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BORIS CATZ, MD

Interview conducted by
Michael Chappelle
March 22, 2010

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INTRODUCTION

Boris Catz, MD, Clinical Professor of Medicine Emeritus at the University of Southern California School of Medicine, has been a pioneer in the field of clinical endocrinology for more than sixty years and is widely recognized for his innovative treatments of myxedema coma and exophthalmos. In 1985, the Boris Catz Lectureship was established in his honor at Cedars-Sinai Medical Center. It recognizes Dr. Catz for his devotion to the care of patients, his role as an educator and model for training clinicians, and for his contributions as an original thinker, pioneer and leader in establishing novel therapies for diseases of the thyroid.

BIOGRAPHICAL SKETCH

Dr. Catz was born in Troyanov, Russia in 1923. He graduated from the Universidad Nacional Autonoma de Mexico in 1941, attended the Escuela Nacional de Medicina, Universidad Nacional Autonoma de Mexico from 1941 to 1946, did his internship at the General Hospital in Mexico City and received his MD degree in 1947. He came to the United States in 1948 for postgraduate training at the University of Southern California (USC), where he began to study the thyroid gland and diseases of the thyroid during a two-year fellowship with Paul Starr. Dr. Catz was awarded an MS degree in medicine in 1951 and joined the faculty at USC as an instructor of medicine in 1952, becoming an assistant clinical professor in 1954. After becoming a United States citizen in 1955, Dr. Catz served in the US Army as a Captain from 1955 to 1957. Following military service, he became chief of the Thyroid Clinic at Los Angeles County Hospital, a position he held until 1970. After attaining the position of Clinical Professor of medicine at USC in 1959, he joined the staff at Cedars-Sinai, where from 1983 to 1987 he served as Chief of Clinical Endocrinology. Among his many accomplishments are notably his pioneer work with Samuel Perzik in the development of total thyroidectomy for the treatment of hyperthyroidism, cancer, multinodular goiter, and chronic thyroiditis not responsive to medical management. In addition, while collaborating with Franz Bauer, Dr. Catz was the first to recommend total thyroidectomy and treatment with radioactive iodine for exophthalmos and Graves' disease. Another major contribution of Dr. Catz was the pioneering protocol that introduced triiodothyronine (T₃) and cortisone for myxedema shock and coma, work done in collaboration with his then fellow Stephen Russell. Dr. Catz has authored two editions of the book *Thyroid Case Studies* and has contributed numerous articles on thyroidology to medical journals. The American Thyroid Association awarded him a certificate of Distinguished Service in 2002. In addition to being emeritus at Cedars-Sinai and the University of Southern California, Dr. Catz continues to maintain a private practice on a part-time basis. Today, Dr. Catz finds great satisfaction in the careers of the many clinical residents and postdoctoral fellows he has trained regarding the importance of taking a good family history and seeing the patient as a total individual and a complete human being.

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I. FAMILY BACKGROUND AND EARLY YEARS

Chappelle: Dr. Catz, would you please tell me a little bit about your family background starting with your grandparents?

Catz: It is very simple: born in the Ukraine in a little town called Troyanov, which is near Barbayarv--where the Nazis destroyed everything. The town is nonexistent now. One of my Japanese doctors went to visit and took a picture that I cannot find. There is only a little house and a caretaker and nothing more. Everybody was exterminated. It's almost like the houses you saw in *Fiddler on the Roof* in Anatevka.

Chappelle: When did your family move to Mexico?

Catz: We left in 1928. We possibly bribed [our way] out [of the Ukraine]. You had to pay to leave, and we went to Riga, which is the port, where a French ship was waiting for us. We left--mother, father, my sister, and myself. They put us in third class--in steerage--the majority of the trip we were sitting outside and starving. That ship was supposed to go to New York, where there were some pseudo-relatives. Instead of that, it finished up in Veracruz, Mexico--the port of Veracruz. Apparently, some Jewish people knew about the ship coming there; they received us, and they took us to Mexico City, what is called DF, Federal District. There they gave us accommodations, and from then on we progressed.

Chappelle: What was it like growing up in Mexico during the Depression and during World War II?

Catz: We were lucky that we came to Mexico because the United States--after 1928 the Depression was tremendous. So we were lucky in that aspect--for survival. What was your question?

Chappelle: What was it like when you were growing up in Mexico in that time and during World War II?

Catz: Very simple. Mexico has what they called the "gold dress people": they were all Nazis, and they participated with the "right"--to try to cause strikes and [unrest], but they didn't touch us. There were manifestations, but that's all. And at that time in Mexico, you had the extreme right and the extreme left--and that's it. But they didn't touch us, and you were able to pay for people not to touch you, also.

