see me, and said, "You have a gift. You're in the back of the room, you can see the abnormality. You have a gift that I've never seen before." He was a senior guy, and he said, "I don't know what you're planning to do, but you know you got to go into radiology. This is an amazing gift."

So I didn't pay attention. I was already going to be an intern in surgery, at the Brigham [and Women's Hospital]. But as I started that, in the mid-'70s it was very difficult to be a woman in surgery. As I did my every other night, forty hours on, eight hours off, I became somebody that was impatient, and not the person I wanted to be, so I started thinking about that conversation. I gave him a call, and he said, "Oh, what took you so long?" They actually opened up a special position at the Mass General for me to go right into my residency in radiology without waiting a year for the next group.

So I started in radiology and all of a sudden I was in my element. I mean the pictures just speak to me. I can look at a picture and I can see the pattern. I can see things that nobody else can see. It's really weird. I couldn't understand why other people couldn't see it. But after all these years I've come to the conclusion that it is a gift. I sure struggled with the other side of it, which is not

being able to read properly, so now this gift is understandably the flip side of that whole problem.

00:22:58 Q: Now did you continue to work with this senior professor?

00:23:01 Benacerraf: Well, briefly, during my residency. Unfortunately he died while I was still a resident, so he never really saw my success, which is too bad.

00:23:10 Q: I can imagine picking you out and realizing you had that gift, you had—

00:23:12 Benacerraf: Yeah, so he discovered me if you want to call it that way [laughs].

00:23:17 Q: Well, still.

00:23:18 Benacerraf: And then I went into ultrasound, which was not a field that I had planned to go into. Since I wanted to be a surgeon I wanted to go into interventional radiology, which was related. It was hands-on, but—

00:23:39 Q: What does that entail?

00:23:41 Benacerraf: Invasive radiology, it's drainage of abscesses, putting catheters, things that require imaging that also require some surgical technique. But at that time it required a lot of exposure to radiation. So I wanted to have children, and I wanted to do something for a year that

would allow me not to be exposed to radiation. At that time, in 1979, ultrasound was very rudimentary, in the very early stages. I thought, you know I have no interest in ultrasound, but I'll do it for a year. I'll take a fellowship and get pregnant.

So I took a fellowship, I was back at The Brigham, actually, and off I went. I got pregnant immediately in July, and had a very difficult pregnancy, with preterm labor, and all sorts of issues. That was the year that my father got the Nobel Prize, and so the year he went to Stockholm. As I went through this pregnancy, which is now my son, who's thirty-four years old, I started to get really interested in prenatal diagnosis and obstetric ultrasound. At the end of that pregnancy I thought, Well before I go back to my original plan, I don't want to have an only child like I was. I want to have a second child. So I immediately started planning the second pregnancy, and as you know you can see eggs develop by ultrasound in early pregnancy. And so I checked myself out, and the first egg that came down the pike after my delivery I went for and was pregnant again. My daughter, who is now thirty-three was delivered on the same day as my son's first birthday. So I have two children one year apart on the same day. By that time I was sold. I was sort of becoming an expert in prenatal diagnosis and obstetric ultrasound. There weren't very many people at the time. So it was really a very new field that there was a lot to discover. And I was very lucky to be at the right place at the right time.

00:26:16 Q: And you stayed at Brigham and Women's at that point?

00:26:18 Benacerraf: Well that's a complicated story because my father, who was a difficult man to get along with, was not getting along very well with the Chair of Radiology at The Brigham, who was also a difficult man at the time.

00:26:36 Q: You're dealing with both of these men [laughs].

00:26:38 Benacerraf: It is difficult [laughs] to say the least. But not only did I not get a job at The Brigham to stay on after my fellowship, but I couldn't get a job anywhere. I think that there was some politics involved where I just couldn't find a place to work. So my father helped me to set up my own private practice, which was called Diagnostic Ultrasound Associates, which I set up in 1982, right out of fellowship. I didn't really know very much at the time but neither did anybody else.

I was straight out of fellowship. But interestingly enough the guy who trained me in ultrasound at The Brigham, who was the only other person involved in this field in Boston, left for Chicago. So I had a window of time out there by myself in my own private practice with one sonographer and one secretary. I had a period of time when I was the only one in town with any expertise. So I got to see everybody in New England who had any issues, including everybody from The Brigham, the Beth Israel [Medical Center]. For ten years I was it. They even wheeled some of the inpatients down the street from The Brigham. The Chair of Obstetrics, Dr. [Fredric D.] Frigoletto was a big fan of mine. I was a big fan of his, and I certainly helped him with his patients many, many times. He would get phone calls from Vermont, New Hampshire, whatever, "I have this patient who has this issue," and then he would give out my number. I would see the

patient, and then the patient would come over to see him and we would basically have it solved. And so we became really famous, if not to say infamous [laughs]. Until the time when The Brigham said, "You just can't do that anymore," to Dr. Frigoletto. You know, "You can't just be sending everything out." The attorneys said, "You can't wheel the inpatients down the street, for the liability," and so Dr. Frigoletto was under a lot of pressure to bring me back into the hospital.

