Joe Libonati and Pat Cummings interviewing Dr. Merrill Snyder on October 12th, 2001.

JL: All right, Dr. Snyder can you tell us a little bit about your background, educational background and professional positions in your career?

MS: Yeah, my educational background was essentially as a chemist. Clinical chemist. I got started in microbiology I guess younger than you fellas. I was motivated at about 13 years of age. I got the book given to me, Paul DeKrief (sp), Microbe Hunters, and that decided my career. In fact in my high school yearbook there were predictions of the class and they have me as, 50 years later, a microbiologist, in high school. Went to college and with the intent of being a microbologist and there was depression and my faculty advisor was the Charles King who was the discoverer of vitamin C and happen to get him for Inorganic chemistry fortuitously. And he told me that microbiology was only a career for women. That’s what he told me. And if I wanted to be a medical microbiologist I should go to medical school otherwise I would just be a technician because there were no good jobs available for men in microbiology. So I switched to biochemistry. That makes it very interesting because, because of that was so heavy in chemistry I only had one two-credit course in microbiology, undergraduate, and I had never taken a microbiology laboratory course.

JL: You’ve never had a microbiology course?

MS: Never had.

JL: Undergraduate?

MS: No. Undergraduate I had a two-credit course, elective course. After graduation every time I took, in my graduate work took microbiology, they said to me that I had so much experience in the laboratory that it wouldn’t be necessary to take the laboratory. So I have never participated as a student in a formal microbiology. I have had laboratory instruction, at CDC and so forth but never was my academic work at a college laboratory.

PC: So your PhD was in biochemistry?

MS: No, from, what happened I had the BS, major in chemistry, in biochemistry. I went to work at a hospital. I graduated in 1940 and I was looking for a fellowship, to see if I could get a fellowship that would let me go to graduate school but I couldn’t get one so I went back to work at the McKeesport Hospital. I have worked since I was 15 years old I started during high school, working in the laboratory. I was always interested in photography so the pathologist who the family knew asked me if I would do his photography; he had given me training, with laboratory work in the hospital. So I started working in the hospital lab assisting my folks and so forth when I was 15 years old. I was very fortunate in WWII I was myself at a local hospital, McKeesport Hospital in Pennsylvania. They got me a deferment without me knowing it. I was irritated that they had got me a deferment from the draft without even consulting me. So I refused the deferment, I was the right age. I was drafted in, went in the army on June the 4th 1941, six months before Pearl Harbor. And got in the medical department in the Army, had my basic training and got sent to Walter Reed because of my experience, to a chemical research lab to the department of
chemistry and I was doing essentially toxicology on post mortem specimens from autopsies. And I was, I mean I was a buck private and I was doing some micro-lead determinations because they had a problem with some Jerry cans that they transported water in had some lead soldering in them and they wanted to know, cause lead’s pH is very (inaudible), and they wanted to know how much lead would leach off in the water. And then Pearl Harbor came, with Pearl Harbor things changed. They took all of the low level GI’s from the various departments, they used to call it the Army Medical School, at Walter Reed and put us to work at night because of the intensity of the drafting with the incentive of entering the war into producing, they produced their own typhoid vaccine, the army. So they put on a night shift to up the (inaudible) of typhoid vaccine. So I got put on the night shift it was mainly making up the media. We made our own veal infusions and I can still remember sitting there and we’d get this nice beautiful lean veal and make our own veal infusions. We’d get the large petri dishes and a tongue depressor and that would be our lunch. With a little salt and pepper on that veal. That was our lunch every day. Well if you want to know some anecdotal stuff.

JL: How about your professional positions? You haven’t really gotten into that.

A: You mean since then?

Q: When did you get your degree in school?

A: Well, when the war got over, I started to go to night school at GW. I took a civilian job with the army. I was working mainly with, doing serology for rickettsial diseases, and I took 3 years at GW night school, I drove down there at night and Leland Parr who was the almost permanent secretary of the National SAB, in those days, Society of American Bacteriology. He was the professor at GW where I was taking this graduate work. So in 3 years, I was approximately halfway to a Master’s degree and Dr. Woodward who had a close association with Joe Smadel at Walter Reed, an advisor in the rickettsial department came over and offered me a job and I told him that, he offered me an assistant professorship and I told him I did not want a job, I wanted to be able to get my degree so I would prefer a fellowship. So he gave me a fellowship and then October of 1949 I came to Maryland and I finished up my Master’s degree in a year and I realized that that did not mean much so I continued on through a doctorate degree for another 3 years and got my Doctor’s Degree from Maryland.

