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ARMED FORCES INSTITUTE OF PATHOLOGY
ORAL HISTORY PROGRAM

INTERVIEWER: Charles Stuart Kennedy

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Q: Dr. Zimmerman, could you tell me, in the first place, when and where you were born, and then something about your childhood and early education, so we can sort of get to know you a bit.

DR. ZIMMERMAN: I was born in Rochester, New York, on July 19, 1914 (I guess I helped start World War I). Grew up there and went to grammar and high school and college. Graduated from the University of Rochester with a degree in chemistry. And, after a hiatus of two years, started medical school at Stanford, on the West Coast.

Q: Had there been any medical cast to your family or friends or anything?

DR. ZIMMERMAN: Only a great admiration for physicians on the part of my parents. There certainly were no medical people in my family, to my knowledge. I guess my own interest did not turn actively in that direction until about the time I started college.

Q: Which was when?

DR. ZIMMERMAN: I started college in 1932, right in the middle of the Depression. I remember that period very well. I remember thinking that nobody ever got a job, that people who got jobs only got jobs because they knew somebody. I had tried to get work, and I did odd jobs, but I was never able to get a job until after I finished college, when I worked as a hospital orderly for a year.

Q: You graduated when?

DR. ZIMMERMAN: Nineteen thirty-six.

Q: With a degree in chemistry. Was this with a view towards...

DR. ZIMMERMAN: No, it was with a view toward going into medicine. For the record, I need to point out that, although my undergraduate record was good, getting into medical school was not easy at that time. There were varying degrees of restriction, of prejudice against various groups, and it was not easy for me to get into medical school, which accounts for the fact that I went across-country, where I was accepted at Stanford.

Q: We're talking about the Jewish quota at the University of Rochester?

DR. ZIMMERMAN: Yes, there was a specific quota.

Q: Good God.

DR. ZIMMERMAN: It was my understanding, although I couldn't verify it, that they accepted one Jewish student a year at the medical school.

Q: Was this sort of a New York-inspired thing?

DR. ZIMMERMAN: It was national, but it was more marked on the East Coast than on the West Coast, I would gather; at least my own experience would verify that.

Q: It's incredible to go back to that.

DR. ZIMMERMAN: To look at that. I think World War II and the aftermath led to a striking change in that regard, at least for that group.

Q: In a previous interview I did with one of the men here, who was black, he told me that right in the middle of World War II, they wouldn't give him a commission because they said they didn't want black doctors.

DR. ZIMMERMAN: Oh, I'm sure. I'm not surprised.

Q: We've come a ways.

DR. ZIMMERMAN: We've come a long way.

Q: Then you went to Stanford. What was Stanford like in those days, as far as medicine?

DR. ZIMMERMAN: It was a wonderful experience. The university itself was, as it is now, a great university, and the medical school was considered one of the better ones in the country. And it was, indeed, a great experience; it was a wonderful four years.

Q: As you went through medical school, did any particular subject sort of grab your attention?

DR. ZIMMERMAN: Yes, I've always been interested in things related to chemistry. And I've always had a feel that I would like to be in academic life, so I always looked forward to being academic. I didn't know how it would come about, but I just thought I would like that. In medical school, it was not long before I decided it was internal medicine that I wanted to do. My interest began to move in the direction of endocrinology, but my interest in liver disease came up during World War II. I can touch

on that now.

Q: Why don't we talk about it. In the first place, when did you graduate?

DR. ZIMMERMAN: I finished medical school in 1942.

Q: We were just really getting into the war then.

DR. ZIMMERMAN: Just getting into the war. As a matter of whimsical comment, when the draft was started, in, I think, the fall of 1941...

Q: Maybe it even started in 1940, because, remember, they renewed the draft after one year, in October, or something like that, of '41.

DR. ZIMMERMAN: Let's see, I finished medical school in '42, starting the senior year in '41. It was 1940. I had just begun my junior year, and I was on what was called a clerkship on the wards at the San Francisco City Hospital when the draft numbers were pulled. And mine was the first number pulled.

Q: Was it 158?

DR. ZIMMERMAN: Exactly 158. How did you happen to remember that?

Q: Because that was the number...

DR. ZIMMERMAN: It was number 158. Now when I say mine was the first number pulled, I was not the only bearer of that number.