But at the time I had a private practice, which had grown tremendously. I had some associates, I had twenty employees, I mean I grew it very quickly.

00:29:12 Q: My goodness.

00:29:13 Benacerraf: I had to, I had to run with it, I mean it was up and up. Meanwhile I was making a lot of observations. My main observation that I made, for example, was all the findings that helped to determine the risk if Down Syndrome, the nuchal fold, the nuchal measurement of the neck being related to the risk of Down Syndrome, that is all my observations. So I was publishing up the storm at night, meanwhile raising these two young children too. It is a very difficult time, but I ran with it because once you have the ball you've got to run. You don't get two opportunities like that.

So they asked me to come back into the hospital and I negotiated with them, because they needed me to come back, that I could keep my private practice and I could come back part time. At that time the radiology department still didn't want to talk to me. So the hospital said, "Well come back in obstetrics." At that time there was a turf battle between radiology and obstetrics about

who would do ultrasound, and they said to me, "Come back in obstetrics and forget radiology. I felt that I really couldn't do that. I'm still a radiology at heart, and the old chairman had left by then, and there were other people who were my contemporaries who had risen to power. I thought, you know, let me talk to them and see if we can strike something, a compromise where we can do a shared unit, which of course had never been done. The two chairmen wouldn't talk to each other about it. But my friend, who is now actually Vice Chairman of the Department, Peter [M.] Doubilet, and his wife, Carol [B.] Benson, they were in charge of ultrasound at that time. I knocked on their door and said, "Why don't we work something out?" They said, "Oh, yeah, that's a great idea." And we launched the first unit in this country that was shared fifty/fifty by radiology and obstetrics, and trained both types of residents, and was staffed by both types of people. So that became very good and a real model for other hospitals.

Everything was fine, until the Chairman of OB/GYN [Obstetrics and gynecology] retired, and then a new chairman came and there was a major change in leadership within The Brigham in Obstetrics. And a lot of people left. It's always that way when you get a new chairman, a lot of changes. The people that left The Brigham were all recruited to The Mass General [Massachusetts General Hospital], where Mass General only had gynecology, didn't have obstetrics. So the Chair of GYN at The Mass General said, "Why don't you guys come down here, and we'll open an obstetrics service?" So sure enough six of us, including me, went down to The Mass General and set up there, and opened an obstetrics service. Meanwhile I still had my private practice [laughs]. Now the Mass General has a big obstetrical service, and I founded the obstetrical ultrasound unit there, and stayed five years.

I wanted to go back to The Brigham, because The Brigham is right next to [Boston] Children's Hospital, and a lot of the difficult pregnancies end up getting delivered there because of the proximity. So I ended up going back, and I work there now a day a week in the unit where I was originally. I don't chair it anymore, but I'd done other things, such as being the Editor in Chief of a journal, *Journal of Ultrasound and Medicine*. I also came up into the ranks of some of the national/international societies, and I'm now I'm President of the American Institute of Ultrasound and Medicine. So I chose those types of activities, instead of going into the hospital and becoming a chair myself and having that kind of academic career. That decision allowed me to keep my private practice and do my academic career differently through some of the societies that influence the way that ultrasound is done. So that's basically where I am today.

00:34:13 Q: Now were there things that still stick in your mind, particular cases or consultations that you have dealt with that—?

00:34:18 Benacerraf: Oh, there are many.

00:34:19 Q: —that you'd want to share this—?

00:34:20 Benacerraf: Oh, my goodness.

00:34:21 Q: I mean you really are a pioneer [laughs], or an inventor even.

00:34:22 Benacerraf: Yeah, I am—I consider myself an entrepreneur in a sense. It's hard for me to think of them. Um—

00:34:52 Q: Well you mentioned the early ones that really gripped you.

00:34:56 Benacerraf: Well there's some that grip me all the time. There's things that we find that make a difference—I mean we save lives all the time, whether it's the fetus or the mother [laughs].

00:35:15 Q: Are there different kinds of complex pregnancies that you notice that have changed in the course of your career? More instances of this or that or something?

00:35:23 Benacerraf: Oh, yeah, sure. Prenatal diagnosis has changed dramatically. When I first started ultrasound was very difficult to interpret. I mean if you looked at an ultrasound picture it looked like a surface of the moon, and now we have 3D ultrasound that really has an amazing ability to depict what we see. So our ability to make diagnosis has ramped up dramatically. When I first started the only way that we could detect Down Syndrome is by doing an amniocentesis on women above the age of thirty-five. That was it. And they only really give birth to about twenty to twenty-five percent of the fetuses with Down Syndrome that are out there.

00:36:13 Q: Women of that age group you're saying, oh.

00:36:15 Benacerraf: Yeah, they have a much higher incidence of having a baby with Down Syndrome, but they represent such a small part of the pregnant population that if you look at the Down Syndrome fetuses that occur, seventy-five percent of them occur in younger women. There's just so many more of them. The individual risk is lower. So what I did was to really take away the whole thing about being thirty-five or not, and just take it in completely to imaging. And say, you know, Sure the patient may be forty-years-old, but let's look at the fetus. There are a number of markers that you can find that will change the risk of Down Syndrome and signal the need for an amniocentesis. That was really the state of the art for a long time.