Chappelle: Was education a priority in your family?

Catz: For Jews, education is always a priority. So my elementary school was what they called Escuela Israelita de Mexico. That means it is a Jewish school where they teach you Yiddish and at the same time Spanish, and you follow the curriculum of

the government. It was very nice. I excelled in that. And after I finished, I even got a gold coin for knowing the history of the Jews, not the history of Mexico.

Chappelle: What were your favorite subjects?

Catz: My favorite subjects in school? Really, literature more than anything else: Jewish literature, Spanish literature, getting acquainted in how to speak Spanish and communicate with the people.

Chappelle: Were you making any decisions at that time about what you wanted to do later in life?

Catz: At the age of eight, nine, ten, you don't make decisions. The family makes decisions for you.

Chappelle: Were they making any for you?

Catz: Oh, the important thing is that--at the same time that you follow the curriculum of the Mexican schools--on the side you get some Jewish religious teaching, at all times. So you participate in both cultures at the same time, and you get a lot of philosophical insights.

II. NATIONAL UNIVERSITY OF MEXICO

Chappelle: Why did you choose to attend the National University of Mexico?

Catz: That's the only university that you can go to. The French University was--how can we say--part of the Catholic Church, and it is very hard to get in there unless you participate in Catholicism. Mexico University is, by the way, free for all. It means free--at the time that we started, Mexico University only cost 600 pesos per year, which is nothing. The problem with the Mexican university is that [it is] a place where all types of parties want you to participate with them--mainly the left and the government party. So you have to be careful not to annoy anybody. And if they want to do something to you--by paying a few pesos, everything is arranged.

Chappelle: What was your major?

Catz: My major was health sciences more than anything else, but also philosophy and psychology.

Chappelle: Who was your mentor?

Catz: My mentor--there were two. In the early years, there was Dr. [Adolfo] Menendez Samara, the professor of psychology and philosophy. [He quite] possibly liked me so much that he took me every day to a coffee shop in Mexico where you [could] meet the poets, the artists, and the painters. And you got the feeling of culture that

you don't see [from the] outside. And as a young man, you never think on problems [of a practical nature, such as] where you are going to eat, where are you going to sleep, where to make a living. You [simply] enjoy the studies. And when my parents asked me what do I want to be, I said, "a philosopher." So my father tells me, "Wait a minute, do you know any philosopher who makes a living? No, you go and be a doctor." Period. That's it.

Chappelle: How did you feel about that?

Catz: At the same time, the profession of medicine gives you the feeling of philosophy and healing, and it is worthwhile.

III. NATIONAL UNIVERSITY OF MEXICO MEDICAL SCHOOL

Chappelle: Why did you go to the National University of Mexico Medical School?

Catz: That's the only place that will take you.

Chappelle: What feature or features stand out about your medical school?

Catz: There were two. Dr. Norberto Treviño Zapata was a gastroenterologist, was a politician, and he took me in his wings to guide me and train me. The other one--who made me read the text in English--was Dr. Jose Joaquin Izquierdo, professor of physiology. He was enamored with Claude Bernard, and at the same time wanted us to read him in French. [He wanted us to] be really interested in the subjects instead of playing around. Because in the Mexican universities, they play around--the students. They form parties; they strike every time there is a strike. People that really want to study have to think twice. If you have a teacher that is interested in you, you will make it. If you don't have [such] a teacher, you pass [you don't succeed as a student], that's it.

Chappelle: What kind of physician did you want to be? What specialty?

Catz: Because my mentor was a gastroenterologist, everything was gastroenterology. But in the meantime reading the textbooks--American and English textbooks--you got an interest in every aspect of health. At the same time I got interested in Jewish medicine. And my mentors and others said, If you become a physician, you have to take care of the human being--*completely*. And *serve* that human being to [ensure that they will] be healthy.

IV. GENERAL HOSPITAL IN MEXICO CITY: INTERNSHIP

Chappelle: You did your internship at the General Hospital of Mexico City?

Catz: Yes.

Chappelle: How did that experience shape you as a physician?

Catz: Very well, because you see [a wide range of patients,] from the patient that doesn't have anything, to the patient that has something. And the patient that is very rich has a special place in the hospital, okay? And the patient that doesn't have anything doesn't ask for much, and you really have to take a complete, good history to find out [the source of their problem]. Almost every patient in Mexico has four parasites, so gastroenterology was the number one thing. That's what you were seeing.

Chappelle: How did you treat people with parasites then?