Q: Oh, no, but everybody had a number, and that was...

DR. ZIMMERMAN: There were 26 people in the San Francisco area with that number.

I had a room-and-board job at a hospital in San Francisco, St. Mary's Hospital, and my roommate and I went back for a bite of lunch (it was close enough). Walking down the hall, somebody stopped me and said, "Congratulations, Zimmy." (They were always teasing us because we were the two medical students there.)

"For what?"

He said, "Your draft number was pulled."

I said, "Yeah, big joke."

When I got back to the county hospital, there was a group of reporters waiting to talk to me. So it wasn't a joke.

And for about three weeks, nobody knew what was going to happen. For about three weeks, it was uncertain whether I would have to be pulled out of medical school.

And then they worked out a pattern, similar to the World War I pattern, in which I was able to get a reserve commission and complete medical school. So I got my physical and was commissioned while a student, and then completed medical school, and completed my internship, and then went into the Army.

Q: So you went into the Army when, in 1942?

DR. ZIMMERMAN: I went into the Army in '43, because I finished my internship. I interned from '42 to '43.

Q: Where did you intern?

DR. ZIMMERMAN: I was interning at Stanford University Hospital. And then, late in the 1942-43 winter, my father developed a bronchogenic carcinoma, and I thought I'd like to get back to Rochester. So I was able to complete the internship at Strong Memorial Hospital, at the University of Rochester. I spent three months there, and then I went into the Army. So it was two combined: Stanford University and the University of Rochester internships.

Q: Will you talk about your experiences in the Army, what you did and where you were?

DR. ZIMMERMAN: I was very lucky. I was in for three years, and for somebody fresh out of an internship to be able to say that I did medicine for 33 of the 36 months, it was a striking bit of luck.

Our very first assignment was to go to Carlisle Barracks, Pennsylvania, for the equivalent of basic training. And that was really quite a good six or eight weeks, in which you had lots of exercise and marching. It was during the summer. I was really more fit then than I've ever been since, I guess.

And then I was sent to Billings Hospital, Fort Harrison, Indiana. I wasn't assigned there; I was put into a replacement pool, waiting to be assigned. And after three or four days of sitting around, of nothing happening except watching people play poker or playing myself, in the barracks, I went over to the hospital and asked could I do something. They assigned me to the emergency room, and then I began to work on the wards, and I stayed in that capacity for a year without any other assignment. And I got to do medicine: ran a malaria ward for a while, read electrocardiograms, and just enjoyed myself. My wife was with me, and our first son was born there.

And then I was sent to the School of Tropical Medicine at Walter Reed. I was here for eight weeks, and it was a wonderful course. I had the great privilege of seeing both Dr. Strong and Dr. Stitt, who are two great figures in the history of the military and of tropical medicine.

Q: Of course, by that time the United States was deep into the Pacific.

DR. ZIMMERMAN: Deep.

Q: We'd already been in Africa. We had people in the Middle East, India, all over the place. What was the state, as you saw it, of our knowledge of tropical diseases? Of course, we had been the protectors, occupiers, whatever you call it, of the Philippines.

DR. ZIMMERMAN: And we'd been in Panama. Well, I lacked perspective. I was almost awed by the quality of the teaching in the course that I took. It was wonderful. And they had accumulated not only experts in the area, but experts in teaching the material. So it looked as though they had lots of knowledge of tropical medicine. Now I am sure it did not compare with the kind of knowledge-in-depth of, perhaps, the British, who had a century of experience in India.

Q: Colonial empire all over the place.

DR. ZIMMERMAN: Colonial empire all over. But as far as I could tell, there was lots of depth. I think the single best textbook on tropical medicine was the very colorful, two-volume set by Stitt and Strong (Admiral Stitt and Colonel Strong).

I remember the very dramatic picture of when we got the degree. After eight weeks there, they had a graduation ceremony, and Dr. Strong, who was mid-seventies, helped Dr. Stitt, who was a few years older, up onto the stage. And it was a wonderful sight; for me, a very heart-warming sight.

Anyway, it was a very good course, and it was nice to be in Washington, which I had really never gotten a good look at before. And we lived here for eight weeks.

Q: After you finished the tropical-medicine course, then what did you do? This was about 1944?