Now things are changing again because now they're able to take maternal blood and get some cell-free DNA of the fetus. It's a screening test it's not full proof, but it's very accurate for Down Syndrome. So things are moving more towards biochemistry. But ultrasound is still the way to—I mean Down Syndrome is a minority of that can go wrong in a developing fetus, and ultrasound is the way to go for everything else, because it's the only way we have to look at the fetus.

00:37:51 Q: So you spoke about being able to find characteristics of the neck as it's developing that would show part of this whole syndrome.

00:38:01 Benacerraf: Thickening of the neck is related to Down Syndrome.

00:38:03 Q: That's absolutely amazing. Are there other changes that are then done? I mean you don't operate on the fetus, I mean you can't do anything to alternate something at that point.

00:38:12 Benacerraf: There are certainly times when you can do something to help. There is fetal surgery that you can do in utero. There was a fetus, for example, who had complete obstruction of the urinary tract, and the kidneys do not survive the pressure of not being able to empty the urinary tract long-term. So in order to get those fetuses through you have to put in a shunt that is a conduit between the urinary tract and the amniotic fluid. Amniotic fluid is largely urine eventually, and if the urine doesn't come out and eventually doesn't get made anymore the fetus ends up in an environment with no fluid. Then the lungs don't develop and a bunch of things don't develop. So it's not like they can come out and have a transplant. They don't survive at all. So if you can put a conduit between the urinary tract and the amniotic fluid during the crucial time of fetal development, then you can replenish the amniotic fluid and then fix the urinary tract when the kid comes out. I remember one child that wouldn't have survived, who now is I think twenty-eight, twenty-nine, something like that, a great kid. Still had some problems with his urinary tract, ultimately ended up with a transplant, but still made it through and has a normal life now.

00:39:49 Q: That's fantastic, do you ever get to meet these people again? Your little infants, prenatal people here.

00:39:55 Benacerraf: Oh, yeah. Oh, sure. Oh, sure, absolutely.

00:39:57 Q: That's very gratifying. So the department now that you're working with one day a week—are you training a lot of people as well?

00:40:09 Benacerraf: Oh, yeah, I've been training people all along, yeah.

00:40:11 Q: You had been training all along, sure.

00:40:12 Benacerraf: I train the radiology residents when I'm at the hospital. I train the OB/GYN residents in my office. So they come for their rotation in my office, and my office has always been an extension of an academic center. At the beginning I wanted an academic career but I couldn't have one because I couldn't find a job, probably because of this issue between my father and the chair. So I made my practice into an academic center. When people say, "I don't want to go into private practice, I want to do academics, my answer is, "You can do academics wherever you are because it comes from within." You don't have to be in an environment to do it, you create the environment yourself. And people came and worked with me, and fellows and residents, because in fact that was the best environment to be in. I helped many of the maternal fetal medicine fellows with there thesis for, I don't know, ten or twelve years. They did them all in my office. I had an employee whose sole job it was to help me with research. Out of my clinical practice I'd basically paid a whole other person to do the research for me.

00:41:35 Q: That's pretty amazing. So how did you ever find time [laughs] to do all the writing of the research as well?

00:41:41 Benacerraf: Well, with the dyslexia I dictate. I depend on people who read and write very well [laughs], to transcribe it and proofread it. So that's how I get around it.

00:42:04 Q: So let's go back a few things. We'll go back in a few stages. The father of these two children? How did that all happen?

00:42:12 Benacerraf: The father of these two children—I've been married forty years. He was a resident when I was a medical student, and we met at The Brigham, during one of my rotations. He became a cardiologist, and he became a very well known scientist in cardiology.

00:42:35 Q: Your father's premonition, or advice that you had to only be the best clearly goes across—

00:42:41 Benacerraf: Yeah, a very ambitious man. He was the Chief of Cardiology at The Brigham for seventeen years, and has stepped down recently do to more research, clinical trials and things like that. He's a preventative cardiologist, so he's involved in all the research that has led to the use of Statins. He's the one who discovered that atherosclerosis is an inflammatory process, and so that has led to the development of all of these different types of treatments that are anti-inflammatory for heart disease. So he's traveling a lot. In fact he's in Brazil right now. He has clinical trials going worldwide.

00:43:35 Q: That's amazing, so you really are, both of you in major parts of the medical world here.

00:43:40 Benacerraf: Yeah, one of the things that we talk about sometimes with students is how do you manage a two-career couple, raising children and both having a career, because it is very

difficult. Each person comes home with the expectation that somebody's going to be home to take care of them and in fact that's not the way it is. It takes a special man and a special woman to understand that. You know, it wasn't always easy, but we were really made for each other. It's interesting we met in May of 1975 and got married that same November.

00:44:23 Q: So you knew right away.

00:44:25 Benacerraf: He moved in on the second date.

00:44:27 Q: You knew right away, okay.

00:44:29 Benacerraf: Yeah, yeah, and I think we didn't know each other very well when we actually got married, but ultimately it was a good match.