Catz: At that time we had a lot of medication [that we used]. But you treat them and then they go back [to the same environment], so what's the use? What's interesting--gastroenterology--the poor Mexican patient, they eat the frijoles, the chili, and that's it--the tortillas. There are almost no ulcers. The moment he advances to middle class, he starts having ulcers of the stomach, peptic ulcer--whatever it is. That means stress of life produces the problem, not the food.

Chappelle: After you finished your internship, what did you do next?

Catz: I had to decide. My professor at that time, Dr. Norberto Treviño Zapata, tells me it is possible that he is going to be the president's doctor--to the new president that is coming [into office]. You see, every six years you have a new president--and he [professor Zapata] wanted me to be his assistant. This is 1947. By the way, it is interesting; when you finish medical school, you are supposed to go do social work for seven months outside Mexico.

Chappelle: Outside of Mexico?

Catz: Outside of Mexico City--in a little town. They sent me to Banderilla, Veracruz, which is a little town near Jalapa, Veracruz. The only factory there was a factory of cigars. So my patients--they didn't have money--they paid me with cigars. And this is why I still chew a cigar, which is a fascinating story. And after you finish [your seven-month obligation], you have to write a report--there it is [gestures to papers on table]. In the report, I mentioned the situation in this little town: it has a doctor, it has a curandero--one who is not a doctor but gives you so-called natural medicines and makes other things for you--and when you walk through the town at the same time on the walkway--on the side--there is the sewage canal. So the water is always part of the sewage, and that is why you get a lot of parasites, also. I reported that in my booklet, and I got a call from one of the guys in the little town, "Don't come back here, you are going to be killed, you destroyed our town by publishing all that." So that's Mexico.

V. UNIVERSITY OF SOUTHERN CALIFORNIA

Chappelle: Why did you choose to attend the University of Southern California graduate division?

Catz: It is very simple. This was '48, when I married my wife--an American that was part of the foot and mouth disease campaign that the United States sent to help Mexico--and I wanted to leave Mexico. I wanted to get more studies. I applied to the University of Pennsylvania, I applied to the Mayo Clinic, and I applied to SC [University of Southern California]. The only one that accepted me was SC. So in '48, that's where we went.

Chappelle: You and your wife?

Catz: Yes.

Chappelle: And your wife's name?

Catz: Rebecca.

Chappelle: Who was your mentor at USC [University of Southern California]?

Catz: Paul Starr and Donald Petit, both of them. They were working at the same time that they had private offices--part-time--and were in charge of SC education in the hospital.

Chappelle: What was Paul Starr like as a physician and a scientist?

Catz: When I met him, he was like a father to me. He guided me, he liked me, and he offered me [a position, so] that I should stay with them. When I finished the year of postgraduate, I came back to Mexico. And after a few weeks, I got a cable, "We want you to become a fellow in thyroid. Please come back to us." So that was a beautiful opportunity--from gastroenterology to thyroidology. How many doctors have done that? But at least you learn medicine; you learn the body.

Chappelle: So in 1949 you became a fellow with Paul Starr?

Catz: Paul Starr.

Chappelle: What was the state of the art in thyroidology at that time?

Catz: The state of the art is like it is now. You [always] want to improve the science of thyroidology, to find new ways to help the patient. But the interesting thing that I learned is that thyroid [disease] doesn't appear spontaneously. It is a *family disease*. It starts for at least four generations before [it manifests in the patient]. In those days you would take a history, you [would] ask for the family history.

Chappelle: When you were a fellow, did you do research yourself?

Catz: Oh yes. Not only basic research, but also clinical research. The basic research was with Dr. Ernest Geiger, a Viennese professor that was interested in physiology and with it the measurement of the thyroid cell height.

Chappelle: Cell height?

Catz: Cell height. You measure the cells, and the height corresponds to diseases. That means the stresses of life make the cell heights grow and the thyroid grow. We not only were interested in that. We worked with rats, [inaudible] rats, and we did experiments with cortisone, insulin, cold, and heat. And there is no question that all type of corticoids, insulin, and cold increase cell height. And we published it. And it was beautiful. Here you see patients during the day, and after you finish you go to the little barracks where we had our lab, and you spend hours--up to two or three o'clock in the morning--doing the work. That is research.

Chappelle: Would you talk a little bit more about Paul Starr and his pioneer research in nuclear medicine at the Massachusetts General Hospital?

Catz: I don't think at Massachusetts. The pioneer was [Earle] Chapman. Paul Starr was there at that time, but Chapman was the one who reported the first treatments with radioactive iodine in Massachusetts. And Paul Starr, remember, was trained in Rush Medical School or something. And he--at Massachusetts--had experiments done. At the top of the buildings, he had a lab. He was interested in tests like PBI (protein-bound iodine) in order to find out if there is [in fact] a test to establish the disease. I don't know how he came to California. He never told me that. I only know he was interested in the human being.

