Interview with Robert B. Daroff, MD, FAAN, FANA

Interviewed by Douglas J. Lanska, MD, MS, MSPH, FAAN
and Barbara W. Sommer, BWS Associates

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American Academy of Neurology Oral History Project

Interviewed in Dr. Daroff’s home
at 27500 Cedar Road. Beachwood, Ohio
February 22, 2014

Robert B. Daroff - RD
Jane Daroff - JD
Douglas J. Lanska - DL
Barbara W. Sommer - BWS

BWS: Today is February 22, 2014. We are at the home of Dr. Robert B. Daroff at 27500 Cedar Road in Beachwood, Ohio to interview Dr. Daroff for the American Academy of Neurology [AAN] Oral History Project.

Dr. Daroff received his M.D. from the University of Pennsylvania and specialized in neurology in his residency at the Yale University School of Medicine from 1962 to 1965. He then further specialized in neuro-ophthalmology at the University of Miami and the University of California-San Francisco. Dr. Daroff served as Professor of Neurology at the University of Miami School of Medicine and as Gilbert W. Humphrey Professor of Neurology and department Chair and Associate Dean of the Medical School at Case Western Reserve University School of Medicine. His support of ocular motor research led to the establishment of the Daroff-Dell'Osso Ocular Motor Laboratory at Case Western University. From 1987 to 1997, he was Editor[in-Chief] of Neurology, the journal of the American Academy of Neurology.

The interviewers today are Dr. Douglas [J.] Lanska, neurologist in Tomah, Wisconsin, and Barbara W. Sommer.

Go ahead, Dr. Lanska.
DL: I would just add that Dr. Daroff is Past President and Honorary Member of the American Neurological Association, and an Honorary Member of the American Academy of Neurology, and also Past President of the American Headache Society.

BWS: I’m going to go ahead and ask the first question. I know we’ve covered this in a number of interviews, but we’d like to ask you just a little bit about your parents and your childhood. What were some of the most important factors as you look back on that time that helped lead you to the person you are and career you have?

RD: I don’t know if I’ve ever mentioned this in previous interviews, but Charles Daroff was not my biological father. My mother was married five times. Her mother died when she was a little girl. She was pawned around to a number of different relatives and at age sixteen, she married, one George Chenenko. I was a child from that. She divorced George after three years, [and] remarried again. My brother came from that [second marriage]. And I was bounced around from relative to grandparent and, finally, she married a very wealthy man, Charles Daroff. And that led to my being sent to military school for a couple years while they settled in and moved from his hotel suite in New York to an apartment in Forest Hills where the family moved. And I adopted the name of Daroff rather the long name of Chenenko because it just made sense. So, I had a screwed up childhood.

BWS: And it led to…? [chuckles]

RD: It led to… I’m not sure what it led to.

BWS: Where there other influences in your…

[brief break as JD enters the room. General conversation]

RD: Did you hear the last question? [addressed to JD]

I’ll have to get her advice.

Did that lead to anything, my screwed up childhood? Shall I talk about that? [addressed to JD]

JD: If you want to.

RD: I was analyzed for five years.

DL: Let’s come to that.

RD: Okay. We’ll come to that, that screwed up childhood…

DL: Let’s come to that. Charles Daroff was one of four brothers who owned…
RD:  H. Daroff & Sons, the largest clothing manufacturer in the United States, Botany 500.

DL:  Charles was actually on the East Coast in New York.

RD:  Right. The company and the factory was in Philadelphia [Pennsylvania]. He ran the New York office, and so he lived in New York.

DL:  You grew up then…

RD:  I grew up in New York.

BWS:  What motivated you as a kid or how would you describe that in terms of the direction that you began to think about things?

RD:  You know, as a kid, I just wanted to get along, I guess get laid, depending upon what year it was. [chuckles]

BWS:  At the University of Chicago? Do we want to get there yet?

DL:  No. Somebody influenced you when you were in grade school to become a physician. Do you want to speak to that?

RD:  I was either the smartest or the second smartest kid in school from about the third grade on through junior high school. I didn’t have to study. I think it was [at] the eighth grade at Stephen A. Halsey Junior High School in Forest Hills, New York, Queens, and the teacher was Herman Horn who taught science. For some reason—he told us we were going to discuss something the next day—for the first time I think ever, I read the assignment. I just answered every question, and he was very excited, and he sort of made me the aide in the class, and I did all sorts of things. I really liked that—sciences. He said, “You ought to become a doctor.”

The next year, I had a bellyache and woke my mother up. Our pediatrician gave [sic, had previously given] me a medical book and I was looking at it. I said, “I’ve got appendicitis.” I had a hard time convincing my mother, but I finally did and we went and, sure enough, I had diagnosed my own appendicitis at age nine [sic, fourteen], and that sort of settled it.

BWS:  So you were reading the book from the pediatrician by that age?

RD:  Yes. I was looking at bellyache and it became clear.

DL:  How did you get to the University of Chicago?

RD:  There was a Ford Foundation [that] had a program where they were going to, I think, send fifty kids to one of five schools—Harvard, Yale, Columbia, Penn [sic,
Princeton], and Chicago—who scored the highest on an examination. The top two percent of each high school in the United States could submit candidates. I was in the top two percent at Forest Hills High School. That would have been the tenth grade. I didn’t make it, because you’re competing against guys who are a year older. So there’s no way to answer...so I didn’t make it, but... I didn’t make the top fifty. The University of Chicago sent me a letter saying, “You didn’t make the top fifty, but you made our admission requirements. Do you want to come? You’d have to pay the tuition.” That’s when I went to the University of Chicago in 1952-1953.

It was great academically, but socially it was a disaster. Here I am this horny sixteen-year-old kid. What am I doing? There are no girls. They were all older and everything. I didn’t have a car. And when I came home for vacations, I couldn’t talk to my family. I was into transcendentalism, and existentialism, and all that Freudianism—all that. They were into business and various other things, so I decided to transfer out of Chicago to one of the eastern schools. But I had to have a twelfth grade certificate, that is to say a high school diploma. Chicago would give you one if you took five classes. I only took four during the school year.

So I went and took a summer class at Chicago and that’s when I roomed with Carl Sagan1, who was a year older, a hell-of-a-lot smarter, [and] very, very intimidating. He’d ask you questions and you’d give an answer and he’d ask you another question. Ten questions later, he determined that I contradicted myself with the first one. He kept all that in his head. I kept up with him over the years. He was the smartest guy I’ve ever, ever come across and he knew it.

At any rate, Swarthmore and I think Yale would have admitted me as a sophomore, but I didn’t want to. I wanted to start over again as a freshman. So I went to Penn [University of Pennsylvania], which was a good idea, because my father’s family was in Philadelphia.

DL: Let me go back for a second. While you were in Chicago, you did become interested, I think, in [Ernest] Hemingway2 and in [Sigmund] Freud3. Can you tell us what interested you about Hemingway for starters?