00:44:42 Q: Yeah. And what is his background? Is he also international?

00:44:46 Benacerraf: He's from California, but he's multi-lingual, and wanted to marry somebody who spoke French. We spoke French at home with the kids when they were growing up, so—

00:44:54 Q: So did your family as well.

00:44:56 Benacerraf: Oh, yeah. And my parents actually lived nearby which was one way in which we managed this. They only spoke French to the kids, so the kids are completely bilingual. I still have the home in Paris where I go frequently, which is my childhood home, now that my parents have passed away.

00:45:16 Q: That's wonderful. Okay, so let's go back a little bit and talk maybe about Barnard. You said it was an excellent place in terms of the academics, and you're grateful. What were some of the things you remember during those years?

00:45:29 Benacerraf: I'll tell you, the academics when I was in school—

00:45:32 Q: Well, not Barnard, but Columbia, because you said you were taking classes.

00:45:36 Benacerraf: —was never really what I enjoyed about school. That goes for Brearley, Barnard and Columbia. What I enjoyed about school was—I was very sheltered growing up. I didn't have a date until after high school. And I think what I really got out of my time at Barnard and Columbia was an opportunity to grow and to find myself and who I was, and get to know other people, and live outside of my home. I lived in Plinton dorm, and living on-campus was a big change for me, because I was always at home, in this immigrant home where we spoke different language, where were different and all that. Finally I had emerged from that into the world like everybody else. Even though I went back to Italy between Barnard and medical school—because I really wasn't sure what I wanted to do, and that's why I ended up taking the

MCATs in Rome. But I think my time in college was instrumental in my deciding to stay in this country ultimately.

00:47:07 Q: Do you still have friends from back then, or remember friends that you lived with?

00:47:11 Benacerraf: Not very many, somehow. I didn't—a couple, but not that many. I have more friends from subsequent times.

00:47:27 Q: Sure, more years as well.

00:47:28 Benacerraf: Right [laughs].

00:47:29 Q: And how about the whole Columbia Strike, do you remember that happening and how that affected you?

00:47:37 Benacerraf: Oh, absolutely. I actually had mono during that time, [laughs] mononucleosis.

00:47:41 Q: You were in what, St. Luke's [Hospital], or something—?

00:47:43 Benacerraf: No, no, I was at home part of the time [laughs], because I lived in New York. But I was in the radio station a lot. I was an anchor some of the time while some of the

reporters were out there remotely. So I was at WKCR station while some of my friends were out there with the microphones, you know, interviewing people.

00:48:12 Q: Was it at all disruptive to the trajectory of you're going on to medical school?

00:48:16 Benacerraf: Not at all, for some reason, not at all.

00:48:17 Q: No problem?

00:48:20 Benacerraf: No.

00:48:23 Q: So talk a little bit about that radio station. What drew you to—? you said you were doing three while you were in college.

00:48:29 Benacerraf: Well mostly WKCR. I worked for a couple of other radio stations a couple of times to do some commercials and things like that. I was into music in high school. I played the flute and I was quite musical, and when I got to Barnard I looked around for something I might be interested in doing of the extra curricular activities. I thought that the radio station was really interesting, so I started working there, and then ultimately became the head of classical music there, which really controlled about six hours of programming a day. So I was there, I mean that was my second home. I was there twenty-four/seven basically. I had about, I think, three radio programs during the week. It turns out that my voice lends itself very well to radio, and I was even being recruited later by TV stations and things like that. I could have gone into

reporting—at one point when I was trying to decide between medical school and not, the other option would have been TV and radio.

00:49:47 Q: No, you have a beautiful voice. Do you sing as well?

00:49:48 Benacerraf: No, I don't [laughs].

00:49:49 Q: But, yeah, you have a deep resonant voice.

00:49:50 Benacerraf: Yeah, so I loved my time at the radio. I got everything out of it that I could. I had a press pass, went everywhere in the city, got to know a lot of people in other radio stations. I almost felt as though I did the career in the four or five years that I had. I felt that had I continued, [laughs] I'd definitely be over the hill right now. The job security is not as good in that field as it is in medicine. So I think I felt somewhat uncertain about going into something like that, whereas medicine always felt like a very secure place.

00:50:45 Q: Now had anyone in your family been involved in media or in entertainment?

00:50:47 Benacerraf: No, not at all.

00:50:48 Q: So you really were stepping out of your familiar—

Benacerraf -1-28

00:50:50 Benacerraf: Yeah. And since then I've done a lot of media. I do, as part of my

Presidency of The American Institute of Ultrasound and Medicine, I do monthly webinars that

are live.

00:51:04 Q: So you're used to being taped [laughs].

00:51:08 Benacerraf: Yeah. So I do a lot of—I tape a lot of things all the time.

00:51:10 Q: Where are the headquarters for that? Or does it rotate from place to place?

00:51:12 Benacerraf: Well the headquarters for AIUM [American Institute of Ultrasound in

Medicine] is in Laurel, Maryland, outside of Baltimore. But obviously the presidency changes

every two years and there are thirty-some employees there in the Laurel, Maryland office. You

know, they have a huge convention every year. They have ten thousand members. I ran their

journal for ten years and then ultimately went on to playing other roles in that society, but now I

just became president.