And it is fascinating because at that time he was interested in checking the test T_4 in every patient in Los Angeles, and I think he published something of the incidence of thyroid diseases in certain parts of Los Angeles. But he was interested in T_4 as medicine only.

One of the residents that was with me at that time, Ron Stein, who is the chairman of the Endocrine Club in L.A., said, "I remember something about you. First, why were you always fighting in Santa Barbara when we had the meetings with the clinical societies, the American Federation in Carmel, and then in Santa Barbara?"

Then he says, "You know, I remember you for one thing only. You made us make rounds to see patients, and you told us, 'See the patient as a total individual.' And [once] you told me, 'Please tell me what this patient has.' So I touched the neck, I feel some lumps, and I said they have a goiter. You said, 'Wait a minute, didn't I tell you to see the patient as a total individual? Did you notice that this patient is

missing one leg?” He [Ron Stein] still remembers. Those were the rounds; that was the training. It is not at the present time.

Chappelle: The time you are talking about now is when you were an instructor in medicine.

Catz: Yes.

Chappelle: Nineteen fifty-two, nineteen fifty-five, roughly in there. How did you divide your day when you were an instructor?

Catz: I was there until seven or eight o'clock at night, you see. Also, I was interested in teaching residents what I know of parasites. So I spent time with them. And when they brought a patient that had a particular fever and all that, then I told them, "Get the blood, make a smear, and see what you see there." And we discovered parasites [were present] also. I loved medicine at that time. I was not interested in anything else. That's beautiful.

Total thyroidectomy followed by I-131 in the treatment of thyroid cancer

Chappelle: What research were you doing on the thyroid gland with I-131?

Catz: Oh, we were the first ones to recommend I-131 treatments for cancer of the thyroid after you do the total thyroidectomy. There's a package there with all the publications [gestures to papers on table] so you can know more about it. We were the first ones--which is interesting--the paper of Bauer and Catz, or Catz and Bauer. Franz Bauer was the first to recommend total thyroidectomy and treatment with radioactive iodine for exophthalmos and Graves' disease, persistent eye disease. And it has taken so many years--until recently they finally say it works.

Chappelle: Who were your collaborators on that?

Catz: I have a list of all my residents, but let's start mentioning. We have Dr. Fawell, Dr. Stone, Dr. Ginsburg, Dr. Rohde--more and more and more and more. I mean everybody that was a resident or intern participated. They loved to do the work.

Antithyroid medications

Chappelle: What research were you doing on antithyroid medications?

Catz: Oh, as a fellow I did a paper on Itrumil--you will see it there--which is a mixture of iodine and thiouracil [given] at the same time. We were assaulted because [it seemed paradoxical]; who uses iodine and antithyroid drug at the same time? It will wash out. But the patients responded. Ciba paid for that. They paid for my fellowship--\$200 a month. Isn't that a big salary? Now a fellow wants \$2000 or \$3000 dollars a month. But I was happy. I survived. I did it. That study was important because it introduced me to Dr. Means at Massachusetts General

Hospital; it introduced me to Dr. Astwood and all the others--to present the work. No one was interested in that. Nevertheless, one thing that was important--that we discovered--when you use the other antithyroid drugs, some of them will cause anemia and death. What was the reason: they were giving barbiturates at the same time to the patient.

Chappelle: Why were they doing that?

Catz: Excuse me?

Chappelle: Why were they doing that?

Catz: There were no other medications to calm down the patient, to make them better. There was no Valium, okay? No Valium. So that was what was given, and a certain percent of patients developed severe aplastic anemia and died. So we wrote a letter to the editor that was published in the *Journal of Clinical Endocrinology* about that.

Chappelle: Now what about Ted Astwood? What was your relationship with him?

Catz: Very little. The best session I had with Astwood, we were in Italy for international work.

Chappelle: [What was he like as a friend and personality?]

Catz: As a friend--and a very nice physician, [one who] when he makes a mistake, he corrects it publicly.

Chappelle: What about his scientific contributions?

Catz: Very good; very good. Very solid.

Comparing subtotal to total thyroidectomy in the treatment of thyroid cancer

Chappelle: You published a program with Paul Starr in 1955 on the medical treatment of thyroid cancer. What was that protocol?

