

**MC.0356**

**Interviews of the Margaret MacVicar Memorial AMITA Oral History Project**

**Renata Cathou** – Class of 1957

(interviewed by Catherine Bae)

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ORAL WOMEN'S HISTORY PROJECT  
NOVEMBER 18, 1995  
INTERVIEW WITH MS. RENATA CATHOU  
INTERVIEWER: CATHERINE BAE  
PART I

LOCATION: ALGIER'S CAFE IN HARVARD SQUARE

Catherine: Ms. Cathou, starting from the beginning, how did you arrive at MIT?

Ms. Cathou: Well, that's a bit of ancient history...I was always interested in science as far back as I can remember. So, MIT was a reasonable choice. I lived in Brookline at the time and I attended Brookline High School. MIT, though, was not my only choice. I also applied to Radcliffe, where I also got in. There were actually three women in my class at Brookline High School. And, I don't remember how this idea germinated, but the three of us decided to attend MIT together. This was highly unusual for any woman to consider, at the time. I mean, **you** have classes where there are forty to fifty percent women, but when I went to MIT, in a class of 1000, there were approximately twelve women.

Catherine: How did that make you feel?

Ms. Cathou: Strange! Or at least certainly very visible. You could not hide. There was very little in the way of dormitory arrangements for women at the time. There was one house on Baystate Road, or on Beacon Street. At any rate it was across the river. But that only housed a few students. This was not a problem, because I lived very close, in Brookline, and I commuted from home, as did my two friends.

Of the other two, one departed from MIT after one year, and the other made it through most of graduate school. But, again she left to get married. I suppose, that out of the three, I was the only one to persevere. But, really the three of us went to MIT because we were supportive of each other.

Catherine: What made you decide MIT over Radcliffe?

Ms. Cathou: I preferred MIT, but there was something appealing about also going to Radcliffe. I always thought of MIT as a stronger school in science. And, I think that there was the challenge of doing something that few women did.

Catherine: Was your first intention to go into Biology?

Ms. Cathou: Ah, well my first intention was to go into physics, with a view towards going into biophysics. I had already worked summers at MIT before I went as a student. I was in the biology department, and I was very interested in biophysics. The professor at the time recommended that the biology was easier to pick up than physics. And, that I should really get the grounding in physics. So, I went into physics with the full intention of getting a degree in it. However, the second year I changed my mind and switched out of physics.

Catherine: Why?

Ms. Cathou: It was a question of emphasis. It was a question of the types of courses I had to take. Physics at that time, had a fair amount of electrical engineering in it and I was frankly bored to tears. I preferred to do something like physical chemistry and everyone thought that I was an absolute masochist to do that. Physical chemistry in the minds of most people was absolute torture, but compared to electrical engineering it was a breeze. I switched out of physics, but I did not go into the biology program per se. Courses had to be taken in a strict sequence and if I had gone into biology I would have had to stay an extra

year to make up for the course time. I was on a full scholarship and I did not think that I could afford to stay an extra year. So, I went into what was then food technology. Now, it is called applied biological sciences. That had a fair amount of biology, a great deal of chemistry, and some chemical engineering. I did not see that as a real problem for getting the real ground in biology. So, that worked pretty well.

Catherine: As a female minority at MIT, what sort of social activities were you involved in that involved other women?

Ms.Cathou: Well, we had the Cheney Room. It was the meeting place, the one place where one could go and relax in between classes. There really was no other place to go. It had a kitchen, a locker room, and bedroom. You could basically go and crash. But, it was also the social center for women at the time.

Catherine: Were you close to a number of women, besides those simply in your field?

Ms.Cathou: I was reasonably close to a number of people in a variety of fields. Your major really made no difference. And, there were numerous extracurricular activities. I did the drama shop for three years. That was quite exciting. There was also Tech Show, which was also a lot of fun.

Catherine: Why did you go into grad school right after completing undergraduate school, instead of immediately joining the work force?