00:51:57 Q: Oh, congratulations.

00:51:58 Benacerraf: Thanks.

00:52:00 Q: So, ten thousand members, that's amazing. When you started out, though, there was almost no one, because you said you were for ten years really everything was coming to you here—

00:52:10 Benacerraf: Well, when I started out—yeah, there was really nobody interested in prenatal diagnosis. I was really before my time in a sense. It was also very difficult for me because I wasn't being accepted in any of the academic arenas. If you're not in a hospital being presented by your chair you just can't make it in. So I tried, and tried, and tried. Especially in radiology circles I wasn't even invited to any of the meetings until much later in my career. But what I did was to write a lot of papers, and then send in abstracts, and try to get those into the conventions and speak there. People thought I was this crazy lady in private practice who thought that measuring the neck was related to Down Syndrome. So I was almost booed off the stage a couple of times. I was not well accepted—

00:53:09 Q: Seriously?

00:53:10 Benacerraf: Oh, yeah. I was not well accepted. It took me four tries to get into The Society of Radiologists in Ultrasound, because I was so controversial. I would go to meetings, nobody would know who I was. Because, you know, being in private practice, even if you're the center in Boston and New England, it's not the same thing as being in academics in the rest of the country and the world. So I used to sit there and try to make myself known. There was one time [laughs] I was in the audience and a professor, who is now emeritus who was really a leader, was giving a tutorial and showing some cases and asking people for suggestions of what

the diagnosis was. I sat in the back and people were guessing and guessing wrong, and ultimately each time I would raise my hand and give him the right answer. About halfway through the time he walked down the aisle and stood in front of me and said, "Who the hell are you?"

That's how I made it. I made it through the force of my talent in this area. So then he sought me out and then, you know, asked me to speak at his courses. Then it sort of mushroomed after that. I did it all on my own. I have gotten all the awards. I've gotten the Gold Medal at the International Society. I've gotten all the awards there are to get [laughs], the Pioneering Award, I even got an award from Barnard.

00:54:58 Q: I remember. It was right after your father had died wasn't it?

00:54:59 Benacerraf: My mother died.

00:55:00 Q: It was your mother, yeah, you were not in—it was a hard time.

00:55:02 Benacerraf: They also asked me to give the [Roslyn S.] Silver ['27 Science] Lecture, which I gave at Barnard.

00:55:10 Q: That's going on, training another generation.

00:55:12 Benacerraf: Yeah. But one time that really, really marked me—if you want to know something that marked me in high school—the kind of obstacle that I came up against

repeatedly, was this. In high school my only good subject really was math, because I didn't have to read in math. I was *very* good in math, I mean I was head and shoulders above everybody else. On the final day of school, when you graduate seniors are all sitting up on the stage in white dresses, and the awards are read and are given out for each of the subjects. Everybody knew that I was going to get the math prize. They were handing out all the other prizes, and then they got to the math prize, and I was getting ready to get up, and the headmistress said, "For the first time in the history of Brearley we're not awarding the math prize. It was felt that nobody deserved it this year." I was sitting on the stage and I thought I was going to die.

00:56:19 Q: Oh my goodness!

00:56:20 Benacerraf: My parents were in the audience. It was one of the worst moments in my life.

00:56:27: Q: There was never an explanation?

00:56:28 Benacerraf: My father actually went there and tried to ask them, and they said I wasn't creative enough. I think—the teacher didn't like me. You can't be creative in high school math [laughs].

00:56:42 Q: Was she threatened by your intelligence?

00:56:44 Benacerraf: I don't know. I don't know. You know, I didn't really have good grades except for math. Math was very easy for me. But I turned around and never gave them a penny, until they honored me [laughs] recently.

00:57:00 Q: Oh, they did. Another, like your dad. "Come! Come teach now."

00:57:06 Benacerraf: Yeah, but I was so angry. I was just—I mean they <u>just</u> took me down. You know, doing that to a child is just so unfair, I can't tell you.

00:57:16 Q: I mean it gives me chills just hearing this story.

00:57:18 Benacerraf: Yeah. So, you know, over and over and over again I've come up against obstacles. Not being able to get into The Society of Radiologists in Ultrasound—and then ultimately they gave me their two awards. Just bumping up against things constantly. So, things have been challenging for me, but I got around it. That's what I'm proud of actually.

00:57:49 Q: Well, as well you should be. How much of that was not being, as you alluded to, part of an academic establishment at that point?

00:58:00 Benacerraf: Oh, all of it. All of it, I mean I made my own way.

00:58:05 Q: And how much was prejudice just because you were a woman? Well, yeah, you created this whole different dynamic.

00:58:08 Benacerraf: Completely, I mean I created my own institute essentially.

00:58:10 Q: Which is, "Screw You!"

00:58:11 Benacerraf: I was across the street from the hospital where I saw all the patients. No, it was a David and Goliath kind of story. I mean people couldn't believe what was going on, but it was going on. I worked like an animal.