I should tell you about my experiences at Walter Reed because we were the center for Rickettsial work we were doing was very important to the army it was the, considered the best work of my lifetime, my career, because of the war, research was highly directed and we knew what we had to do and there was no going off onto tangents, you just stayed right with it and produced a large volume of research. So which got published after that was because we were not allowed to publish then. But in MD it was, Woodward donated my services. He gave me a nice fellowship. He made me donate my service to the microbiology department so I taught sophomore microbiology at the medical school, or helped teach. Frank Hacktel, a very old fuddy duddy was head of the department of microbiology. And divisions then were small we had a little research lab, I guess that’s, and I stayed there until retirement, and I forgotten when I retired, it’s been quite some time. Why don’t we turn this thing off a minute and let’s talk about how it’s going in the computer.

Let’s talk about Maryland, Woodward, we were very fortunate to, Dr. Woodward who started the Division of Infectious Diseases was head of the Department of Medicine. We also had control of all the laboratories up there and in the hospital. Infectious Diseases filled our lot, and my lot became to supervise hospital bacteriology and serology. I wore a number of hats later in my career when infection
control was a big thing. I was in charge of infection control for 13 years. It might be interesting to know that as head of infection control I was a member of the executive board of staff at the University Hospital until the JCAH came down for an inspection one year and in their report they said that I couldn’t be on the staff of University Hospital you had to be a physician, and this applied to the microbiologists and I laughed because they did not want to show the list to me and they took about a month before they showed it to me because in the report they had put microbiologist as 2 words. Micro Biologist. They knew I was a small biologist. So, that’s the way it’s been around clinical relationships to clinical matters for microbiology and I think with all the effort and work that has been done on both the local and the national level. Young Ted Carski was on a committee I think to, uh, microbiologists have never gotten their proper position in working in hospitals. I think that biochemists do much better because uh I think the, politically the American Chemical Society has been much stronger politically than the American Society of Microbiology. Um so I was Associate Director through 5 or 6 directors at the division of Infectious Diseases of course it was a clinical division with a lot of clinical responsibilities and I couldn’t take care of that, but I took care of all of these ancillary things like finances and...

JL: Personnel, budget.

MS: Personnel, budget uh hospital laboratories, infection control at the hospital and um work with a number of people. Member of ASM, SAB, way back since my army days.

JL: Early 40’s?

MS: Early 40’s. I remember talking about the society. We used to as graduate students at George Washington University, Parr used to put 10 dollars into, our coffee budget for we had a seminar every month at night it was a night seminar but one night that seminar used to be devoted to a bout every few months to fold and put in envelops the mailings for the National, (ASM – JL) because that was they had their headquarters building that’s, I can still remember coming to seminar (inaudible).

JL: Who was the person? What was his name?

MS: Leland Parr. Leland Parr. And uh, so I have been associated with the (ASM) society for a long time.

JL: Are you an Emeritus member of The Society?

MS: Oh yes, I have been for a long time. They did not want to do it because they said I had only been a member when I retired and as for Emeritus status they came back that I had only been a member for 8 years, somehow they got that...The record keeping was not quite up to date but I am sure I have been a member for...

JL: 50 plus years?

MS: 50 plus years, oh easily, 50 plus years. Uh, it turned out that I was a pretty regular, Andy and I at the local society; Andy Smith became my closest friend and still remains my closest friend. Another one of my extremely close friends is sitting here at this table. I don’t have too many. What? Anyway, the local meeting, we used to meet quite often at the state health department laboratories were on 25th St.

JL: 23rd.
MS: 23rd, it was the old Goucher Buildings, it was the old Goucher downtown Goucher College buildings originally and the state Health labs took it over and of course because we met there the state health people in microbiology were the mainstays of the local branch in those days.