RD: Hemingway was later. Hemingway was in medical school. I was doing psychiatric research in medical school. One of the psychiatrists mentioned this Hemingway quote. I’m not sure under what context it was. He said, “There are three things that make a man: good with a woman, good with his fists, and good alone in a room with paper and pencil.” At that point, I was married. Good with your fists? That’s not for an adult. That’s for a kid. Good in a room with paper and pencil? I knew I was good with that. I was Editor of the Daily Pennsylvanian. But I translated “good with your fists” to being in

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1 Carl Edward Sagan, PhD (1934-1996) became an astronomer, astrophysicist, cosmologist, author, media personality, and science popularizer.
2 American author and journalist Ernest Hemingway (July 21, 1899 – July 2, 1961)
3 Austrian-born neurologist Sigmund Freud (born Sigismund Schlomo Freud; May 6, 1856 – September 23, 1939).
combat. Then, when I got orders to go to Vietnam, and my mother could have gotten me out of it, because she knew Senator [Jacob] Javits—I definitely could have gotten out of it—I thought two things: (1) if I don’t go because I have contacts and somebody goes in my stead and gets killed, that would be awful; and (2) I didn’t fulfill Hemingway’s second “good with your fists” [criterion] to see how I would do with mortars coming in and all that. So that was one of the motivations. I went to Vietnam, leaving Jane and two little boys here in the United States.

DL: I actually looked for that quote myself. I think it’s apocryphal. I don’t think he said it. I looked for it. I think somebody said it about him. I did find a quote that I think you might like in his autobiographical memoir on hunting, *Green Hills of Africa*, from 1935. Someone asked him, “What are the things, the actual concrete things that harm a writer”—or you could consider a man? He reported that he replied, “Politics, women, drink, money, ambition, and the lack of politics, women, drink, money, and ambition.”

RD: [chuckles] That’s great! The psychiatrist told me that [quote about the three things that make a man]. I had no reason to doubt that.

DL: How about Freud then? Let’s talk about Freud for a bit.

RD: Well, that was at the University of Chicago. I was really into Freud. We had a course on him and I bought a whole bunch of books. I think I read everything he wrote, almost. I became convinced. In the book, *Civilization and its Discontents*, which very few people have read. It’s a fantastic book. It has certain things like “men have an insatiable desire to urinate on fires and put them out.” And you think about when you were a kid going out in the woods with your friends and you light up [a fire], you pee on it if it’s just the boys around. That instinctual desire led to women being the keepers of the hearth, because you couldn’t have the men keep the hearth: they’d pee on it! So the guys became the hunters and the women kept the hearth. Also, said Freud, “There is only one true desire we have and that’s sex.” Everything is sublimation. We go to school; we sublimate. We learn. We work. It’s all sublimation for sex. There I was sexless as a sixteen-year-old kid and I was very unhappy about that. I was deprived of [the] one real joy according to Freud.

DL: So that was the big tension between civilization and the individual!8

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4 Jacob Koppel "Jake" Javits (May 18, 1904 – March 7, 1986) was a liberal Republican politician who served as United States Senator from New York from 1957 to 1981.
5 *Green Hills of Africa* (New York: Charles Scribner’s Sons, 1935: 28) was Hemingway’s autobiographical memoir on hunting.
7 Sublimation is a defense mechanism whereby socially unacceptable impulses are consciously transformed into socially acceptable actions or behavior. Freud believed that sublimation is a sign of maturity—one that enables people to function in culturally acceptable ways.
8 In Freud’s *Civilization and its Discontents* (1930) he enumerated what he saw as the fundamental tensions between civilization and the individual. According to Freud, the primary tension results from an
RD: Yes, exactly.

DL: [laughter] That works for me.

[chuckles] So then you transferred to the University of Pennsylvania.

RD: Yes.

DL: How was that different from the University of Chicago?

RD: First of all, I was a year older. I joined a fraternity. I didn’t have a car then, but there were girls in the school. I mean it was different. I could have a social life. I borrowed a car and I would go pick up a high school girl and take her to parties and things like that. It was hard if you’re a freshman to date freshman girls. I mean girls… they want someone a little older. So for a couple of years, I was dating high school girls.

BWS: Were you still actually high-school age when you were at the University of Pennsylvania?

RD: I was seventeen when I started.

BWS: Would that have been your senior year of high school?

RD: That would have been my senior year in high school. Instead of picking up two years, I electively just picked up one year.

DL: When you were there, you became the editor of…?

RD: I pledged a fraternity and I got into the fraternity. Then, I was told by the fraternity brothers during a meeting, “You must go out for an activity.” “What do you mean, an activity?” [They replied,] “A sport of this or that or the other.” I said, “I’m a pre-med student. I don’t have time for that.” I was ordered to. So I said, “Well, I’ll go out for the newspaper.” So I went out for the student newspaper, and I heeled, and I was accepted, and I gradually went up the ranks, and in my senior year, I became Editor-in-Chief of the Daily Pennsylvanian, which has affected my life, because I became a writer.

BWS: How did you choose the newspaper among all the things that you were…?

The individual's quest for instinctual freedom in opposition to civilization's contrary demand for conformity and instinctual sublimation. Many of man's primitive instincts are harmful to the community at large, so the community (civilization) creates rules (laws) that prohibit actions resulting from such primitive instincts (e.g., murder, rape, and adultery), and implements severe punishments if such rules are broken. This ceaseless tension instills perpetual feelings of discontent in its citizens.
RD: It seemed like... I’m not a jock. I couldn’t have made any team at Penn. I made the wrestling team at Chicago, but that’s a bunch of University-of-Chicago kids. I wasn’t very good at it. You could be a manager of a team. I didn’t want to be a manager of a team. So the newspaper seemed reasonable.

BWS: Sort of the method of elimination.

RD: Yes, exactly.

BWS: It’s just something that could interest you.

RD: I was good at it. It was great.

DL: How did you do academically then in college?

RD: Fair, because I spent about four hours a day at the newspaper every day. So I was a B [or] C student, and I picked up a couple of A’s. I think because of being the editor of the Daily Pennsylvanian, I applied to Jefferson and Penn, I got into both and I picked Penn.

DL: Can you tell us how you met Jane?

RD: It was during my second year at med school. One of my lab partners, Nicholas Vincent, and I went to Houston Hall, which was the Student Union, to have lunch. Then, I went out and there was a phone booth. I don’t know if young people know about phone booths, but I went to a phone booth to call my girlfriend, Einee. I’m on the phone with Einee, and Jane comes and she’s waiting outside to get in the phone booth, and Nick, my buddy, was waiting outside for me to finish. He got into a conversation with her. Then, Jane came in [when] I was walking up the stairs with Nick. He said, “She’s a terrific girl. I really liked her.” I said, “Did you get her name or anything?” He said, “No.” [I said,] “Go down and get her name.” I was trying to support his love life. At any rate, a couple of weeks later, I said, “Did you ever date that girl?” He said, “Well I found out she’s Jewish, and if I brought home a Jewish girl, my mother would kill me.” During that interval, I had broken up with my girlfriend and Jane being Jewish was not a problem for me. So I called her and we got started and that was it. We got married a year later.

DL: You guys have had a terrific long relationship.

RD: A long relationship.

DL: Marvelous.

So how did you do in medical school?