00:58:24 Q: I lot of people were threatened too. Oh, yeah.

00:58:26 Benacerraf: Oh, yeah. So, you know, I am a force to be contended with [laughs] in this kind of thing, but I am not deterred easily.

00:58:43 Q: Now what about the whole feminist women just—? you said it was difficult to be in a medical school.

00:58:51 Benacerraf: Yeah, I'm not a feminist.

00:58:52 Q: You wasn't to explain that a little more [laughs]?

00:58:54 Benacerraf: Yeah, I think that [sighs]—I think that the world, unfortunately, is easier as a man. If you go through an airport as a single woman, verses a man, you're treated very

differently. My husband actually has observed that. We actually did an experiment, you know where I went through by myself and I was not treated wall at the TSA [Transportation Security Administration] and things like that. Whereas when I travel with him we get upgraded, we get—now he's a very good looking man, but it's very different to be a woman verses a man in this world. Once you accept that—I mean it's not going to change. I think that there are advantages to being a woman that are things that men can never do. I appreciated, for example, the opportunity to have children, and to experience the birthing and the raising and being a mother, which men could never do. So I think that you end up with whatever you're dealt, and there's some advantages and some disadvantages. I'm not going to go out there and be a feminist because that's not who I am.

01:00:28 Q: Have there been any other—? well, maybe a follow-up to the question is do you ever feel that you were discriminated against because you're a woman, other than this airport situation?

01:00:36 Benacerraf: Oh, sure, oh, sure.

01:00:37 Q: And in your field of being at the top like that.

01:00:38 Benacerraf: Yeah, I mean, I wanted to be a surgical resident at the MGH, and I got turned down. That was purely because I was a woman. In fact there was one person that managed to torpedo my application. Ultimately we made such a stink out of it that the whole process was changed, that one person couldn't torpedo an application like that. I ended up going

to The Brigham, and I think that had I gone to the MGH, which was really where I wanted to be, I might not have decided to go into radiology.

01:01:48 Q: So you patched up that whole thing, obviously.

01:01:53 Benacerraf: Yeah.

01:01:54 Q: What about any of your "causes" or other—I mean you're life's been very full.

01:02:00 Benacerraf: Well my big cause is animals, and as you can see I have one right here.

01:02:02 Q: Beautiful, beautiful creature. You're not too far from the—

01:02:06 Benacerraf: MSPCA [The Massachusetts Society for the Prevention of Cruelty to Animals], yeah. I'm one of their big donors.

01:02:13 Q: Oh, okay, much more deserving than other people.

01:02:16 Benacerraf: I'm working with them on several projects. I'm very involved in the animal—that particular, Angel [Angel Animal Medical Center], and the animal rescue type things. So that is my passion.

01:02:31 Q: And what does that entail now? You said you're working on a couple of projects.

01:02:34 Benacerraf: Well, I'm still in discussions with them about some of the projects that I can do, but currently I basically give them money, [laughs] but I'm going to be involved in other things.

01:02:49 Q: But this is not drawing from any of your medical background.

01:02:50 Benacerraf: Oh, no, no, not at all.

01:02:51 Q: This is simply a passion.

01:02:53 Benacerraf: Yeah.

01:02:54 Q: And this one? She's gorgeous.

01:02:55 Benacerraf: This is Darcy, and he's a Russian Blue. He sleeps with us at night [laughs]. He provides a lot of comfort. I've always had dogs growing up, but here it's difficult to have a dog so we've gone to cats, but he is very much like a dog.

01:03:17 Q: He's so beautiful. Does he know how beautiful he is?

01:03:19 Benacerraf: Oh, yes, unfortunately [laughs]. He's very narcissistic.

01:03:26 Q: He looks like he's a great comfort too.

01:03:29 Benacerraf: Yeah.

01:03:30 Q: So the whole women's thing of having a high profile career and two children very close at age, and a husband who's also got a very distinguished career, how did you balance it out? You said you had parents that were not too far away, but how did you balance all that?

01:03:44 Benacerraf: I hired a lot of people. I had a full-time nanny. I had a housekeeper and I had a cook. Whatever I could pay somebody to do I did. Even if it cost me my entire salary I just got down to just being with the kids or doing things like that. Every little bit of work that I could give away I did. My parents who actually had the other penthouse in this building, right across the hall here, were very involved and the kids, were there frequently. So they were—my mother was the backup to the nanny. The kids also spent a number of weeks every summer on Cape Cod where my parents had a home, and the nanny went down there with the two kids and we would come down on the weekends. I don't think that it would have worked as well had I not had family involved in that.

Yeah, so it's a question of organization. I'm well organized. My husband did travel quite a bit and was on call quite a bit. So it really came down if I had to travel I have to find coverage, if he had to travel he didn't have to, so it was really up to me. The thing that I also did was that, when I went into private practice and ultimately when I came back into the hospital, I always negotiated not to take any call so that I never carried a beeper. If you have two people who are

on call you could ultimately both be called in and not have anybody for the children. So my sacrifice, if you want to call it that [laughs], was that I never carried a beeper and I could never be called in after I left.