DR. ZIMMERMAN: It was '44. As a matter of fact, I was still at Fort Harrison, before the tropical-medicine course, when D-Day occurred. I remember driving to the hospital to work, and hearing on the radio that we had invaded the Continent, and being thrilled and excited and worried as to how it was going to go.

Anyway, to come back to answer your question, it was in August of 1944 that I finished the course here at Walter Reed and went back to my post at Fort Harrison, expecting that I would be sent to the Pacific. And it was not long after that, that I received notice to report to Camp Barkley, Texas, to join a newly formed numbered general hospital, the 239th General, that was going to be sent overseas. And I went there. My wife and my son went out to San Francisco to stay with her mother, thinking I would see them on the way out of the country. Instead of which, with all my training in tropical medicine, we were sent to Europe.

Q: Which was a hotbed of tropical diseases.

DR. ZIMMERMAN: A hotbed of tropical diseases, exactly. And that was a very good experience there. Our hospital crossed on the *Ile de France*, but three of us were separated, as acting transport surgeons, and put on Liberty ships. So I crossed in a convoy, in a Liberty ship, across the ocean, and I remember every time I heard a sound, I was sure it was a depth charge. I guess every convoy lost a couple of ships at that time, but if our convoy lost any, I didn't see it happen. It took 17 days to cross the Atlantic in that convoy. We landed in Cherbourg, but my hospital was in England, so we had to try to find the hospital. Another fellow and I finally did, and after a month's staging, we went back to the Continent. And after a couple of weeks in tents, we were sent to a town called Châlons-sur-Marne, which was during the Battle of the Bulge.

Q: Yes, the Marne being up towards the north.

DR. ZIMMERMAN: Our hospital was set up near the Bulge. And I was quite thrilled at the experience of going to town where there was nothing, and within three days having everything to set a hospital up. Everything arrived, and by that time, the Army seemed to know what it was doing, and it all came together with great precision. We had everything that one needed: a laboratory, an X-ray, beds, nursing material, and all that was needed. It was a great operation, and we had a good hospital.

But this brings me to an item that I've always liked to recall. I'd started with an interest in endocrinology, but within a week of the time our hospital opened, I had a ward with 100 beds full of patients with trench foot, a very dull but painful entity. On rounds every morning, I saw the patients were supportive, and there wasn't a lot else. On the third or fourth or fifth night of that, all of us who shared a big room were talking, and one of the fellows said, "I had a patient with catarrhal jaundice today. Anybody want him?"

I said, "Yeah, I'll take him."

Catarrhal jaundice is what they used to call hepatitis in those days. And I said to the fellow who ran the admitting room, "If you get any other cases, send them to my ward." Well, the next day, I became ill myself and developed a viral pneumonia and was in the hospital for a few days. And while that happened, new admissions for hepatitis kept coming in. So I recognized that there might be something happening, and got some forms prepared and got one of the lab people to work with me, and we set up a study. And during the next six weeks, 330 patients with hepatitis were admitted to my ward. So we did a study and got to write a paper on it and got it published. And my interest in liver disease began.

Q: What was the source of this?

DR. ZIMMERMAN: I think we knew where the source was; I was able to get a history. Out of our patients, 88 percent, three to six weeks earlier, had developed a gastroenteritis. I went over to an orthopedic ward (people who did not have hepatitis), and only about a third of them had had that experience. I deduced (and I think it's reasonable) that these patients who had the gastroenteritis had been exposed to

contaminated water or food, three to six weeks earlier, and had developed a bacterial gastroenteritis, but at the same time had ingested the virus of viral hepatitis, and it happened.

Now how did that come about? You could trace that back to the middle of the Battle of the Bulge.

Q: Which was December 1944, in Belgium and Luxembourg.

DR. ZIMMERMAN: These patients came to me in January of '45. The Bulge, by the way, was not over yet, but the worst of it was over.

Anyway, at that time, they were picking up snow from the ground and melting it to make their coffee, and probably not being effective in destroying the virus responsible. And so I think that's what happened; it makes perfectly good sense and it's probably true.

So that's the little vignette that I look back on...

Q: Then you continued as a...

DR. ZIMMERMAN: We stayed in Châlons-sur-Marne until about a month after VE Day, which was May 9, and we left there in early June and moved to a redeployment camp in France, Camp Philadelphia, I think it was called, and were being readied to go to the Pacific. We had all of our material packed, and it was at the Mediterranean waiting for us to join it, waiting for a port call. And while waiting, the bomb was dropped.