Catz: The protocol [was] started by an old retired surgeon, Dr. [Charles] Sturgeon, who was a friend of Dr. Starr. We found out that the majority of surgeons were doing partial surgery--or subtotal surgery--of the thyroid. We decided to compare subtotal with total thyroidectomy. Is there tissue left in the subtotal that is cancerous or promotes cancer? And that was one of the first papers to recommend total thyroidectomy for thyroid cancer--against the wishes of Sloan-Kettering and all the other surgeons that were doing subtotal--and that's it. [These other surgeons were] taking out the nodule that had the cancer and leaving the rest of the tissue there. Then we went--recommended the treatment with radioactive iodine--total ablation of thyroid with radioactive iodine in every patient that has cancer of

the thyroid. And that's being used now, you see. But they try to modify it, [recommending] that radioactive iodine shouldn't be used as much, [inaudible] the chest. But if you have cancer, you want to make sure it has been destroyed, not that they play around with you. And we have thyroid tablets [for replacement of the thyroid hormones]. What's so bad? So you have to train the surgeon to know how to do a total thyroidectomy, and that's where my main goal was at Cedars-Sinai and at Good Samaritan. Good Samaritan had the best surgeons--C. J. Berne, who didn't allow anybody to come to the surgeries. He was to be the only one. He asked me to come, and we even published a [paper] at the General Hospital on that: how to do the total thyroidectomy. What happened with the general surgeon or even the head and neck surgeon--they opened up the skin and there it is.

The parathyroids were there. That was complication number one. Number two, they didn't inspect the recurrent nerve that controlled the voice--to make sure that they were there and were intact. So they were butchering and sometimes cutting them. So my function was to be at the surgeries. But the only two surgeons, big ones, that accepted that I should be there were Dr. Berne and Sam Perzik. Later on, the other surgeons--Dr. Karlan, Dr. Alfred Katz, Dr. Irving White--accepted that.

VI. UNITED STATES ARMY (1955-1957)

Chappelle: You became a U.S. citizen in 1955?

Catz: Nineteen fifty-five, January fourteen. And in 1955, a month later, I received a letter: We welcome you in the Army. How it worked so fast I don't know, but it worked.

Chappelle: Were you surprised?

Catz: I was surprised because I was doing research and I didn't expect that they would take anyone that was spending time in the laboratory for the Army. And Dr. Starr was surprised. He even wrote a letter asking his friends there to transfer me to the Navy where there was a special cancer center. I have the letter there [gestures to papers on table]. And they said they could not; the Army had the privilege already. So here I go as a captain to Fort Brooke for training, and then with ten others--Spanish-speaking doctors--to San Juan, Puerto Rico. In Puerto Rico, fortunately, when I come in, my colonel meets me, "How are you?" I said okay and [asked] what are my duties. [The colonel said] "Okay, your duties are you are going to take care of the officer ward, you are going to take care of the TB ward, you are going to take care of what you like, but you are also going to be the dermatologist." I said, "I don't know anything about dermatology." "Don't worry. Here is a little booklet with one, two, three, up to one hundred potions that you give and that's it." "Yes, sir." My best work that I did in the Army was to protect soldiers that had more than twenty years of duty--twenty-five. And in six more months--before they are to be "rejuvenated," or whatever [the correct term is]-

-suddenly they put them in the ward because they “think” they have “psychological” problems. Okay? So if you kick them out six months before they reach--let’s say twenty-one or twenty-six years, it [costs the Army] less. And my colonel tells me that we are going to have a board to adjudicate these cases and [he tells me] to remember that the orders are finish them up. Unfortunately for him, every soldier or every officer that came, I had to do the physical, I had to go to the officer’s ward, and I got acquainted with them. And--in every instance--I find a *medical* problem, and that caused me a lot of trouble with my CO, but I saved the people.

VII. UNIVERSITY OF SOUTHERN CALIFORNIA (1957-present)

Chappelle: After your military service, you returned to USC as a clinical professor. What were your duties when you first returned?

Catz: Take care of the thyroid unit, more than anything else.

Chappelle: Were you teaching then too?

Catz: Sure. It was beautiful. It was beautiful because, if you read the letter of Dr. Nicoloff--at the bottom--saying how they were so interested--the interns and residents who had me there.

Chappelle: That [event you are describing] is twenty years in the future [from this point in your narrative].

Catz: Okay, but still, you realize--

Chappelle: Yes, we’ll get to it.

Catz: Okay.

Chappelle: In 1959 with Paul Starr, you published “Treatment of cancer of the thyroid after surgery with suppressive thyroid medication, I-131, and exogenous TSH.”

Catz: Yes. We stimulate with TSH as preparation for the radioactive iodine to be accepted by any thyroid remnant cell.

Chappelle: What had been the treatment before this?

Catz: Like I told you, subtotal thyroidectomy or partial thyroidectomy. That’s it.

Chappelle: And how did you develop your treatment protocol?

Catz: If you have cancer, you want no cell to remain there. How can you protect the patient otherwise? So, with Dr. Sturgeon, who was the old timer that supported

this--a beautiful guy--we convinced him that this should be done--he said, "Publish it." And we convinced Starr also about that.