01:05:43 Q: And did you raise then here or—?

01:05:44 Benacerraf: Yeah, right here in this apartment.

01:05:47 Q: What kind of education did they end up—? Careers, rather, did they—?

01:05:50 Benacerraf: My son went to a very prestigious boys' school called Roxbury Latin [School]. He wants to be president. He was interested—

01:06:04 Q: President of the U.S.A.?

01:06:06 Benacerraf: Yeah. Since he was two-years-old.

01:06:09 Q: I'm telling you, your father planted this in all of you.

01:06:11 Benacerraf: Yeah, I think he did. He was very close to my father actually. My father was very pleased that he was the first one in the family who actually could be President of the United States [laughs], because he was born here. So he ended up going to Harvard College, and majoring in government and going in that sort of direction. He worked for Rudy [Rudolph W.]

Giuliani for a while, even though he's a Democrat theoretically, but he worked for the firm, Giuliani Partners, that are consultants. Now he and one of his friends owns their own firm, venture capital, in New York. So he's very successful. He also runs a non-profit, which has become very successful, that he and another friend at Harvard sort of invented, put together, called The Resolution Project. That's a way to have people that are in college, who want to be entrepreneurs, get micro-grants for doing green projects all over the world. So he has competitions everywhere. He's raised a lot of money. He has a beautiful website if you ever get on there.

01:07:37 Q: Now what year was he at Harvard?

01:07:39 Benacerraf: He was at Harvard, I think—

01:07:40 Q: He was born in '80, or—?

01:07:41 Benacerraf: No, he was born in '81.

01:07:45 Q: '81, oh, yeah. So my son was at Harvard, but he was born in '80, so he would have been in the class before.

01:07:50 Benacerraf: Anyway, his name is Oliver Libby. Then my daughter was born a year later, and she went to Windsor School, which is very much like Brearley here, and ended up wanting to go to Columbia. So she went to Columbia, graduated from there, and went into Latin

and Greek, and did a Ph.D. in Princeton, which was one of the best places for classics, and she chose to go there. Very, very bright, probably the brightest of all of us. So she taught for a year at Amherst, it was a one-year commitment, but then she ended up being recruited at Boston College for a tenure track position, and she went there. It wasn't a good match, and she is now married to a woman, and they have this little child who's turning two.

01:08:52 Q: Oh, your grandchild, yeah.

01:08:53 Benacerraf: But she was actually—she applied and got this amazing job that she now has, which is Resident Dean at one of the Harvard Houses. So the Pforzheimer House, which is in the quad, is where she's Resident Dean. She has twenty-two tutors that work for her, and she basically is responsible for the academic and personal lives of four hundred students, which is a fulltime job. She also teaches. She has to teach one class per semester in the college. So she's very busy, her partner, or wife if you will, is a Ph.D. in neurosciences, and works at Harvard Medical School. So they're also very busy.

01:09:43 Q: Yes, I would think so. My goodness. Great. So looking back over all of those years and experiences, what do you think brought you the greatest joy, what moment or what turning point probably was the most—?

01:09:55 Benacerraf: I don't know. That would be really had to say. I'm very critical of myself. So I never—I've never sat back on my laurels, because whatever you achieve is immediately in the past. Then you have to worry about whether you can either do it again or, you know, what's

next. I think that it was easier to clamor up to the top than to figure out what you do when you're at the top, because at the top, you have no place to go but down. So how do you maintain, how do you reinvent yourself sufficiently? I've done that several different ways. I've now completely branched off from prenatal diagnosis and I'm in gynecologic imaging, endometriosis, pelvic pain and ovarian cancer. Now I've written a book on that and I've completely reinvented myself in that. So you have to keep moving, because otherwise you become a has-been so quickly. I think that's the biggest challenge, is not to be a has-been, and to figure out what to do next to—you know to not embarrass yourself, I guess [laughs].

01:11:14 Q: Do you think your father went through that as well?

01:11:16 Benacerraf: Yeah, my father had a really hard time with retirement. He retired when he was seventy, or even seventy-five, I don't know, and he lived until he was ninety. I think for those fifteen years he had a very hard time with it. I think it's—we don't plan on retiring [laughs].

01:11:35 Q: That was my next question, yeah.

01:11:36 Benacerraf: Yeah, no, we don't. I mean my husband stepped down as the chair just recently, but at this point we have jobs that don't require us to retire, because I work for myself, and he runs a lab. As long as he's funded he can keep going forever, and as long as I have patients who want to see me I can keep going. So right now we don't really have a plan.

01:12:01 Q: And besides French women never get old.

01:12:03 Benacerraf: Well, I wish. We do have this beautiful apartment in Paris and we'll be spending more time there now that we've renovated it and made it ours. But I think that I've been blessed with very good judgment. I make decisions very carefully at the time and never look back, because—

01:12:26 Q: So you're decisive.