Q: You're talking about the atomic bomb dropped on Hiroshima, Japan.

DR. ZIMMERMAN: The atomic bomb was dropped on August 6, and clearly everything changed. And instead of being sent to the Pacific, our hospital was sent to Paris.

Q: Shucks.

DR. ZIMMERMAN: The last hospital in Paris. I think the 1st General was sent home. Because we were more recently in the theater, we were sent to replace them. We were in two hospitals: one was a girls' school in Vitré, where we set our hospital up; and then it was only a month and half later that we moved to an old neurological hospital in Villejuifs, ironically. Stayed there until I was returned to the States in December of 1945, and spent from then until late May of '46 at Lovell General Hospital in Massachusetts, and then was discharged.

Q: During the three years that you were dealing with the Army, and really also from your medical-school time, had you had any relationship with or knowledge of what was then the Army Medical Museum and its referral service?

DR. ZIMMERMAN: I don't think I'd even heard of it then. I don't think I'd even heard of it. I knew very little of the Washington scene. All I'd seen was during our eight weeks here.

Q: At the tropical-diseases course.

DR. ZIMMERMAN: I don't think I became aware of the Museum until my residency, which I took at what was then Gallenger Hospital, is now called D.C. General Hospital, in Washington.

Q: When did this start?

DR. ZIMMERMAN: It started in July of '46. I was scheduled to be discharged after July, so I had not applied for a residency, and suddenly learned, in about April of '46, that I, with my terminal leave, would be out before July 1. I began to scurry around for residencies, and so I noticed in the annals of *Internal Medicine* that there might be an opening at Gallenger on the George Washington University service. And, by dint of hurrying, I got my application in and got the appointment and came here and started. It was very hard to get a residency then because of all the people being discharged. A very good crop of candidates, because these were all people coming back with experience in the war, more maturity, more awareness of responsibility. The crop of residents had a lot of attention at that time.

Q: I'm sure it did. So you went to Gallenger Hospital.

DR. ZIMMERMAN: As a resident on the George Washington service rank.

Q: Then did you have any beginning connection with the Army Medical Museum?

DR. ZIMMERMAN: Yes, well, what happened is that liver biopsy (that is, the procedure of getting a small bit of tissue from the liver by inserting a needle into the liver) was in its infancy. And with my interest in liver disease, I became intrigued by it and decided to learn how to do it. And learning how to do it meant doing it yourself, essentially, because there was no large experience by anybody.

The first 20 biopsies that I did were done under the visual supervision of a surgeon who had a peritoneoscope that he had used to examine the peritoneum in people, and he would look with the peritoneoscope from below while I would put a needle into the liver above, so that I could be sure it was going smoothly and carefully without any harm. The first 20 biopsies went very well, and then, as articles began to appear, it was clear that one could do the biopsy, if done carefully, with respectable safety.

But when I submitted the biopsies for processing in the hospital laboratory, instead of giving me decent specimens to look at, they made chopped liver out of them,

they just were so badly handled.

I don't remember how I happened to take a specimen to Dr. Hans Smetana at the AFIP, who at that time was head of the hepatic-disease section, but a wonderful relationship evolved from that. I used to take the specimens, after I would obtain them, to him for processing, and he would review each one with me. We would study them together, and he would give me a copy for my files.

Q: Could you talk a little about Hans Smetana?

DR. ZIMMERMAN: He was a wonderful human being and one of the world's great pathologists, in my mind. He came as a political refugee. He did not come because of religious discrimination against him; he was not Jewish. He just came out of principle.

Q: From Czechoslovakia.

DR. ZIMMERMAN: From Czechoslovakia. As you may know, his granduncle was the composer of *The Moldau*; this is the same Smetana family. He himself was the epitome of a cultured, thoughtful scholar, and he was a fine human being. He was a fairly tall man. I guess he had some dueling scars on his cheeks; it looked like those to me; I never asked him. But he did not act like the kind of person who would ordinarily have dueling scars.

Q: What was the atmosphere of the Army Medical Museum?