RD: In medical school, you see, I was going to be a psychoanalyst. In those years, a psychologist could do psychoanalysis, but mostly they were M.D.s, and most psychiatric
departments in the mid-to-late [19]50s were analytically oriented. The chairman was an analyst. What is all this science stuff, anatomy and all that? I felt I just want to be an M.D. so I can take a psych[iatry] residency and be an analyst. So I don’t really have to bust my hump getting A’s or even B’s. I was satisfied with a gentleman’s C during my first two years. In my third year, after medicine and neurology, I said, “Gee, this is really fun. I don’t want to give up this scientific medicine”—you know, what I was learning—so I said, “Maybe I’ll be a pediatric...” —At the time, there was a subspecialty of pediatric psychology in which you’re not a psychiatrist, you’re an M.D., but you took care of kids with problems and also their parents if they had problems. But that sort of didn’t work out. Then, I decided [that] I’m not going to be a psychiatrist. I’ll be a neurologist. They had a great neurology department at Penn. So I just flipped over. Then I started getting A’s, because I was really into it.

DL: Let’s come back to that in a minute.

It was in medical school that your father died.

RD: He died... Charles Daroff died.

DL: Right.

RD: George Chenenko was still alive, and we had some contact. He was a lovely man, but he was poor. He was a mailman and bartender and various other ... [things]. During the war, he was gone for the whole Second World War.

Charles Daroff died of lung cancer [in September 1957] when I was a freshman in medical school.

BWS: Did that have an impact? Obviously, it would have an impact.

RD: Well, my mother was free to have a fourth and fifth husband. But putting that aside, she moved to New York from Queens. My mother had a child with him [Charles], [named] Ellen, who changed her name to Tracy, [and] who is thirteen years younger than I. That was biological [child]. He said he was going to, but didn’t, adopt my brother Steve and me. He told me—he felt very strongly about this—that if boys are given a lot of money, they lose their ambition and he was really into ambition. He disliked teachers [and] policemen, because they weren’t making a lot of money. In his head, unless you’re making a lot of money, you’re a failure, even though you’re doing something reasonable, like being in the Army, a Colonel, or something like that, or a policeman, or a schoolteacher, or a professor. You don’t have the ambition. Having money thwarted ambition, so he arranged for my brother and I to get educated. He had [provided] all the money for that. He said, “Your mother will take care of you.” And she did.

DL: Was it in medical school that you met Dr. [Aaron] Beck9?

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9 Aaron Temkin Beck (born July 18, 1921) is an American psychiatrist and Professor Emeritus in the Psychiatry Department at the University of Pennsylvania. See Appendix 5 for further information.
RD: Yes. Well, what happened? When Charlie died—Charles Daroff died—I got depressed—truly depressed—for the first time in my life. So I saw a student health psychiatrist, had a few sessions, and I felt a lot better. I said, “I really like this. I’d like to sort of continue.” He said, “Well the next step is psychoanalysis.” I said, “Okay.” So it wound up [that] he sent me to somebody downtown. I had to take a bus. It was very awkward and the Associate Dean of the medical school, who was in charge of students, when I told him about this [said], ”No, no, you can’t spend two hours a day during medical school doing that. I’ll have you see another psychiatrist.” So he had me see another psychiatrist who interviewed me and said, “I disagree with his going to the first psychiatrist, but we’re at the same level academically, so we need someone higher. So have him see Leon [J.] Saul,” who was Professor of [Clinical] Psychiatry and the most distinguished psychiatrist at Penn. If Leon Saul said something, that was it. So I saw Leon Saul and he read this psychological test on me and said, “God, these psychologists, all they do is go after weaknesses. They don’t deal with strengths. The man for you is Beck,” Aaron T. Beck, who then was a relatively young man. So I was analyzed by Beck, who became kind of a maverick and sort of drifted off analysis and, years later, developed Cognitive Behavioral Therapy, which is the thing. We keep up with him. He’s a wonderful guy.

DL: He also, among other things, was responsible for the Beck Depression Inventory, the Beck Hopelessness Scale, the Beck Scale of Suicidal Ideation, the Beck Anxiety Inventory. He was quite the guy.

RD: All because of the basic tenet of psychoanalysis—he was an analyst—was that the dreams are a royal road to the unconscious and depression was inverted hostility. You’re hostile, but you invert it. You don’t want to show your hostility and then you get depressed. So if you believe that, and [if] dreams are the royal road to the unconscious, the depression of depressed people would be hostile. [But] they weren’t. In their dreams, they were wimpy and unhappy just like they were in real life. It was totally contrary to the Freudian concept and he [i.e., Beck] realized if the Freudian dream stuff is out, it’s gone. So he just moved off.

DL: So you shifted then to neurology. There were several people at Penn that inspired you.

RD: Yes. Gabe [Gabriel A.] Schwarz was a very distinguished guy, a psychiatrist… No, he was neurologist.

DL: He was both, actually.

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11 Gabriel A. Schwarz, MD (c1909-1994). See Appendix 5 for further information.
RD: Yes, you’re absolutely right. He was both. Because Beck used to refer patients to him who needed just psychotherapy and didn’t need analysis. He was also a terrific neurologist and a good friend of [Joseph M.] Foley\textsuperscript{12}—they were sort of contemporaries—and John [E.] Bevilacqua, who was a very young, aggressive guy who spent a lot of time with us, and Jim Toole\textsuperscript{13}, who was, then, an assistant professor. I took an elective and spent two months with Jim Toole when I was a senior before he went to Winston-Salem as Chairman of [Neurology at] Bowman Gray [School of Medicine]. So we’ve had a great relationship over the years.

DL: He’s had quite a career, as well.

RD: Yes, he has.

DL: He wrote a very famous textbook, \textit{Cerebrovascular Disorders},\textsuperscript{14} and was the Chair of the Working Group on Disability for U.S. Presidents\textsuperscript{15}. He is quite a gentleman.

RD: A wonderful guy.

DL: He’s always been nice to me, as well.

RD: He’s in his late eighties now and he’s slowing down, as he’s supposed to.

DL: Yes, he is.

Gabe Schwarz, when you were there, I think, was then chairman of neurology.

RD: I think he was acting chair.

The chairman—I’m blocking on his name\textsuperscript{16}—was a homosexual, it turns out. He liked to do cremasteric reflexes and various things like that. It became problematic and he left.

\textsuperscript{12} Joseph Michael Foley, MD (1916–2012). See obituaries:

\textsuperscript{13} James F. Toole, MD, FAAN (born March 22, 1925). See appendix 5 for further information.

\textsuperscript{14} Toole JF, Patel AN. \textit{Cerebrovascular Disorders}. New York: Blakiston Division, McGraw-Hill Book Co., 1967. This was the first modern textbook on the treatment of stroke. It has now gone through 23 editions in four languages (according to WorldCat).


\textsuperscript{16} George Gammon [Personal communication from RD to DL March 19, 2014]

RD: Abe Ornste\new was in private practice in town, but he gave us these great lectures. I think fourth-year students all converged at Penn. He was terrific.

DL: What was characteristic of his interactions? Didn’t he have some movies he showed?