01:12:27 Benacerraf: Oh, yeah, very decisive, and I usually make a decision with eighty percent of the information. If you wait for a hundred percent of the data you're too late most of the time. But when you make the decision, you make it, you go with it, and that's the best you can do. It doesn't help me to look back, because you might get information later that you didn't have. So I must say that I'm very lucky that I really don't regret any big decisions that I've made in my life. I'm pretty happy with how it all went. It was very difficult, and very challenging in many ways, both at home and at work, but I think that I've navigated it pretty well.

01:13:18 Q: You said you wouldn't ever—you know, people are always saying, "Oh, thank this person for that." Were there ever any mentors in your life that you—?

01:13:25 Benacerraf: Um, maybe that Chair of Obstetrics, Dr. Frigoletto, who helped me get started by sending me all the patients from The Brigham. He's probably.

01:13:33 Q: The closest.

01:13:34 Benacerraf: —the closest I would call to a mentor. Perhaps my father and my husband who also were there for me, you know, reading over some stuff that I was publishing and things like that.

01:13:48 Q: And is it a role you feel you've played for other generations?

01:13:51 Benacerraf: Oh, absolutely, absolutely, yeah.

01:13:53 Q: It's been very satisfying I'm sure.

01:13:56 Benacerraf: Yeah, it has.

01:13:57 Q: Yeah, that's great, good, good, good. So in terms of the future? Just keep reinventing and coming up with more amazing discoveries? [Laughs]

01:14:05 Benacerraf: I don't know how much longer I can do it. I'm President of AIUM now for two years. That's a very busy time. So I'll be very busy with that, trying to make a difference nationally, internationally, particularly now that medicine has become so complicated with all these changes in reimbursement, regulations, it's very hard. So it's important to have people in the leadership of these societies that can make sure that nothing bad happens. After that I'm still on the Executive Board for a couple of years, so that takes me until I'm seventy. [Laughs] The

lease on my office there's another six years at least. What I come up with as far as discovering what to do next is based on sort of what I see in my daily life. I see patients everyday, and I draw from them really. I make observations that help them and then I try to figure out how can I help others, and maybe I should look into this or that. That's how it is. I look forward to—I'm a grandmother now, they live in Cambridge, obviously they live on campus, so I look forward to being a grandma.

01:15:55 Q: And how about traveling?

01:15:58 Benacerraf: Well we travel quite a lot. My husband travels a lot and sometimes I go with him when I can. My husband speaks seven languages, so he's a big linguist. Obviously he speaks French perfectly, and lived in France for a while before I met him. He also speaks Portuguese, because he lived in Brazil for a while, after he was a physician. So he can lecture actually in those languages. He also speaks Italian, because I lived in Rome, I have a lot of friends in Italy, and they don't speak anything else so he had a couple of glasses of wine and started speaking Italian. Then he goes to Japan a lot because he has a lot of post-docs coming from there, and he's managed to learn how to speak Japanese. And German, he's a big music lover. So I like to go places where at least one of us can speak the language [laughs].

01:16:56 Q: Yeah, that's ideal obviously.

01:16:57 Benacerraf: And so we do travel a lot, we go to Europe several times a year, Japan—he goes several times a year. I go with him maybe once a year.

01:17:09 Q: Any other part of your life that we haven't touched on that you'd like to have recorded, or experiences—?

01:17:18 Benacerraf: No. Not really.

01:17:19 Q: If you could go back and give advice to yourself as an entering student at Barnard what do you think that would be? What would you say to that young girl?

01:17:26 Benacerraf: Um—you know, I don't think I'd do anything differently. I really wouldn't. I did the best I could. And that was always the advice I gave myself is just do the best you can.

01:17:46 Q: Okay, well thank you very much.

01:17:47 Benacerraf: Sure. I don't know if this lives up to what your expectations [laughs].

[END OF INTERVIEW]

A J Alfred Dreyfus, 4 Jacques L. Monod, 6 American Institute of Ultrasound and Medicine, 17, 28 Journal of Ultrasound and Medicine, 17 American Institute of Ultrasound in Medicine, 28, 43 Amherst College, 40 L Angell Animal Medical Center, 35 Lewis Thomas, 6 B M Barnard College, 1, 2, 3, 5, 24, 26, 30, 45 Mass General Hospital, 11, 16 Beth Israel Medical Center, 14 Medical College of Virginia, 5 Boston Children's Hospital, 17 Boston College, 40 Brearley School, 2, 9, 24, 31, 39 N Brigham and Women's Hospital, 11, 13, 14, 15, 16, 17, 22, 35, 42 New York University, 6 P \mathbf{C} Peter M. Doubilet, 16 Carol B. Benson, 16 Princeton University, 40 Columbia University, 3, 5, 24, 25, 39 Columbia University College of Physicians and Surgeons, 3, 5 R Roslyn S. Silver, 30 E Roxbury Latin School, 38 Evelyn Wood Reading Dynamics, 10 Rudolph W. Giuliani, 39 S F St. Luke's Hospital, 25 Fredric D. Frigoletto, 14, 15, 42 T H The Massachusetts Society for the Prevention of Cruelty to Harvard Medical School, 3, 5, 7, 40

Harvard University, 3, 5, 6, 7, 38, 39, 40

Animals, 35

The Society of Radiologists in Ultrasound, 29, 32