DR. ZIMMERMAN: The AFIP at that time was on Independence Avenue, in that old red-brick building. The Museum was there also, and so was the Surgeon General's Library, the forebearer of the National Library of Medicine. And that, to me, was a wonderful old building. First of all, the AFIP, to my knowledge, was all in the basement; at least Dr. Smetana's office was in the basement. And I remember my first step was to go in there and go down to see him and sit with him and look biopsies with him. Then I would go upstairs to the library, which was a wonderful experience, also. It wasn't like this library we have now, but it was still a great repository of books and useful help. I did not spend a lot of time at the Museum. I knew of the Museum, but I was busy either looking at biopsies or at the library.

Q: Was there a problem with your own hospital, Gallenger Hospital, you know, here is a young doctor, hopping over to the Medical Museum?

DR. ZIMMERMAN: Oh, I'm sure there would have been had they been as clearly aware of it as they might have been. You might say that I bootlegged the specimens out for proper handling. Performing a biopsy with proper care (and I really devoted enormous care to it), it could be kept reasonably safe. There was always a concern with it, and it took great attention. But to perform that procedure and not have the specimen handled

properly would really have been unconscionable. And it was with that in mind that we did that. I am sure they didn't like it, but it was a fairly loosely run place, and I'm sure that they didn't pay much attention to it. The one who would have minded most would be the pathologist, on whom it would be something of a judgment.

Q: Had you found that, throughout the United States or at least certainly in the Washington area, the Army Medical Museum was considered the preeminent place to bring pathological specimens, or was it just because it was handy?

DR. ZIMMERMAN: As time wore on, I began to realize how preeminent this place was, and is. At that time, I was simply awed by the fact of its presence, and by the wonderful reception that I had, and simply by the excellence that I saw. I don't think I had the perspective.

Q: It was just a neighborhood pathology place to go to.

DR. ZIMMERMAN: No, I knew I was in a great place, but I was not aware of how well known that was. I think I had a sense of it. I think I was awed by the fact that I could take that ten-minute ride from Gallenger over to it and get the reception that I did, and the help that I did. It was not a reception; he tutored me, as it were, and he was just a wonderful person.

Q: How did your career develop from this point?

DR. ZIMMERMAN: I finished my residency in 1948 as chief resident of the George Washington service. And since there were no full-time jobs in the area, no academic positions, and I never thought we would leave Washington, ever, I went into practice for a year--my only year in practice--from '48 to 1949. And, to my surprise, did a modest amount of consultation, because there was nobody else focusing on liver disease. So I was doing internal medicine, with an interest in liver disease.

And then, at the end of that year, I was offered an appointment at the Washington Veterans' Hospital as one of the two assistant chiefs of the medical service.

Q: Where did the Veterans' Hospital fit into the medical framework?

DR. ZIMMERMAN: During the last six months of World War II (maybe before that, but certainly the issue came into focus then), plans were laid for the postwar Veterans' Administration--brilliant plans, which consisted of developing a veteran's program to be closely attached to the medical schools of the country, where VA staff would be medical-school faculty, and vice versa.

I remembered hearing about it between assignments, so to speak. After our hospital was closed in Châlons-sur-Marne and we moved to Camp Philadelphia, I was one of several people detached to be assigned to a large camp that had a lot of prisoners

of war. I used to take sick-call every day on those POWs, and be available for medical problems. During that time, I had a lot of time on my hands, and I remember receiving a copy of the *JMA* my wife had forwarded to me, and reading about the new plans for the VA, and learning that the chief of the medical service, for example, would be a professor at the medical school. And I thought, "Isn't that a wonderful idea." As I said earlier, I had always thought I'd like to be in academic medicine. I said, "That's kind of where I'd like to be." And I didn't think about it a lot more after that, until this offer came up in 1949. So it really fit a passing glance I'd given the phenomenon several years earlier.

Q: Where did you go then?

DR. ZIMMERMAN: I was there about a year and a half, and they opened a new VA hospital in Omaha. And I remember a call from Omaha from the VA central office official. He said, "I'm sitting here with a dean on either side of me, from the University of Nebraska and Creighton University, and they'd love to have you come here as chief of the medical service."

And I said, "Oh, my goodness, I better think about it and talk to my wife." We were not planning to move to anyplace from Washington, and certainly not to the middle of the country, away from the East Coast. I went home and we talked about it, and then decided that it might be an interesting thing to do. And we accepted and moved out there in February 1951.