RD: He showed movies and I have the movies.

DL: Do you?

RD: Yes. He just took pictures of various… One of them…

DL: [chuckles] I’ve seen the one you’re going to talk about.¹⁸

RD: Right…was somebody with a movement disorder, I think, and he took a movie of him nude and you could see his penis flopping around. One of the senior psychiatrists said, “You can’t show that in public.” But it wasn’t in public. It was going to be shown to the Psychiatric Association and there weren’t women in it then. Anyhow, he had to go through each frame of the movie blocking off the penis. What happened was it drew your attention to it, because you saw this thing and every now and then a penis would flop out. [chuckles] It turned out to backfire, but I’ve got that movie. I can give it to you if you want it and you can put it in… I’ll send you the whole Ornstein collection.

DL: Please, do. I’ve seen that video and it’s hilarious. It’s truly hilarious.

I understand he was quite the man in terms of instilling enthusiasm for neurology…

RD: Oh, yes.

DL: …by his passion, and the videos, and the dynamic discussions.

RD: Absolutely.

BWS: Was he one of the first to do videos?

RD: Yes. He was, I think, the original video-er. It was in the 1920s and 1930s.

BWS: That was pretty unusual to be able to start to show some of what was going on.

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¹⁷ Abraham Maurice Ornsteen, MD (September 30, 1894 - April 28, 1978) was an American neurologist who taught at the University of Pennsylvania for 45 years. He became Chief of Neurology at Philadelphia General Hospital and Einstein Medical Center, Northern Division, and Chief of Psychiatry at the Philadelphia Psychiatric College. He is most remembered for his clinical teaching, and for the neurological films he made for teaching purposes.

RD: Well, most of them weren’t nude. They were just movement disorders and various things like that.

DL: There were several others before him videoing neurology.¹⁹

¹⁹ There were earlier individuals who made pictures of neurologic patients in Philadelphia and Boston before Ornstein. The earliest, of course, goes back to the Muybridge-Dercum collaboration at the University of Pennsylvania in 1885. American photographer Eadweard Muybridge's (1830-1904) ambitious pioneering efforts with the collodion and gelatin dry plate technology of the 1870s and 1880s utilized multiple cameras and projection with a rotating disk of transparencies to photograph and project a short sequence of movement. In 1885, Muybridge's collaboration with Philadelphia neurologist Francis Dercum (1856-1931) produced classic sequential images of abnormal movements in patients with neurologic disease, the earliest examples of motion pictures of medical subjects.

Walter Greenough Chase, MD (1859-1919) was among the first to recognize the potential applications of motion pictures to medicine, particularly for recording abnormal movements, and indeed he began experimenting with medical applications of motion pictures only a few years after graduating from Harvard Medical School in 1901. Using a “biograph” camera, Chase photographed the seizures of epileptics, gaits of persons with various neurologic disorders, and some other abnormal movements such as athetosis.

Later Theodore Weisenburg (1876-1934) was the next major neurological cinematographer. He graduated from the University of Pennsylvania and then was trained in neurology at the Philadelphia Hospital from 1899-1901 under Charles Mills, Francis Dercum, Wharton Sinkler, William Spiller, and Charles Walts Burr. He served as Editor-in-Chief of the Archives of Neurology and Psychiatry from shortly after the inception of the journal until his death. He also served as president of the American Neurological Association in 1918 and again in 1933, served as chairman of a committee on training in neurology of the American Neurological Association, and was active in the establishment of the American Board of Psychiatry and Neurology. From the time of his appointment as Neurologist and Consultant to the Department for the Insane at the Philadelphia Hospital in 1907 until around 1912, Weisenburg recorded approximately 10,000 feet of motion picture film of patients with nervous and mental diseases with the assistance of German-American photographer Siegmund Lubin (born Siegmund Lubszynski; c1841-1923). DL has not been able to locate those films despite inquiries more than a decade ago at the University of Pennsylvania. However, Weisenburg included motion picture images of various neurologic conditions in some of his published works. The conditions illustrated by Weisenburg using motion pictures included tremor in multiple sclerosis, and posture and gaits in hemiparesis, spastic paraparesis, tabes, and Parkinson's disease.

Weisenburg in turn stimulated Isaac Hampshur Jones MD (1881-1956), Laryngologist at the Philadelphia General Hospital and Instructor in Neuro-otology at the University of Pennsylvania Medical School, to record motion picture sequences of vestibular testing.

In Europe the most important pioneers of motion pictures of gaits and neurological disorders began in France in the late 19th century with the work of French physiologist and “chronophotographer” Étienne-Jules Marey (1830–1904), and with the work of French “chronophotographer” Albert Londe (1858-1917) who worked with Jean-Martin Charcot at the at the Salpêtrière in Paris, and somewhat later in the early 20th century with the work of Belgian anatomist and neurologist Arthur Van Gehucht en (April 20, 1861 – December 9, 1914) in Leuvern.

See also:
RD: Really?

DL: Yes. But he was early, to be sure.

Tell us a little bit about the Philadelphia General Hospital [PGH], which is no longer. You were there.

RD: I was there as an intern. The State of Pennsylvania required you to have a rotating internship. You couldn’t have a straight medicine [internship], straight surgery [internship], or whatever. I didn’t want to do an internship at Penn. I’m not sure why I didn’t want to do it at Penn. It could be because I couldn’t have gotten in. I didn’t want to do it at one of the community hospitals, so I did it at Philadelphia General, which was shared by the five medical schools in Philadelphia: Penn, Jefferson, Temple, Hahnemann, and Women’s [Medical College].

I learned some things about women. There would be students on OB [obstetrics] from five schools and you’d take turns doing deliveries. The women would always sneak in and steal a delivery from one of the men who was next up. It dawned on me… Guys. What do you do? We play basketball. One ball, six guys or five guys and you take turns. That was just part of growing up. You take a shot. The next guy takes a shot. Women didn’t do that then, so they didn’t learn this notion of you really take turns. If you have an alternate feed in a highway, the women, they sneak in—they used to. Now that women are into sports, they don’t do things like that.

BWS: It’s changed.

RD: Yes.

DL: Well that [PGH] closed in 1977. Subsequently, parts of it are now the Children’s Hospital of Philadelphia, the VA [Veteran’s Administration Hospital], all sorts of stuff.

RD: The VA was always close by. We didn’t rotate through the VA at Penn, I think, as some of the other medical schools rotated.

What happened was that one of the mayors of Philadelphia decided that Philadelphia General was a drain. It was as all inner city—county hospitals are. So he said, “All the medical school hospitals can pick that up and we won’t have that drain.” So there went Philadelphia General Hospital which began during the Civil War. It was [Sir William] Osler’s first hospital when he came to the United States. The nickname was Old Blockley and there was a sign in Philadelphia General, “I miss Old Blockley—William Osler.” So it’s gone.

DL: Mills20 was there—Charles Mills.

RD: Right. Mills was there, exactly.

DL: So why did you choose Yale for your neurology residency?

RD: I’m not sure. It was recommended to me by one of the neurologists at Penn. I went up there and it’s kind of prestigious. New Haven seemed like a nice town. And they took me—two residents a year.