Ms.Cathou: There is nothing you can do with a bachelor's degree, or at least back then that was the case. I wanted to go into research. For research, one needed a Ph.D. for a working certificate. At the time the only research that I was aware of was academic research. For that there was a strict sequence. Once you got your Ph.D., you did post-doc for several years. Then you went on to doing whatever you hoped to do. And, I followed that sequence.

Catherine: Soon after graduating from graduate school, what did you do?

Ms.Cathou: Well, there were a lot of milestones after I got my Ph.D. and completed my post-doc at the physical chemistry department for two and a half years. At that point, I was very interested in immunology, so I got a research position at the Massachusetts General Hospital in immunology and did research there for five and a half years. After that, I took a faculty position at Tufts Medical School for eleven years. I went from assistant professor to full professor and I had a lab with graduate students. We put out quite a bit of research. Concurrent with the Tufts positions, my husband and I co-founded a company called Clinical Assays. It was the first company to put out a radio-immuno assay. At the time it was extremely novel, and it was based on work that had been done by others at Massachusetts General Hospital. It measured, in a very short amount of time, blood levels of important drugs and hormones using specific antibodies to capture the drug or hormone in question that had been labeled with a radioactivity tracer. The hallmark of radio-immuno assays is to be able to do it for very small concentrations. At the time, radioactive isotopes were the most sensitive way of doing this, and only much later were other tags used rather than radioactive isotopes.

—Well, my husband Pierre and I founded Clinical Assays to provide hospitals for a way of measuring digoxin levels in patients- which is a cardiac drug which has a very small window of clinical effectiveness: too small a dosage and it's not useful, but at too high a level it's deadly. Up till that point, the assays were biological and it took several days. You really needed an answer in hours. The only useful method that appears to us was in an immuno-radio assay. So, we eventually founded a company on that, and went on not only

to provide service to hospitals but also then to produce our own kits. From there, it just branched off into different types of assays. That was concurrent with the Tufts faculty position, so that was my first real industrial experience. That had to be kept quiet however. It may seem strange to you now, but at the time, in 1970( even as late as 1975), in academic research it was thought a "no-no" to dirty your hands with anything commercial. It was unethical. It was a pursuit of knowledge versus a pursuit of money. It wasn't until the genetic engineering revolution at about 1977, did people in the academic world began to get into industry themselves. The fuzzy line between academic research and industrial research blurred. So, many people began to do it, and you couldn't really stop it. It then no longer became an issue. But, at the time that I did it, it was an issue. So, I just kept quiet about it. They [Tufts Medical School] did not know that I was involved in Clinical Assays.

Catherine: You mentioned your husband, Pierre, as your partner in Clinical Assays. Could you tell me something about your marriage to him?

Ms.Cathou: I met Pierre at MIT. He was a electrical engineering major and we were in the same class. He did the five year combined masters and bachelors program. Then he went onto Harvard Business School. We got married when I was part way through graduate school.

Catherine: Was it tough going to school, and dealing with a family?

Ms.Cathou: Well, we did not have any children which was a conscious decision because it would have been tough. We lived first in the house of Bruno Rossi, who was a famous physics professor at MIT, and then we lived close to MIT, so it was not a problem to get to lab.

Catherine: What did you do with Clinical Assays after you had firmly established it?

Ms.Cathou: I stayed in teaching, but in 1976 we sold Clinical Assays to Baxter-Travenol. We also got divorced. Once Pierre and I were divorced, I was not involved too much in the company except on a friendly and consultative basis. At that point I went back to strictly academic work. But, the whole experience did make a lasting impression on me because I now viewed academic work from a rather different perspective- a business perspective. I stayed on at Tufts until 1981 and then I decided to leave. I thought about things for a while, and then I started Technical Evaluations.

Catherine: What was Technical Evaluations about?

Ms. Cathou: It is a consulting company geared towards helping small start-up companies, primarily in diagnostics with both technical and management expertise. I also worked with venture capital firms in terms of evaluating companies that they are interested in or possibly buying.