Myxedema, shock and coma

Chappelle: What treatment protocol did you develop--around 1961 you wrote a paper about it--for myxedema, shock and coma?

Catz: Remember [that] everybody, the heads--that was 1960.

Chappelle: Nineteen-sixty?

Catz: Nineteen-sixty. We suddenly got emergencies: here is a patient coming in almost dead. What to do? All the reports that we found from Germany, from England, from France say that [in cases of] myxedema coma, there is nothing to do. We decided at that time--if they have thyroid, it's not working. The tablet would not work. [So we thought] why don't we use the fast-acting thyroid, T₃; put it through the catheter, inside the gastric juice or even rectally; use cortisone at the same time to prevent shock, and see if they survive. And they survived. [As a result, physicians] are doing it now [using this protocol today] all the time.

The person who called us liars--I still cannot remember the name--was the Chief of Endocrinology at the Post Graduate School in London with Dr. Selwyn Taylor, who was the main surgeon and dean of that school. Because Selwyn Taylor liked me, I made frequent visits--almost every year.

Chappelle: How did you know to try T₃?

Catz: They are dying! Try something that works immediately and see if they wake up. [It's that] simple, nothing more. You *have* to do something drastic. The patient comes to us almost dead--low blood pressure, everything. So you start something immediately. And Dr. Russell, who was my resident at that time, participated with me on this and was excellent.

A day in the life: working at USC and LA County Hospital

Chappelle: In 1959, you became Associate Clinical Professor of Medicine at USC, and during the sixties you were Chief of the Thyroid Clinic at Los Angeles County Hospital. What was a day or say a week like for you at that time?

Catz: The thyroid clinic was always on Wednesdays in the afternoon. But being in charge of the thyroid clinic means you have to make rounds every day at County Hospital. And the thyroid clinics at that time also were--in public health--concerned about the fact of radioactive iodine, if it causes cancer and all that. So we had one of our residents work on that project also. But in the thyroid clinic, you see, on average we saw twenty-five to thirty patients, one after another. And all the guys that are now--or were--specialists in thyroid were trained there. At

Permanente you have Dr. Fawell and other men--all over. It was good training because you considered the patient [as] a complete human being: you take the history; you don't treat tests until you have a good history. You use the test to see if it corresponds to your history. But the most important thing is the family history. Thyroid doesn't come from the sky. It starts at least four generations earlier. All Europe has it. All of China has it. Japan has it. Around the world!

Chappelle: When you take the family history, what are you looking for?

Catz: Where were you born? Where were your grandfather and grandmother born? Where was your mother born? What part of the continent? Because you have in Ireland--Ireland has pockets of areas that have thyroid, and it wasn't until--you were able to read my hypothyroid article, there [gestures to table]. On the last page you have item fifty-eight [that shows that] where they have pockets of thyroid and all of them have cancer of the breast. They don't respond to treatment after surgery for cancer of the breast unless you add thyroid. Things like that. So thyroid is very important for structuring health, and that is a beautiful thing. Also, one of my--I don't remember who it was--one of my students brought me an article published in Polish by Dr. Beer that [discussed the significance of] the short little finger and the short little toe. If you look at the short little finger and it doesn't reach the upper line, there is thyroid in the family. The left [indicates the] mother; the right is father. And the little toe is always crooked and small. Everybody laughed at that, okay? If you look at this now [today], it is true. And they published it--the Irish--saw that article--they published it, and they use it now as a sign for thyroid disease. But it took so many years, fifty years, for somebody to repeat this study. So the first thing I do now when a patient comes is [to say] "Show me your little finger. Let's see if it reaches the upper one--indentation." If it reaches [inaudible] automatically it is in the family.

Chappelle: What else do you look at when you first see a patient? What else do you do with them?

Catz: I take first the family history; then I examine the hands, occasionally the feet--if they have sandals, I can look at the feet, otherwise it is a big production. And I ask questions. How do you feel? Do you feel tired all the time? Do you feel colder all the time? How is your memory? How is your concentration? Do you take psychiatric drugs?

People that have depression will not respond to slow-acting T_4 , only to fast-acting T_3 that will open the brain barrier. Patients with ADD [attention deficit disorder]--the same thing will happen. If they take T_3 , then it opens the brain barrier for the antidepressant to work. But they still don't follow that, you see. This is why I am still in practice. I take a family history. Even if I work [only] two hours, that's all--since my surgeries and my infections and all that--I still enjoy medicine--

Chappelle: Now, when the patient comes to you, you do recommend some tests?