BWS: What did you know about the program?


DL: Let’s talk about him.

RD: Well, he was a very interesting guy. It was really a two-person department: Glaser at New Haven Hospital and Lew [Lewis L.] Levy at the VA, both terrific clinicians, different types. Glaser had an encyclopedic knowledge of neurology. He remembered everything. He had a photographic memory or what’s that other kind of memory?

DL: Eidetic.

RD: Eidetic. I’m not sure what it was.

20 Charles Karsner Mills, MD (1845-1930), one of the preeminent American neurologists of his time. See appendix 5 for further information.


One day, we were talking about a patient and a couple of weeks later, I found an article about that… I forget what the patient had. It was very interesting, because it clarified something we were uncertain about. I showed him the article. He turned the pages. “Yes, very interesting, Bob. Thank you very much.” I thought he was just making nice. He wasn’t reading it. He was turning pages. But a couple of months later at grand rounds, he says, “Bob Daroff showed me a paper a couple of months ago,” and he went through the whole paper. I had totally forgotten about it. He remembered everything. He was great at that and he was a good neurologist. For years, before scanning, before CT [Computed Tomography] scanning came out and really changed the way we made diagnoses, I would think on a difficult [case], “What would Dr. Glaser do?” At New Haven Hospital, every day, we made rounds with him, except when he was out of town. Then, a younger attending, Don [C.] Higgins, made rounds. We saw thousands of patients with Glaser. We knew what he would do.

DL: He was a little bit skimpy on exams though, I understand.

RD: He was into history. He spent a lot of time with [H.] Houston Merritt.

DL: Who was also instinctive in his approach.

RD: Right. Merritt would tap on one of these [reflexes]. This story that he was at the University of… Where was he? I think he was at Indiana or someplace as visiting professor. I was told the story that they presented him a patient who was fasciculating all over. Merritt looked at him and said, “Stick out your tongue.” It was fasciculating. He

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22 RD had also recounted this anecdote in AANnews in 2012: “Robert B. Daroff, MD, FAAN, was one of the ‘Glaserian ganglion, as Glaser’s former residents referred to themselves. ‘Gil had an encyclopedic knowledge of neurology, as well as an eidetic memory; he never forgot anything he read,’ Daroff said. ‘One day I showed him an article about a subject we had discussed. He just seemed to glance at it and said, ‘Interesting.’ I was disappointed that he seemed so dismissive. About six months later, at a conference, he referred to the article (‘that Bob Daroff brought to my attention’) and discussed it at length. I had forgotten most of the details, but not Gil. During my years at Yale (1962-65), there was only one other full-time attending neurologist at New Haven Hospital. Thus, we made rounds with Gil every day, unless he was out of town. We learned to think like him. For years after finishing, when I was confronted with a difficult problem, my mind always jumped to, ‘What would Dr. Glaser do?’, and it turned out to be the correct decision.”

See also:

23 Donald Cheney Higgins MD (August 15, 1928 - April 1, 2010).
24 H[iram] Houston Merritt, MD ( January 12, 1902 - January 9, 1979) was one of the preeminent American neurologists of the twentieth century. See appendix 5 for further information.
didn’t even say what the diagnosis was. “It’s obvious. You all know what it is. I know what it is,” and he walked out of the room. Sami [I.] Harik\textsuperscript{25} tells a story…

DL: Well, Sami’s a lot like that, too, actually.

RD: Well, yes, I think he was influenced [by Merritt]. Sami did a good exam—well, I’m not sure.

DL: He was very instinctive and intuitive.

RD: That’s because he knew everything. Sami Harik knew everything.

DL: Yes. He would pull off some of the wildest diagnoses and he would be \textit{brilliantly} correct or he would go down in flames.

RD: The infectious disease… He was attending someone with an infection and they said he had Tb. He said, “He doesn’t have Tb meningitis.” They call an ID [infectious disease] attending, who writes, “This is an obvious case of Tb meningitis.” So when they presented to Harik, he said, “I’ll take on ID with my left hemisphere tied behind my back.” [DL: (laughter)] That’s the way he was. At any rate, when Sami Harik was at Cornell [University] doing his residency, a very wealthy son of a rabbi—he wasn’t wealthy, he was a prominent person in a Jewish family—was brain dead or something like that and he was brought to see Fred Plum. They wanted another opinion. Plum suggested [Morris] Bender\textsuperscript{26}, or Houston Merritt. “We heard he’s the best.” So they called Merritt in, and Harik was told to really mess up the case, kind of talk about lab results that had nothing to do with anything, whatever it was, but Merritt was right on. He tapped on a couple of reflexes and he had the diagnosis. You couldn’t mess him up.\textsuperscript{27}

\textsuperscript{25} Sami I. Harik, MD, FAAN (born July 27, 1941) is a Lebanese-American neuroscientist and former Chairman of Neurology at the University of Arkansas College of Medicine. See appendix 5 for further information.

\textsuperscript{26} Morris B. Bender, MD (1905–January 23, 1983) was an American neuroscientist and Professor and Chairman of Neurology at the Mount Sinai School of Medicine. See appendix 5 for further information.

\textsuperscript{27} Similarly, when D. Lanska was a Neurology Resident at Case Western Reserve University in Cleveland, Jerome Posner, MD, was invited as a visiting professor from Memorial Sloan Kettering Cancer Center. The Neurology Chief Resident at the time, Arthur P. Dick, MD, decided to present a woman with Briquet’s syndrome (somatization disorder) as a stump-the-professor exercise. Within a few moments Posner had the whole thing figured out. He didn’t slow down or show any puzzlement or hesitation. He quickly elicited her issues with chronic headaches, gastrointestinal symptoms and vague abdominal pain (for which she had undergone numerous unrevealing exploratory surgeries), menstrual difficulties, dyspareunia, and a plethora of different neurologic complaints (episodes of diplopia, dizziness, aphonia, paralysis, etc.). The efficiency and effectiveness of his history taking was phenomenal. I don’t even think he bothered to do anything more than the most perfunctory of exams—he didn’t need to. I remember that Posner then took the assembled group out into the hall, gave an it’s-obvious shrug, and then delivered an outstanding impromptu talk on Briquet’s syndrome and the nature of conversion symptoms. For a young neurology resident, it was a \textit{tour de force} that showed a remarkable mastery of neurology, that was all the more impressive as this was not even an area of apparent clinical interest for him. As the group shuffled away, I heard him gently pull the Chief Resident aside and say quietly, “That’s really not what you should do with a visiting professor.” That was all. Then he went on to the next patient someone else had to show him with the same equanimity that he started with. Strangely enough, the whole thing made a more lasting impression on me, and
He was just brilliant! As a teacher, what the residents would do [is ask,] “How did he come to that diagnosis?” They’d work it out. What were the clues? He would never tell you. But you could finally work it out. He was great!

DL: Some people found that hard to work with, though. They didn’t see the steps involved.

RD: You had to have a certain mind in order to pull that off.

DL: Right.

Let’s go back to Glaser [DL pronounces it Gläzer] for a minute.