JL: Can you name some of them?

MS: Oh yes. A few of them (were) Elizabeth Petran and Dr. Perry.

JL: Cornelius Perry.

MS: Yes, I didn’t remember his first name; we always called him Dr. Perry. Another mainstay we had here in Baltimore, it was quite a microbiology center because, industrial microbiology played a part, there was a chemical company and I can’t think of its name (Hynson, Westcott & Dunning-?), where Rudy Algar was a microbiologist, chemical microbiology of fermentative microbiology and he was pretty heavily the almost the permanent secretary of the local branch for a long time. Secretary and treasurer. Another quite active person, of course he was mainly active in the national society. His name slips me.

JL: Give me a hint.

MS: The little guy from Hopkins, single, unmarried. Barnet Cohen was his name. He was very active in the held positions in the national society and I think was president one year. Joe Libonati had just mentioned Clinton Ewing while the microphone was off, he was head of the city labs, but another regular, University of Maryland the only attendants that came to the meeting were members of the dental microbiology department, Don Shay’s department, you all know Don Shay’s position in the national society because it’s amazing, had this association with people who were these secretaries through the years. Held the position for many years and he’d bring his graduate students and small faculty at the time. Andy and I used to take, Frank Hacktel was getting very up in years and had retired, but Andy and I used to bring him to the meeting as our guest very often. Frank Hacktel used to come. Hopkins, very few people came from Hopkins. I would say through the years probably no one came unless they were invited to give a talk on some basis of some of their research, or something like that, but we had no real active members either in the Maryland Medical school department of microbiology or in the Hopkins Public Health.

JL: But we had the 2 awards though. Barnett Cohen Award and the other award, which is given out annually by the local branch, which was in honor of J. Howard Brown.

MS: J. Howard Brown. Well the J. Howard Brown award, well I think it was because of his eminence with, at Hopkins and some of the work it was streptococcus and I didn’t know him, I know Barney Cohen well.

JL: And then in later years we had fellows like Jim Dick, and Bill Merz.

MS: But I am talking about the early years, the years you young people know about I’m sort of not covering them, oh I must say, I missed a big contingent of people who used to come. There were a number of regulars from BBL, from Baltimore Biologic before it became Becton, Dickinson and um, the lab, Harriet Vera was because she was very friendly with Elizabeth Petran, they were very close friends.
JL: Harriet Vera developed virtually all of the early BBL media we use in conjunction with Liz Petran at the state lab.

MS: Paul Rohde supported us very well. I am trying to think if there was someone else besides...

JL: Kay Mangel(sp)?

MS: No, don’t remember her. But we met up there we used to have a nice 30 or 40 people meeting. Christmas time we used to have some refreshments and usually have an entertainer. I remember once they hired a hypnotist who was up there at the state health department we’d have a little entertainment at Christmas time instead of having it technical. Um, then we moved on, they started to have dinner meetings various places and that sort of knocked attendance really down cause people did not want to come out and pay the tab for a technical professional meeting. They had the arrangements where we took the guest speaker out for dinner and anyone else could come. They would announce to a certain contingency if you want to come to dinner let us know and make arrangements at the restaurant and we’d go to some restaurant close by the meeting which was usually at the Western Health District with a nice little auditorium and you could park right down inside the building down in the basement. But we’d get 25 or 30 or 35 I mean Andy Smith records will tell you how poorly attended these meetings were. We always had beer and chips afterward and always had refreshments after the meeting. A number of us would go to dinner. I would say it ran 10-20 people and that sort of fell into disrepute after 2 or 3 years because we had a couple of freeloaders who would come early and go to the bar and order oysters on the half-shell and so forth run up a tab and put it on the check and everyone would split the check. The other thing I can remember, we had a number of Dietrich people who would make the trip down from Fredrick for our meetings.

JL: Can you name some names?

MS: Oh yeah, Larson...

JL: Bud Larson.

MS: And Joe Jemski, and Silverman

JL: Sid Silverman?