I was there for a couple of years, when, in 1953, the same phenomenon happened in Chicago. My former chief from Gallenger, Dr. Harry Dowling, was at the University of Illinois as head of the department of medicine, and he wrote or called and asked me would I be interested in coming there as chief of the medical service at the Chicago Westside VA Hospital. And so we moved to Chicago.

Q: In both Omaha and Chicago, did you have any sort of relationship with what by that time would have been the Armed Forces Institute of Pathology?

DR. ZIMMERMAN: No, I did not. I was away from Washington for 14 years, from 1951 on, and I used to think, if I ever have a sabbatical, I'd like to spend it at the AFIP. But I did not have a sabbatical. Oh, I was in touch with some of the people here--Dr. Smetana, once in a while; and he was followed by Dr. Criner, and then by Dr. Dubin. I had known the people because of our mutual interest, but I had no real connection with it.

We can fast-forward to when I came back to Chicago in 1965, if you'd like to.

Q: All right.

DR. ZIMMERMAN: I got back here in August of '65, and within a couple of weeks, paid a visit to the AFIP to see who was in the Hepatic Department. Dr. Kemal Ishak had been there about a year as acting chief (or maybe he already was chief of hepatic disease). We had met the year before, it turned out, at a meeting; I had not realized it. And he

welcomed my visit. I said I'd like to start coming regularly, and so we arranged that I would come once a week. That was in 1965, and this is now 1993, and it has continued.

I had two fellows who were studying liver disease especially with me, one was Dr. Leonard Seif, and the other was Dr. Udom Herinosuta. Dr. Seif is now, I might say parenthetically, one of the world's experts on hepatitis. Dr. Herinosuta went back to Thailand after spending some years with me. But, anyway, I arranged for them to spend separate time at the AFIP with Dr. Ishak. And we had a weekly meeting that began then, the three of us and Dr. Ishak and his associate, Dr. Ravin. Within a year or two, I've forgotten when we started, we began our weekly meetings.

In '68, I was invited up to Boston to be chief of the medical service at the Boston VA, and I spent several years there. But I arranged to have it funded for me to come back to the AFIP once a month for a half-day meeting with Dr. Ishak and his people, and we looked at cases of special note. So I did that regularly all the time I was in Boston.

Q: Just sort of on the medical side, had there been major progress in the problems of liver disease? You started really in the war years.

DR. ZIMMERMAN: Early days. The most dramatic progress, earthshaking progress, has been in viral hepatitis. During World War II, it became apparent that there were two kinds of hepatitis: infectious hepatitis, that was essentially fecal/orally transmitted, like typhoid, like polio, a sanitation problem; and then there was what they were calling serum hepatitis, or post-transfusion hepatitis, that was transmitted by blood or by contaminated needle or by contaminated vaccine, like the Yellow Fever vaccine. It was inferred that these were viral illnesses, but not proved, because a virus could never be identified in any way. And that's where it stood for the next 20 years--like Rip Van Winkle, it just slept.

And then, in 1963, Dr. Barry Bloomberg, who was studying blood proteins, with an interest in genetics and an interest in proteins, kind of backed into the discovery of what was called the Australia antigen. In looking at the proteins in Australia, one of the blood specimens of an Australian aborigine turned out to have a curious protein.

To make that aspect of a long story short, after a year or two, it turned out that this protein was the coat of the virus of one of the forms of hepatitis, what we now call Hepatitis B. It was called at first the Australia antigen, and later came to be called the code, and it's now called HBSAG, which stands for Hepatitis B Surface Antigen; it's the coat of the virus.

Once that was obtained, a serological tool for identifying hepatitis became available. And then some aspects of the epidemiology of Hepatitis B that had been not at all suspected became clear.

For example, Hepatitis B is commonly transmitted sexually. Nobody would have guessed that. That it was transmitted by a needle or by blood, but not by that.

Secondly, it was learned then that Hepatitis B can be transmitted from mother to newborn infant. And that accounts for most of the hepatitis in Africa and Asia and other parts of the world, where Hepatitis B is of very high incidence.

Several years later, once this tool was in hand, the virus in Hepatitis A, infectious

hepatitis, was identified. Hepatitis A serologic tests became available.

And then it became clear that Hepatitis A and B did not account for all the hepatitis. There was a third kind, that they called Hepatitis Non-A, Non-B.