RD: Glaser [RD pronounces it Gläser]. His name was spelled G-l-a-s-e-r. His mother and father were Mr. and Mrs. [William] Gläser…Gil Gläser decided that that’s sort of Semitic. Columbia, at the time, had few Jews. So he changed it to Gläser.

DL: In pronunciation, not spelling.

RD: In pronunciation, right.

BWS: But not the spelling.

RD: Not the spelling. He was Dr. Gläser. If someone called him Dr. Gläser, he wouldn’t correct them, but he’d give them a dirty look or something. We’d say, “No, it’s Gläser.” [whispered] Well, Dr. Gläser’s mother, Mrs. Gläser, got admitted to New Haven Hospital. We had a lot of fun saying, “Did you hear that Mrs. Gläser, Dr. Gläser’s mother, was in the hospital?” We played a little game. We didn’t do it with the old man, but that was a game we played with [about] him.

DL: The residents that he trained all respected him highly, as far as I can tell.

RD: Yes.

DL: They had a collective name for themselves…

RD: Gläserian Ganglia.

DL: Which is fairly cute. Do you still consider yourself…?

RD: Oh, yes.

DL: Certainly.

provided a greater stimulus to continually work to improve my own history taking skills and knowledge of neurologic and psychiatric disorders, than if Posner had instead been presented something in line with his areas of clinical and research interest.
RD: Right.

BWS: You were one of them?

RD: I was one of them.

DL: I understand he, like you later did... you both sent residents to meetings to promote kind of a focus on academic neurology.

RD: He was terrific at that. One resident had to stay home, over all three years, almost. Then, it was an in-town attending that you could call if you were in trouble. We went to meetings. It was great!

DL: Let’s talk about Lew Levy [Dr. Lanska pronounces it Lēvy].

RD: Levy [Dr. Daroff pronounces it Lēvy].

DL: I’m not going to get any of those [pronunciations] right, am I? [chuckles]

RD: Lew Levy was a wonderful guy. He did an exam [a thorough neurological examination].

BWS: I’m glad we’re actually hearing these names.

RD: Right. Lew Levy trained at Cornell with the headache guy. I’m blocking.

DL: [Joel R.] Saper?

RD: No. No, no. The guy who wrote the book [Headache and Other Head Pain]. Chairman of Neurology at Cornell before Fred Plum.


RD: Harold Wolff. He [Levy] trained with Harold Wolff and became good in headache, although Wolff was a general neurologist. Then, he went to Louisville and took a fellowship in pediatric neurology with… [Ephraim Roseman]

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28 Lewis L. Levy, MD, FAAN (February 18, 1922 - February 18, 2009). See appendix 5 for further information.

29 Harold George Wolff (May 26, 1898 – February 21, 1962) is generally considered the father of modern headache research, and a pioneer in the study of psychosomatic illness. During much of his career, he was Professor of Medicine and Chief Neurologist at New York Hospital – Cornell Medical Center. See appendix 5 for further information.

30 Ephraim Roseman (January 1, 1913–June 21, 1989) was a neurologist and electroencephalographer, who was Professor of Neurology in the Section of Neurology at the University of Louisville School of Medicine and the Louisville General Hospital in Louisville, Kentucky. However, although Roseman was an adult
Where is Jane? Jane.

JD: Yes?

RD: Who is the guy in Louisville, the attending? We went to his party.

JD: [unclear]

RD: All right. At any rate, he actually did pediatric neurology as well as adult neurology.

DL: But he wound up at the VA of all things.

RD: He was seven-eighths VA, which is thirty-five hours a week. He had enough of a practice so they could see he was the best sort of practitioner. He was great.

DL: He had a particular influence on you, it turned out, didn’t he?

RD: He was a terrific neurologist, clinical. He was a blackboard neurologist. That’s his input. Glaser would just listen when you presented a case and he would look at the chart while you presented. Then he’d do a brief exam and give you what the patient’s diagnosis was and the history of that disorder from the eighteenth century on. Levy was a blackboard person. When you presented a case, he wrote it on the blackboard.

Eph [Ephraim] Roseman!

JD: Ahhh!

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neurologist, “In those years the Adult team usually covered Peds, except in children’s hospitals.” [personal communication from RD to DL on March 19, 2014].

In an oral history interview, a former resident and fellow, neurologist and epileptologist Richard Penrose Schmidt, MD (1921-2008), described Roseman as a “very abrasive and a hard taskmaster.” RD agreed with Schmidt’s assessment [personal communication from RD to DL on March 19, 2014].

Charles D. Aring, MD (1904-1998) noted in an obituary of Roseman that, “he expected everyone to work as hard as he, which on occasion led him to disquisitions on the weaknesses of human protoplasm. But he always recovered soon with a humorous remark or two. He loved live too much to defer to the Philistines. He would not tolerate reduction in standards of any sort.”

See also:
RD: The chairman of the Department of Neurology at the University of Louisville was Eph Roseman, who along with several other distinguished neurologists, was a resident in neurology at Boston City [Hospital] when Joe Foley was a medical student. Eph was a blackboard person. When I went to Fort Knox [in July 1965]—I spent the first few months of my military [service] there—every Wednesday morning, I think, I drove into Louisville and attended Eph’s rounds. We could tell that story a little later. But Lew Levy was trained with Eph and he got to be a blackboard person, which I am now. If someone presents me a case, I’ve got to write on the blackboard.

DL: You even give your introductory lectures to residents on the blackboard.

RD: Well, now I have slides. [chuckles]

DL: Although, at least in my time, you did.

RD: Of course, yes. I was [a] blackboard [lecturer].

BWS: But you still use the blackboard for the –?

RD: Oh, yes, now I do. Oh, yes, when I make rounds with the residents. I only make rounds now at the VA…and [use a] blackboard.

When I was hired for the job [as Chairman of Neurology in Cleveland] and came in May of 1980 to look around, the head nurse of the neurology floor said, “Dr. Daroff, we’re looking forward to you coming in July. What can we do to make your life easy?” I said, “The one thing that irritates me is when there’s no chalk at the blackboard.” [laughter] When I came, she had this big box of chalk and all the nurses wrote my name on each piece, “Dr. Daroff,” which was great. Now, there’s no blackboard. It’s the white board.

DL: I want to come back to one issue with Dr. Levy. There was a case that he was stumped on that got you going in… [neuro-ophthalmology].

RD: That’s right. My first day as a resident at Yale, I’m rotating at the VA… Levy is making rounds. I was the only neurologist. There was a psych[iatry] rotator and two medicine rotators and me. There wasn’t a chief resident at the VA then for a complicated set of reasons. The patient had a supranuclear eye movement disorder. Levy said, “I never really understood this. This really perplexes me.” He points to the group. “One of you has to read about eye movements and give a report to the group.” The psychiatrists and the internists, you know, they’re not going to read about eye movements. It was Daroff.

Several years before, Jane had a sorority sister who married an ophthalmologist. I think I was an intern at PGH [Philadelphia General Hospital] or maybe I was a medical student. We went to visit them and I saw this book on his desk, Neurology of Ocular Muscles by David [G.] Cogan.31 I said to him, “Is that a good book?” He said, “Yes, it’s a very good

book,” so I bought it knowing I was going to be a neurologist. I didn’t read it. I just bought it.