MS: I forget which one of the twins would come down; there twin brothers and I think Kenny Eiglesbach came down a couple of times. And then everybody always looked forward, that started way back when I was at Walter Reed just after the war about 1946 or 47 we started to have a joint meeting with the Washington ASM branch at spring meeting at Dietrich. It was an all day Saturday meeting that got huge crowds up there. We used to have close to...

JL: 150 people?

MS: 50 to 150 people. I remember once I got stinking drunk there, they had to carry me home; I must have had about...

JL: 2 drinks?
MS: 8 Manhattans, no they had a bowl of Manhattans I must have had about 8 Manhattans at there at the officers club. But that used to be...

JL: But that was expected of you, right?

MS: Used to be. I got sick drunk. But it was a fun meeting, a good meeting. We’d have a lot of original papers, most of them as a preliminary to, because it was always held shortly before the National ASM meeting and people would present the papers that they intended to present at the meeting and they were all 10 minute papers with their slides and then we would have an evening speaker who was usually from outside of Maryland. I don’t think they had the foundation there to pay for the thing, I think we sort of paid for the guy’s expenses. But we had some very, I can still remember some. I don’t remember the names of the speakers, but I can remember some very good evening speeches after dinner. It’s only once that I got drunk I was always well aware of what was going on.

JL: I want to add here that there was one other person who came very faithfully came from Dietrich to the Baltimore meetings. It was Harold Glassman.

MS: Oh yes, oh yes, don’t forget Harold.

JL: Harold Glassman was the deputy director of USAMRIID. I guess before that it was...

MS: He was the right bar to Reilly House right. Reilly was the director and these were the civilians of course there was always a military director up there at Dietrich, through the years. Sometimes it was a microbiologist other times it was someone from a colonel or general from the chemical warfare department whose forte was not microbiology but chemistry.

JL: You have given us a great background on your history and the local branches history and a lot of the members of it, and how the branch meetings were conducted. How about a little bit about what was actually happening in the laboratory. Um, how did the day and its work go in the laboratory? I know in the past you and I speaking you mentioned that one of the first things that you did in the morning was do all of your pneumococcus serotyping.

MS: Oh, we’re going way back now.

JL: Talk a little bit about that if you would. About the work that was actually done in the lab. What did the work consist of, what kind of order did it have, what were some of your problems?

MS: Well, I think one of the exciting things about being in microbiology is that although we were constantly producing work on the shoulders of others and extending other work, there’s always been in my lifetime unexpected surprises. I think the most gratifying thing to me in microbiology is to see those diseases which were the top morbidity and mortality factors in the top 10 in my youth disappear from that list. That’s due to the advancements the evolution of our knowledge, productivity and inventiveness, but there have been all kind of surprises. Joe Libonati, Dr. Libonati just indicated to me, I remember the short time when there was rabbit serum for all the pneumococcal types and you use the serum therapy for the pneumococcal pneumonia which was a big killer, so the first order of the day was to do pneumococcal typing so the physicians would know what type of rabbit serum therapy. I don’t think that rabbit serum lasted more than 2 or 3 years because some were in the chemotherapy and antibiotic era. And I can remember the first time...
JL: Wait, you saw that transition?

MS: Yeah, I remember the first time, uh being a hospital chemist, the first time I saw sulphur crystals in a urine. I didn’t know what the hell I was looking at. I can remember the first time I saw sulphur. I can remember taking, uh, after they had sulphonamine they had sulphaperadine (sp) which was soluble and I can remember making up little 50 cc flasks with sulphaperadine and dissolving it and autoclaving it because we had pediatricians who were giving it intra-thecially for meningitis in children. Uh, I, and then of course you had all the surprises the Legionella outbreak.

JL: You just made a quantum leap from the 40’s to the 70’s.

MS: I know I am just thinking.

JL: How about the transition from when you first started using antibiotics. What kind of problems did you have in those years? Before there was any standardization of susceptibility test?