For a decade and a half, that awkward name was all we had for it, until, in 1989, as a result of an absolute tour de force of molecular biology, Hepatitis C was identified. And we now have Hepatitis C.

And then, in 1977, kind of interposed, an Italian investigator named Rosetto identified Hepatitis D, or Delta Hepatitis, which is a fascinating agent. It's a virus that's very similar to primitive plant viruses, that can't do any damage by itself, it can only survive and produce injury with the help of Hepatitis B. In effect, it hijacks Hepatitis B. It will live within the coat of Hepatitis B.

Q: Did the AFIP play any role in any of this?

DR. ZIMMERMAN: The AFIP's role has been severalfold. I would say the most important role has been in the studies on the character of the liver injury from Hepatitis A or B. Dr. Smetana, actually, was one of the early people to study another form of hepatitis, called Hepatitis E.

Q: Good heavens.

DR. ZIMMERMAN: It wasn't known as that, but in 1955 there was a major epidemic of hepatitis in New Delhi, and Dr. Smetana got to study some of those livers and reported them with a very thoughtful report, and now, four decades later, deduction suggests that that hepatitis is a form which is called E. Hepatitis E is seen not in the United States at all, but around the world, largely in the tropics. Very important in India, and so he probably studied it at that time. But those were sporadic. I would say, now, the role of the AFIP and the Hepatic Department is very important. Drs. Ishak and Goodman have taken part in half a dozen or more national studies on Hepatitis C and the results of treatment with interferon. And they're the ones who keep being asked to look at the liver specimens that reflect what's going on there.

Q: When were you in Boston?

DR. ZIMMERMAN: From '68 to '71, and then I came back in '71. And from 1971 we've had an unbroken... In fact, it's been unbroken since '65, except that the intervals between meetings when I was in Boston were a month long. Then they dropped to weekly. I should say that our weekly conference, which has been going unstoppped now since '71, had become a citywide conference. In fact, it's a national conference.

Q: Would you describe what you mean by this?

DR. ZIMMERMAN: After 1971, when I came back, instead of meeting on Thursday

mornings, as we used to, it was changed to Thursday afternoon, from 3:00 to 4:30 or 5:00. Four or five of us would meet, the fellows working with me, and the people here. Then word began to creep out, and more people began to come. And then we had the curious pattern over many years of people who had spent a couple of years in Washington at RARE (you know what RARE is, Walter Reed Research Institute) or at the NIH or at Walter Reed, who would attend these conferences, and they'd go to other parts of the country, for the rest of their career, and spread the word. This became, nationally, a very well-known conference, and people from around the country would stop by for a session.

Q: Could you explain what happens at the session?

DR. ZIMMERMAN: Now, we sit around a 12-headed microscope. At that time, we had individual scopes. Dr. Ishak or Goodman or Ravin or Miracata will have selected cases that warrant discussion either because they are very instructive or because they're puzzling and call for discussion. We will look at the slide without a history, without knowing anything about the patient, and we will struggle with what the probable diagnosis is, and argue about it. And when we finish that phase, we then get the history and what's happening to the patient clinically, and we correlate it. So each biopsy we look at, or autopsy section, as it may be, turns out to be a learning session for all of us. And this is what it consists of.

Q: You mainly were working in the Veterans' Administration?

DR. ZIMMERMAN: I was working in the Veteran's Administration during most of that time. During my time in Chicago, I was out for a few years. In 1957, I was invited to become professor and chairman at Chicago Medical School. So I left full-time VA work and went over to the medical school, but I still continued coming to the VA twice a week and never stopped my involvement with the VA. That was until '65, when I left that and came back to Washington and the VA full-time.

Q: Was there an official relationship during any of this time between the Armed Forces Institute of Pathology and the Veterans' Administration? Because both would be connected with service personnel.

DR. ZIMMERMAN: Yes, and no. Yes, in that several appointments by people who are here full-time are considered VA appointments. For example, in the Hepatic Department, I believe Drs. Goodman and Ravin are really VA appointments assigned here. So they're here as AFIP employees, but on the payroll, if you will, of the Veterans' Administration. And the Veterans' Administration handles their personnel papers and so forth. So that's one aspect of the relationship you were asking about. There is that.