So when Levy said I’ve got to do a thing on eye movement, I read Cogan. I read [Frank B.] Walsh.32 I read [Alfred] Kestenbaum.33 I read everything there was about eye movements and I wrote this paper. It wasn’t ever published, but I have it. I presented it—after, I think, two months or two and a half months into my three-month rotation—to the group. Levy said, “That was wonderful, Bob! That was wonderful. That’s the way to really learn something. You dig into it and you learn everything and, then you go on to something else. Now, I want you to do the bladder.” [chuckles] The bladder? I said, “I’ve got to do stroke. I’ve got to do M.S. [multiple sclerosis]. I’ve got to do real neurology. I can’t do the bladder.” So I refused and I’ve never really understood the bladder, but it hasn’t really thwarted me very much, because very few neurologists do understand it. But Lew did and Fred Plum did, by the way. He’s probably still out on the bladder.

But having read more about eye movements than anybody at Yale including all the ophthalmologists, none of whom was a neuro-opthalmologist, I became as a PG-2 [postgraduate year 2 resident], the Yale authority on supranuclear eye movements—brain, not squints and such. I gave talks to the residents. I said [thought], “Do I really know it?” I wasn’t taught it. I was self-taught. So during my PG-3 year, we had a three-month elective. We could take it anywhere. So I decided to take it in neuro-opthalmology.

I wrote Frank Walsh at [Johns] Hopkins. He wrote me back, “Dr. Daroff. Neuro-ophthalmology is a subspecialty of ophthalmology, not neurology. I don’t believe that neurologists should…” that sort of thing. Cogan said, “I really can’t [take you]. [Try] Lawton Smith.”

So I went to Miami and I spent three months with the great J. Lawton Smith34 and learned a number of things: (1) I really understood eye movements—it was real; and (2) I started

David Glendening Cogan (1908-1993) was an American neuro-ophthalmologist and Former Director of Ophthalmology, National Eye Institute, National Institutes of Health, Bethesda, Maryland.

Frank Burton Walsh (October 18, 1895- November 27, 1978) was a Canadian-American neuro-ophthalmologist.

Alfred Kestenbaum (1890-1961) was a German-American neuro-ophthalmologist.

J. Lawton Smith, MD (1929 – January 10, 2011) was an American neuro-ophthalmologist.
into the general...and I decided to become a neuro-ophthalmologist. I published several papers, went to a neuro-oph meeting in January [1965], and met [William F.] Hoyt, and that sort of led [into it]. Years later, Frank Walsh apologized to me. I convinced him that a neurologist can be a neuro-ophthalmologist.

DL: But before you could pursue that further, something else intervened, didn’t it?

RD: Yes, the military, the Berry Plan\textsuperscript{35}. Doctors were being drafted. The one thing you didn’t want to do after you finished medical school, or after an internship, or even in the middle of the residency... The one thing you didn’t want to do was to be drafted before you finished your residency, because then you were a general medical officer and you were either a battalion surgeon going out with the troops actually in combat or in the United States doing rectals and checking people for hernias at an induction station. Can you imagine spending two years checking eighteen- to twenty-year-old kids for hernias and that’s your first two years after your internship? Deadly! Deadly! Deadly! So I decided to join the Berry Plan.

The Berry Plan was a plan that once you were accepted as a resident, they would allow you to finish your residency, but then you had a two-year obligation as a specialist. You could choose between Air Force, Navy, and Army. I mistakenly chose the Army. The Navy I didn’t want to take because I was thinking about... The Navy, they take care of Marines. The Marines don’t have a medical corps. The Marines like discomfort. They like dirt. They like grime. I didn’t want to be stationed at a Marine place where

\textsuperscript{35} The Armed Forces Reserve Medical Officer Commissioning and Residency Consideration Program, commonly known as the “Berry Plan,” was implemented in 1954 and continued until 1974. It was the brainchild of thoracic surgeon Frank B. Berry, MD, who had accepted an appointment as Assistant Secretary of Defense, because “I was developing a bad tremor in my left hand” and “[I] realized that here was a good opportunity for a second career.”

As a new item in Hospital Topics indicated in 1954, “Assistant Secretary of Defense Frank B. Berry, M.D., urges hospitals not to shut their doors on applicants for residencies who still have military obligations, but to make selections from this group, even on short-term basis. Dr. Berry’s matching plan for meeting military’s medical needs, revealed at Congress on Medical Education and Licensure … has been so well received that Department of Defense will launch plan this spring instead of waiting for end of doctor draft in June, 1955….” [Hospital Topics 1954;32(3):9]

Berry’s undergraduate and medical degrees were from Harvard. Berry served in both World War I and World War II and retired from the military with the rank of brigadier general. He served as Assistant Secretary of Defense for Health and Medical Affairs from 1954 to 1962. His honors included the Gold Medal of Honor of the Medical Service of the French Army and the rank of Chevalier in the Legion of Honor.

See also:
The Society of Medical Consultants to the Armed Forces. Recent history and history of SMCAF. http://www.smcaf.org/History.htm [Accessed February 14, 2014]
everybody is sort of uncomfortable except the Marines. That’s Navy. The Air Force… At the time, we weren’t in a war… [They had a base in] Minot, North Dakota, or South Dakota, wherever they hell that is and they had a base in Alaska. Air Force sent people to all these god-forsaken places. So [I chose the] Army. Then I went to Walter Reed [Hospital]. I was accepted.

I went to the Pentagon to pick an assignment when I finished my residency. I selected Fort Dix, New Jersey, because I frankly wanted to be close to Philadelphia, because I got depressed during my residency, [which was] the second time I got depressed. The first time was when my father died. The next time, I was a second- or third-year resident and one of the neuropathologists committed suicide. I didn’t know him very well. He was classmate of Gerry [Gerald M.] Fenichel at Yale. When I heard he committed suicide, I suddenly just really got depressed. I called Beck and we talked. I think we even went to Philadelphia and I saw him. At any rate, he said, “Try to get to Fort Dix so we can have some time together when you get out and get some more analysis.” I didn’t want to tell them that’s the reason [I wanted to be stationed at Fort Dix] when I went to the Pentagon. So Beck had said, “Tell them Jane was a patient of mine.” He had actually seen Jane socially once.

Actually, he’s responsible for our getting married—sort of. At the time, the notion was you don’t get married when you’re in psychoanalysis. So here we were dating and when are we going to get married? Well, when I finish the analysis. I happened to mention this to Beck during one of my sessions. He said, “Where is that written?” I said, “That’s what everybody says.” He said, “No. Jane is terrific. She’s everything you aren’t. She’s not hostile. She’s not arrogant. She’s not defensive. She’s just a nice person. She will be terrific for you. Marry her.” [chuckles] Okay, at any rate, we got married. That consoled me.