MS: Well at the beginning there was no susceptibility testing for antibiotics, there was no susceptibility testing, all it was you had an antibiotic and the physician gave it with the hope that it was specific for the organism that the patient had. There was nothing else to offer someone who had fulminant bacterial disease. So, you gave the antibiotic in the hope that you could turn a patient’s course around. And then of course you had some susceptibility testing the discs came out and there was a lot of non-standardization of the discs. I can remember taking a vial of 25 discs and putting it on, every one on the vial onto one plate because I could not understand the results. From no zone to fantastic zone size so the amount of antibiotic in little filter paper punch outs were completely either non-standardized or not stored properly or so forth. Of course the suppliers of these things always would tell you, well it is a matter of the way you stored things and they always had some sort of excuse. I had fights; I had a lot of fights with suppliers. We went because I was in essentially a research laboratory as well as a clinical laboratory on fulminant sort of things we brought the organism over from the hospital and to our research lab across the street in the Bressler building and we did tube dilution sensitivities we would do a lot of tube dilution sensitivities and sometimes we’d mix with some organisms, we would mix two antibiotics we do a matrix of the antibiotics sensitivities. Probably do 4-fold dilutions of antibiotics rather than 2 because we had a big matrix and we wanted to limit the number of 2’s uh, of course you saw great advances in the evolution from making all of your own media of all kinds including specialized media to buying it ready made. I am sure it was much better standardized then generally what was made homemade stuff. Uh, I saw the change from glass to plastic, which was a big change. Changed a lot of the way things were done. I saw the change from large volume from micro (volumes). I did live in the era of a real micro type of drop things. In fact in my era never used any other device than a pipet other than my mouth or a rubber hose with a mouthpiece. I never used any of the modern, and I had a few infections in the laboratory. I had Q fever back in Walter Reed, a very bad case of Q fever. But everybody did that worked with Q fever. I had a scare because we used to have in the rickettsial labs, we used to use a lot of waring blenders and we had these metal micro blender things that you just covered them with a petri dish on the top and then you used a broken tip, not a broken tip, but a cut off tip 25 ml volumetric to sop up the quantities, 2 people over at NIH both within 2 days of one another died of fulminant scrub typhus using this type of technique. Uh, we had 2 cases of respiratory tularemia. We did a lot of work with tularemia in our lab we had 2 cases of tularemia. In fact I have upstairs I have the certificate Woodward had made with all covered with rabbits with a thing about the people who about to be elected...(Inaudible)
JL: You did your own tularemia volunteer work. That was not done in Maryland though was it?

MS: Yes. Ann Meredith, the one that sent me the book and Leonard Listner (sp-Inaudible) a senior student working with us over the summer.

JL: That was in the late 40’s, early 50’s?

MS: That would be the early 50’s. Around 51 or 52. We had 2 cases of tularemia. The only thing that I had, I had Shigella. Very severe case of Shigella twice within a few months. Both with the same flexner strain so I’ve always questioned whether a good vaccine for shigellosis will ever be made because I should have been immune.

PC: Did you ever consider selling your serum?

MS: No, I’ve been, I’ve gotten a couple of awards in the army, I’ve been on a number of experiments myself because I always felt that I was the first one that took an experimental Dupont drug when we first get it before I would give it to any volunteers I took it myself to do levels on myself. I was on an Adobrine experiment in the army. I was on a couple of vaccine experiments. I bled myself at least 3 times a week for O cells because I did a lot of influenza hemagglutination in those days we did a lot of influenza work. I felt that if I had one of the standard O cells so I used myself. And, but these are, I can’t think of much else. I have seen a change in serologic methods, I doubt if anyone does much Complement Fixation anymore.

JL: the state lab still does the Wasserman, but in very restricted cases.

PC: But that’s very limited.

JL: Actually they don’t call it the Wasserman it’s Complement fixation.

MS: I think all these things evolved. Go ahead Joe, ask another question.

JL: Did you, did you ever see any problems that may have existed between the Maryland Branch and the National Society or between the Maryland Branch and other branches any conflicts?

MS: No, I’ve never seen that, but we made a mistake in our place because...

JL: Our place being what?

MS: Our branch, our branch, uh we never had a counselor on the executive board and the reason for that is we made a new counselor every year. And there was no way you could get on the national executive board as counselor lawyers the branch representation they have 1 or 2 slots on the national executive board for branch counselors and there was no way you could have someone on there who does not have a longer tenure than 1 year. I always thought that was a mistake that the local branch made had a bigger, a larger...