Catz: Oh yes. Everybody will get complete tests, which are the thyroid antibodies, the serum thyroglobulin, the free T₃, the free T₄, and the TSH. And I want an ultrasound of the thyroid gland. They have to do that before I see them.

Chappelle: You were raised, as you said earlier, to be very aware of the whole patient, and part of that [wide view includes the fact that] sometimes a patient may not have enough money to pay for treatment.

Catz: What do we do in a case like that? We try to connect them with the free clinic for follow up, or we--let's say that we get a patient that has Medicare. By receiving the form that says what tests to have, you already do the favor. They have to do the tests. They use the doctor's name, so when they come we have the evidence. We have the free clinic at Cedars-Sinai that we had before. Previously, it was at Mount Sinai in Boyle Heights. And it works--*if* the doctor is interested. The main thing is to have the doctor be a doctor.

Graves' ophthalmopathy

Chappelle: You mentioned Graves' ophthalmopathy already, but I want to ask you more about it. In the mid-1960s, you published on total thyroidectomy followed by radioactive iodine therapy, and I want to know what led you to take that approach?

Catz: It is very simple. We started thinking: Here we do the surgery--that doesn't help completely. We do the treatment with the tablets--that cures the hyperthyroidism, but something is missing there. At that time, there came out a laboratory test called long-acting thyroid stimulator (LATS)--that apparently becomes active when people have ophthalmopathy. So we used that as a guide. Long-acting--LATS--now it is called TSI (thyroid stimulating immunoglobulin) 1 or 2 in the lab. And based on that in a few patients, we see that LATS was increased. So we decided that there must be thyroid tissue there. There must be. So we then ordered the scan--the ultrasound and the scan. And by the way, every new patient has to have an ultrasound. When I say scan, it means ultrasound. I don't want radioactive iodine uptake and scan, no. I want an ultrasound--no radiation--that shows whatever remnant thyroid tissue there is there. And that is the guide. And we noticed there is always something still there. So we decided, let's try the radioactive iodine. And Franz Bauer, who was one of my residents and later went to UCLA as chief, decided to do the studies. So we did it together, and we came out with the first work. Then we found out--from England and the basic research [conducted there]--how LATS)-- was so important.

Private practice

Chappelle: You had a private practice all along?

Catz: No, no, no. I started only on Saturday for an hour. They gave me space--

Chappelle: Now are you talking 1950s or 1970s?

Catz: Nineteen sixty-five, sixty-six, something like that.

Chappelle: Part time--

Catz: Saturdays, two hours.

VIII. THE BORIS CATZ LECTURESHIP

Chappelle: In 1985 the Boris Catz Lectureship and Visiting Professorship was established at Cedars-Sinai. How did that come about?

Catz: It's very interesting. A patient with ALS (amyotrophic lateral sclerosis)--that had the Levien Foundation in New York--was sent to me, so that I could check him for thyroid. A week before that happened, in the *Journal of Medical Sciences*--it's a [inaudible] journal--appeared a research article [demonstrating] that the muscle fiber needs fast-acting thyroid T₃ to work or vice versa. In the laboratory review, [it was found that] T₃ works better when it is injected into the fiber. Because [the patient sent to me had] ALS, I asked Dr. Braunstein and Dr. Melmed at Cedars (Cedars-Sinai Medical Center) to get interested in this. We kept him alive for more than four or five years with growth hormone and T₃. He was a very rich man; in Long Island at the Jewish Hospital, he built a section there. About nine or ten years ago, his wife calls me up. They hospitalized him. He wasn't able to breathe well. They tried to intubate him, but the intern wasn't able to [successfully perform the procedure, and the man died]. But prior to that, he established laboratories for Dr. Braunstein and Dr. Melmed to continue doing research regarding this [work]. And because he considered that I kept him alive for so long, he gave the first, I think, \$10,000 or something like that, to start the Boris Catz Lectureship. He had a stable of horses, and he ran them at Belmont Park and places like that. And one horse he named Boris the Cat.

Chappelle: [Laughs]

Catz: Okay? Which was very interesting.

IX. CLINICAL PROFESSOR OF MEDICINE, EMERITUS

Chappelle: Did you retire at that time?