Catherine: How did you feel about leaving academia and venturing into the business world?

Ms. Cathou: It was vastly different. At first there were things about academic research that I missed. There was no longer any question about doing pure research because in the industrial world the questions you ask are reasonably well targeted. There are targeted questions in academic research too, but the targets are different. Also, the resources at my disposal were different, in the two situations. I was doing basically physical biochemistry, spectroscopy, and I had a lot of very nice instrumentation at my disposal when I was at Tufts. That was gone once I entered the industrial world and I worked with these small companies which could barely afford even a simple spectrophotometer, for example. Working with small companies meant trying to solve problems on a shoestring, which was fun and challenging.

Catherine: What made you decide to discontinue Technical Evaluations? At that point, what did you want to do with your life?

Ms.Cathou: Well, I'm a moving target and I wanted to devote more time to my other interests. I felt that I wanted to spend more time with those things. I guess I wanted to enjoy life a bit more. A couple years ago, I decided not to work full time. I have a sailboat, I like to travel, I go to a lot of opera, and I also had family considerations. My mother, about to reach the age of 100, needed me more. As the only child, only I could fulfill this obligation. In addition, I wanted to spend more of my time doing things in the daytime. My father was a professional photographer, and along the way I learned a reasonable amount of photography. I devote a lot of my time to it. And, last year, it started out as a sort of experiment, but developed into a full-time interest. I realized that I wanted to switch out of sailing, a very physical activity, and I wanted to see if I could pick up something less exerting such as gardening. So, I basically researched and designed a Japanese garden in my backyard. I envisioned it in several stages and really I've only completed the first stage. So, that has been a consuming interest. It's very peaceful and beautiful.

Catherine: Out of curiosity, have you gone back to MIT recently, to compare it to how it was in your day?

Ms.Cathou: Yes, I'm back from time to time. I go to class reunions and I've been a class vice-president for at least ten years. I was on the MIT Enterprise Forum Executive Board for several years. I gave that up because of the sailing. I am involved with a boating educational group ( a non-profit educational group)- called the US Power Squadrons. Somehow, I got "sucked" into doing a lot there. There again, it's not just the boating interest. This was an organization that until 1982 was on of those "male-only" group. As a matter of fact, when my husband and I first started sailing in 1965 we took Power Squadron basic courses, which were extremely useful. At the time though I could not become the member. He was the only one who could be the member. I, being female, could not become a member. We took their courses and then we basically left the Power Squadron. It was only in 1983 or so, when I got a phone call out of the blue from somebody in the local group in Lexington because he had read something that I had written in a boating publication to ask me if I wanted to help teach. Now they had women, and he thought that I would be a useful role model. I started to teach for a couple of years. Then, they realized that I wasn't a member. So, they made me a member. By the way, this is by invitation only and one thing sort of led insidiously led to another. I went on the executive board of the local Squadron- the Charles River. Before I knew it, I was commander of the group. I was commander at the same time that I was on the MIT Enterprise Forum and it was too much. I couldn't do both. And along that time my mother was ill and I had to spend a lot of time with her. Something had to go and it was the MIT Enterprise Forum. So, I am back at MIT from time to time and I do a lot of stuff for MIT still. I get a lot of newsletters and that sort of thing. I did go back and participate in an AMITA conference- possibly as far back as four or five years ago. I think they still put it on one a year in January or so, to get women ready for the working world. I helped organized one of the panel discussions for that and I brought in women, again to basically describe their experience and provide their input as to what the possibilities might be.

Catherine: What are your view on how MIT deals with the "woman" issue? Do you think that MIT is still a male-dominated environment?