JL: A greater presence in the national society.
MS: We had some influence with the national officers, Don Shay, was pretty potent. Reilly Houseright was very active at the national level and I think he was the national president at one time. Joe Joseph was high up in the circles. Don Shay and Joe Joseph always ran the membership committee for the national society.

JL: And they both became national secretaries.

MS: Don was a good national secretary, a very good national secretary.

JL: Senior members of our branch. Were they treated any differently in the earlier years?

MS: No, never seen any, the one thing I have never seen in clinical microbiology labs and I as I said at the beginning at the outset of this microbiology and the clinical microbiology were women. The one that trained me at the McKeesport Hospital a German born women by the name of Rachel Carson and I am only 15 years old, she made me pipettes, she gave me...I remember she made me stand all day 8 hours at the sink pipetting water with each size of a quantitative pipette. Take your finger off and let it drop exactly before she’d trust me to do Kohn and Kline’s, to do Kohn tests. And of course she’d trust me to do pipette Kohn tests. Kline was a slide test. That’s another thing, she trained me and I’d do it for hours was you made your own slides. With the Kline test the slide has to be impeccably clean and you would make these wax rings with the little it’s like a loop a round loop, covered with thread, regular sewing thread, you dip it in hot wax and put these rings down and you make these rings on large microscope slides. They were 3X4 rings that you made on there and you make each one individually with the wax.

PC: So this is making like a well on the side?

MS: Yes, it makes a well. It’s really not a well; there is no indentation on it.

JL: Of course later on they had the ones with the painted rings on it.

MS: I had to make our own. There are a lot of things we did in the lab.

JL: Do you recall any crises that took place in the national society?

MS: Oh yeah. I remember crises. The national society was full of crap because the national society does the same thing as most institutions. They wanted a notable figure to be up there at the helm. I think you have the same thing with religious groups too. When you get a priest or a rabbi, a leader, they want someone who is in the public eye that rubs off on the institution. It was the same way with the national society; they wanted the Nobel laureates to be the presidents. I know a number of presidents who spent 2 years with the society and that was the only time you saw them, you saw them when they were the president elect and when they were president. They never made an appearance either before or after that. Yet the society had a lot of dedicated workers for the society, but I saw this sort of thing, but I was involved in one crisis when the society had a committee that was advisory to Camp Dietrich, Fort Dietrich and they had that for years, it had a lot of eminent microbiologists on it, cleared, had privy, and they were advisors and they wiped (away-JL) that committee in one year, with, some words of that really this large membership of microbiologists in Frederick, they really hurt them. These were our professional brothers, our confrers and the society acted like they were war criminals. It was terrible. The major one who sparked this was Salvatore Loria. I have great respect for his genetic work and for his brains but he’s a son of a b---- (and I got that recorded). I’m sure there is always politically, I have never
entered into the political that’s the only time I got involved with any politics of the society because I am not a political person. I served, I think, as president of the local society one year most of the people who had any type of position attended regularly the meetings and had to be some help at the society, but I never been a smoke-filled room politician.

JL: Name some people who we should interview?

MS: Oh, yes. Well one of the main ones you should interview and you should get to in a hurry because he’s really up in years, he’s older than I am, is old Ted Carski. Even though didn’t run the meetings he’s been intimate to the microbiology community for years. Reilly Houseright I mentioned, uh, I think you ought to get up to Dietrich and interview some of the other Dietrich people. Joe Jemski and Bud Larson, Hank Eiglesboch, (inaudible) is no longer with us, rest his soul.

JL: John Brewer?

MS: John Brewer would be good. John Brewer used to come to the meetings once in a while when they were of interest to him. John Brewer is a brilliant man and very, I think you might be able to get a little insight cause one who knew about the society when we first came in than anybody was Rudy Algar. Danny Algar as a young man may be able to second hand, be able to tell you some of his father’s experience or what his father had to say, I mean it would be a short interview but whatever Danny could recollect would be beneficial to a, to the documentation that you are trying to get.

JL: Dave Power?

MS: Dave Power, but that’s late, that’s in your era now. Dave is a little late.

JL: Dave predates me.

MS: Well but you know, he’s there, Okay.