Catz: I haven't retired yet. I was working fulltime until three years ago when suddenly I had the famous staph that killed people. It went into my neck and the back of the lung. I was hospitalized. After they did all the studies, they were thinking that it was something else. I had surgery--cleaning me up. In the meantime, I fell and broke my shoulder, and I didn't want surgery again. And then [I was] in the hospital for three weeks. Anyone who can be in the hospital for three weeks and have an IV for that staph is a hero, because you cannot do anything. And my urologist decided that it was time to take out the prostate as well. So they took out the prostate. [It was] benign, but was the biggest prostate I'd ever seen, 296 grams. It's supposed to be twenty-five grams. Okay? So, I'm in the records. And I had trouble walking; the staph was still present in my lower legs. I had the nurses come in here every day to clean me and dress me, and all that. I fell several times. So I decided--this was about two years ago, a year and a half ago--first, I will not drive. After that happened, which was three years ago, I decided I don't drive anymore--I don't want to cause accidents if I fall. I gave back the car. I was still able to--if somebody was taking me to the office. And I started feeling tired, and I started feeling that I was criticizing too many people at the same time, which is the [natural] reaction when you feel tired and sick. And every week I had to go twice a week to cure my legs at Cedars. They [the drivers] had to take me, and take me back, and all of that. And I decided that the physician that shared part of my office should take care of all the people that have insurance, and I will only see patients for two hours. I don't accept insurance; I see maximum of four patients--to keep me occupied. Patients that don't have money, I see free. I don't care. I guide them. And the interesting thing, when I see a patient--this is since I started--the first visit is the history, and then I make a diagnosis. I bring them back in two weeks--free of charge--to see if they follow or they didn't follow what I say.

X. THE PAUL STARR LECTURESHIP

Chappelle: Why did you establish the Paul Starr Lectureship in 1985?

Catz: I felt obliged to him. And what better [tribute than] to establish [the lectureship] after he died. No one else thought of anything. Now remember, he was president of the Endocrine Society in the fifties or sixties. He recommended me for membership. The Paul Starr Lectureship is a clinical lectureship. That means I wanted somebody--a clinician--to guide doctors with the modern technology and the interpretation of tests and help the patient. You have seen the list [of lecturers] we have had, almost everybody that's important was there. Two of your presidents of the Endocrine Society were there. All that. It's one of the affairs that in spite [of the fact] that I am retired from Cedars--I'm emeritus there, also--they still honor it. It is possible because Dr. Braunstein and Dr. Melmed are still chiefs there.

XI. AMERICAN THYROID ASSOCIATION

Chappelle: The American Thyroid Association presented you with its Distinguished Service Award in 2001.

Catz: And then they gave me one also for--I don't know what--two years ago when they were in Arizona.

Chappelle: And the Association said in doing so that in addition to noting your pioneering work in the treatment of myxedema coma and exophthalmos, the American Thyroid Association thanks you for being a generous donor. Would you comment on your relationship with the American Thyroid Association over the years?

Catz: It's very simple. I became a member when there were only surgeons and clinicians as part of the membership. Later on, the so-called researchers came in--[those thyroid experts] that know very little about patients, but know very much about tests. And I find it necessary that there should be a yearly clinical [presentation, The Paul Starr Lectureship]--how can we say, one hour or so--to show that clinicians still count, and they know how to interpret things, and they know how to treat patients. And more than honor the guy that made me. Even if, in the last few years, we disagreed and everything, but that's normal. But we have now so, so many good people doing the lectureship that I was very happy.

XII. THE ENDOCRINE SOCIETY

Chappelle: What has been the nature of your relationship with the Endocrine Society over the years?

Catz: Very little. I go there, but when my wife was very sick, I was only able to be there two days, and I couldn't stay longer.

And now they are superb organization.

Chappelle: You met Clark Sawin.

Catz: Who?

Chappelle: Clark Sawin.

Catz: Oh, yes. Oh, yes. He was a newcomer to our American Thyroid Association. Complete newcomer. We are the old people--the old guys. It was beautiful that he became the historian. The history lecture was so important. People should know what started and how it started. He was a decent fellow. Never insulted anybody. Always listening. Very good.

Chappelle: And do you intend to continue treating patients?

Catz: As long as my brain works, yes. Once I start feeling that I don't remember things, I stop it. I stop it. It would be a disservice, really.

Chappelle: Okay. Thank you.

Catz: Thank you for coming. It's a pleasure.

[End of Interview]

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Interview History—Boris Catz, MD

Dr. Catz was interviewed by Michael Chappelle on March 22, 2010, at his home in Beverly Hills, California. The interview lasted ninety-eight minutes and was edited down to seventy-one minutes. It is the edited version that appears in this transcript. The transcript was audit-edited by Mr. Chappelle and reviewed by Dr. Catz prior to its accession by the Oral History of Endocrinology Collection. The videotape and transcript are in the public domain, by agreement with the oral author. *The original recording, consisting of three (3) 45-minute mini DV cam tapes, is in the Library holdings and is available under the regulations governing the use of permanent noncurrent records.* Records relating to the interview are located in the offices of the Clark Sawin Library's Oral History of Endocrinology Project.