Ms. Cathou: I don't know. I haven't been able to really go back and see. This is something that I think you in the day to day working of the MIT world would probably have a better feel for. I mean, I can see for example, just raw statistics. Clearly, a lot more women have been

brought in for faculty positions. I have a friend who's in the city planning department. I have listened to what she has to say about her experiences about being on the faculty now for a couple of years. She had a very rough road. I don't know if that's typical or now. I think there still may be two standards. I think it's something you just have to be aware of.

Catherine: Would you consider yourself a strong feminist?

Ms. Cathou: In the sense that I went out and did it- yes. In the sense that I would go out and march- no. I would rather go and persevere and do it individually, rather than en masse. But this is only because this is the way I am built. This is a personal choice. Yes, I suppose I am a feminist, but you know, there's a wide range. There are different ways of achieving the same goal, and I think they're all necessary.

Catherine: What about your family background? So who would you say was your biggest role model? Your mother and father?

Ms. Cathou: Very possibly. Although I'm not entirely sure. I'm sure that there are other people that have not yet thought about, only because I have not thought about it. My mother worked. My parents are from Austria and I was born in Milan. My mother was from Vienna and when she was young it was a daring thing to actually go out and get a job. Women just didn't do that from her social level. She worked in a bank. She wasn't a secretary, she was basically an assistant. Once she got married she didn't work. When we came to the United States, she worked with my father for a long time. She basically did the business aspect of the business. Then, later to bring more money in she went to work in Harvard Square- Schoenhoff's Foreign Books as a bookkeeper. Then when Clinical Assays was formed she worked as a bookkeeper until she was in her early eighties. And she probably would have kept on going except that she woke up one morning and said 'I'm tired of getting up at six in the morning. I would like to sleep till seven please'. So I guess that was probably a role model to a large extent. She was always an active woman, and basically in the business world.

Catherine: Given that your father was a photographer, and your mother was in business, why science?

Ms. Cathou: I think it's probably what I was exposed to. I was part of a science fair in high school, which I enjoyed very much. I did that for four years. That just strengthened my interest in science. Then, I went to go work summers at MIT in the biology department- where I was exposed to more science.

Catherine: How did you get involved with the MIT summer program?

Ms. Cathou: I don't remember exactly how I got this job, but my first job was on a research project. Francis Schmitt, who did a lot of basic research on neurochemistry and neurophysiology required squid nerve axon material to carry out the research. So we had this group off in one of the old buildings at MIT doing nothing but squeezing the stuff out of axons under a microscope. That was my first job- I squeezed the stuff out of axons. It's actually a very boring job, but then when I went to find out what you did with the "stuff" it became a lot more interesting. But I think it was this initially work at MIT, before I actually went, that gave me an exposure that I wouldn't have had otherwise.

Catherine: Did your parents have any major expectations of you? Did they ever tell you what you were going to be?

Ms. Cathou: No. Nothing that they ever voiced...I think I just had the feeling that I was expected to do something- something professional but it wasn't clear. It was what I would want to do professionally. And, they told me when I was still a junior in high school that I would have to go out and do it on my own because they could not afford to send me to college. I was expected to do whatever was necessary, they would support me in every way they could, but I would have to go out and rustle up the money if I wanted to do this. I applied for scholarships at the various schools I applied to. So with the various scholarships I was able to do it. My parents basically provided the environment.

Catherine: When you first met MIT professors and researchers, did you feel like they were doing something that you wanted to do?

Ms. Cathou: Yes, yes. I think I always had the feeling that I wanted to go into research, which is why I was there in the first place. I had not decided what sort of research, except that I wanted it to be biophysical in some way. And that's really where I ended up; physical biochemistry is very strongly related to what I initially wanted to do.

Catherine: So, you had decided always known that you would go into research? Did you explore other fields?

Ms. Cathou: I think that I looked at other things, but not very seriously. So, I don't think that there was ever any real question.

Catherine: Is there anything more that you would like to say?

Ms. Cathou: I'll think about it. And why don't you think about it too. Clearly we have basically skimmed the surface.

Catherine: Okay, I'll give you a call later on. It was a pleasure meeting you.

(End of interview)