On the other hand, the relationship that I've had with Dr. Ishak has been our mutual interest and cooperation and efforts to continue a program that continued during the years after I left. I retired from the VA formerly in 1980, and went over to George

Washington University to run the Gastroenterology Department for a few years. Our relationship continued in exactly the same way. So that did not depend on the VA relationship.

I think the advantage of the VA rubric, if you will, the VA title, was that having fellows rotate through here for periods of study was easier to arrange because they were also government.

So, yes, there's lots of common interest between the VA and the AFIP. Our relationship, I think, has derived some advantage from that, but has not been based on that. It has been based on the fact that together we have been able to develop a very warm and rewarding professional relationship.

Q: The AFIP has gone through a whole series of directors and administrations. Did you ever have any feeling, coming to this consultation business, that some were causing more problems, getting more bureaucratic: "Well, I mean, this is all very nice, but is this really in line with our work?" or anything like that?

DR. ZIMMERMAN: I don't know that. I do know, from at the rumor level (none of which I would repeat), that one or another director had been more bureaucratic than the others. I've heard that many times.

I would say this, that the administration has been pointedly proud of this effort of Dr. Ishak and mine for many years. I can cite, for example, every fall Dr. Ishak has a course on liver pathology and liver disease. It's now at 13 years, at least. And it's always introduced by the director, or by his designee, and he always has a series of slides about the AFIP, and he always includes one that refers to our conference and our program as a great jewel in the eyes of the institution. And I believe it's true, because they've even gone to the point of having a flyer, kind of glossy thing on Walter Reed, which always includes reference to the AFIP, and one of the few pictures is of Dr. Ishak and me doing something together. So I think they've recognized this as good for the AFIP and good for academic medicine and good for the community.

It really has been. It's an uncluttered benefit to everybody.

Q: Without a lot of bureaucratic...

DR. ZIMMERMAN: Nothing bureaucratic. It started informally. They've chosen to dignify it as the Zimm Conference, because it started with our relationship. So it's the Zimm Conference, and we hold it in a room now at the Institute that Dr. Ishak has been kind enough to even call the Zimmerman Room.

Q: What about publications?

DR. ZIMMERMAN: Oh, yes, there are many. Dr. Ishak and Dr. Goodman have a huge number of publications. Dr. Ishak and I have had a number of papers together over the years, and we continue to work together.

I don't know that I've really answered your question about the reputation of this

place. I think this is one of the great institutions of the world. This isn't just a good place, it's one of the great institutions of the world, which has housed some outstanding scholars of medicine. Dr. Ishak happened to be one of them. (I'm biased because I'm a close friend of his.) But the character of this place is that it fosters that sort of thing. I like to say that this is kind of like a monastery for the study of histology--people sit in their rooms and study. And it's just a wonderful place.

Q: You mentioned an institution in the world. Could you give me a little feel for its use as an international...

DR. ZIMMERMAN: We get, in the Hepatic Department, biopsies from Africa, from Europe, from Asia, from Japan (which is part of Asia, of course), for interpretation and help. Visitors come from these various countries. I don't know whether they still do it, but they used to have a flag for every country represented here. Maybe they don't do it anymore; I haven't seen it now for some time. But, in event, that appreciation is certainly found around the world, in pathology circles. I can't say that it's as widely appreciated or known by non-pathologists, but it certainly is widely appreciated. It's a unique phenomenon and a wonderful testament to what can be done here by the government.

Q: Well, doctor, I want to thank you very much for this. Have I left out something I maybe should have discussed with you?

DR. ZIMMERMAN: Well, you're the judge of what you want for your archives. This is so personal that I'm not sure it serves the purposes of the AFIP for you.

Q: Well, it does. It does, because I think it shows this relationship, which is so important not directly with the AFIP, but in conjunction with.

DR. ZIMMERMAN: I think the community involvement and community impact of what's been accomplished in hepatology may not be parallel to other departments. I mean, I could cite the fact that Dr. Hans Pater, one of the great liver pathologists of the world, used to come here once a month, just to come to our Thursday conference. Anyway, I've perhaps given some of the picture of it.

Q: Well, I think this has been very illuminating. I appreciate this.

DR. ZIMMERMAN: It's a pleasure to talk to you.

Q: Thank you very much.

DR. ZIMMERMAN: Thank you for inviting me.