So when I got interviewed by a psychiatrist at the Pentagon, I said, “I wanted to be at Fort Dix because I knew the neurologist there was going to rotate off in a couple years and there would be a spot.” He was a two-year guy like me. I told him and he said, “Have Dr. Beck write me a letter and we’ll set it up.” I called Beck and he said, “You know, I shouldn’t have told you that, because that wouldn’t be telling the truth if I did that. I really can’t. I’m sorry.” So no letter came and I wound up at Fort Knox.

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36 Minot is in north-central North Dakota
37 Gerald M. Fenichel, MD, FAAN, professor of Neurology and Pediatrics at Vanderbilt University Medical Center in Nashville, founded the Department of Neurology there and served as chair from 1969-2001. Fenichel is also one of the editors of Bradley’s Neurology in Clinical Practice, which is now in its sixth edition (2012); Fenichel and Daroff are the only editors who have been with this work since the first edition in 1990. See appendix 5 for further information.

See also:
And the Fort Knox neurologist got sent to Vietnam, not Bob Daroff. Whoever was the neurologist at Fort Knox got sent to Vietnam, because it was the closest base that had a nearby civilian neurologist. It was close to a major city, Louisville, where they had neurology to cover.

BWS: That was the slot?

RD: That was the slot. It's interesting, and I can understand why. I pissed off the psychiatrist. I'd said I would do something and I didn’t. The letter never came. So he punished me.

I met the guy who went to Fort Dix. I met him in Japan. I took a patient [from Vietnam] to Japan—accompanied a patient—and I met a neurologist who was stationed there with his family. Jane wasn’t with me, obviously. He said, “They sent the Fort Dix neurologist to Tokyo after they sent you.” I said, “How did you get to Fort Dix?” He said, “Well, I told them I was born and raised in New York. I did my internship and residency in New York at Mount Sinai. When I get out of the military, I’m going to go back to New York where my family is. I haven’t been anyplace in the United States. Send me anywhere except Fort Dix.” [chuckles; RD pounds his hand on the table] He got sent to Fort Dix and he was unhappy, but he got sent to Tokyo with his family. So he was very happy, at that. That’s a perversity.

I’ve got another perversity story I could tell about the military where they do something counterproductive, almost hostilely.

DL: This all stemmed from the Berry Plan?

RD: The Berry Plan.

DL: And he [Frank Berry] was a surgeon who had a tremor and he couldn’t practice surgery anymore. He was looking for opportunities. So he accepted the job as Assistant Secretary of Defense and wanted to make a good impression going in and concocted this scheme which got named the Berry Plan.

RD: It’s no longer in existence, I think.

DL: No, no, it’s gone. It ended.  

RD: Well, the Armed Forces, uniformed services, they produce their own physicians now.

BWS: The draft was still on at the time.

RD: Oh, yes, the draft was on.

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38 The Berry Plan ended in 1974.
BWS: From the Korean War.

RD: Throughout the Vietnam War, the draft was on until we got out of the war, which was 1973.

BWS: You were stuck...you were caught right in the middle of it.

DL: So you found yourself in Vietnam in an Evacuation Hospital.

RD: Yes. They rushed us over there aboard a ship, twenty-three days.

Did I ever tell you about the first day out? I tell this story to residents. You’ve had a bad day? Everyone’s had a bad day. Well, I’ll tell you what a bad day is really like. Then, I draw a picture of the ship we were sent over—the U.S.S. Eltinge [U.S.S. General LeRoy Eltinge]. It was a World War II ship they took out of mothballs. There were about fifty [Army] officers on the ship, including our group, the neuropsychiatry group: one neurologist, three psychiatrists, two social workers, and a psychologist—a team. We were the only neurologist and psychiatrists. We were going to wind up in Saigon in the Third Field Hospital, which was great. That comes later.

The first day out, we hit a storm and there was an obligatory fire drill. So all of us, we don’t have our sea legs. The boat is flopping around like that [RD illustrates with his hands]. We had to go out on the deck. There were two decks. There’s the first deck and then the deck above us, which went way out. The officers were on the first deck. Above us, way out, was the second deck where the enlisted men were. They had to go up there. They couldn’t mix with the officers. So we go out on the officer’s deck. Here we are with our flak jackets [sic, life preservers] on and I don’t want to be the first guy that vomits. Sooner or later, someone is going to vomit and that’s going to be it. Well, what happened was the guys up there—the enlisted personnel—started vomiting over the edge and it swept in over us. So there we were, swept in with all this vomit, and we were sliding on the ground vomiting.

I say, “That’s a bad day. So the next time you think you’re having a bad day, just remember that.” All right. That’s the bad day.

Then, we finally get to Saigon and there’s a big band and all the combat units are being met and we weren’t. It was about two o’clock in the morning. There was no one there to pick us up. We don’t have you on board. It was the 935th Medical Detachment KO. Medical attachments had initials. KO was the neuro-psychiatry attachment. They didn’t have us on the list. So they said, “We have to send you to Tent City B,” where we send wayward soldiers who have no place to go.

So we get off and we pile on these trucks, “deuce-and-a-half” trucks. That’s what they were called. They were two and a half tons. The truck driver said to me, “Get out your weapons, because we’re going through enemy territory.” Our weapons are packed. We don’t have any weapons. “What?” He yells at his buddy, the other driver. “Just my
luck. I’ve got a bunch of cherries and they don’t have any weapons.” A cherry is a
beginner. He gave me an M-14 or something and said, “Stand up and hold it.” It wasn’t
loaded. “Act like you’ve got a weapon.” So that’s what I did and we went to Tent City
B.

The next day, they found us. The head of psychiatry found us. They had us on the wrong
day and he apologized. That’s when he told us that we were going to be stationed at a
hospital in the jungle. What? We thought we’d be in Saigon at the Third Field Hospital
living in a villa. He said, “We have found that psychiatric casualties do better if
hospitalized in a facility that simulates field conditions.” If you take a kid who cracks up
in the jungle and put him in this nice clean hospital in Saigon, warm water, hot water
showers, good food, nurses dressed in white, no mortars coming in, no rats and snakes
crawling around… [He ends up thinking,] “I don’t want to go back out there [into combat].” [If] you put him in our place, mortars coming in, no hot water, no water
actually… There’s no drinking water for the first several months. I was drinking beer,
eleven cans of beer, just insensible water replacement. There were snakes. There were
rats [and] spiders crawling around. [They start thinking,] “I was safer out there.” “Yes,
son, you were.” I said, “But I’m a neurologist” [To which came the reply,] “You’re
attached to the psychiatrists.” So there we were.

DL: But you managed to meet Frank [Francis M.] Forster39 anyway, didn’t you?

RD: Well, I evacuated a patient back to Japan. I needed to be on the plane with him for
medical reasons and also I wanted to go to Japan.

I heard that Frank Forster, who was then Chairman of Neurology at Wisconsin—he had
been at Georgetown, he was in Wisconsin—an old friend of Joe Foley, one of the

39 Francis Michael Forster (1912-2006). Forster was the last survivor of the “Four Horsemen,” a nickname
given to the four neurologists – Forster, Abe B. Baker (1908–1988), Russell N. DeJong (1907–1990), and
Adolph L. Sahs (1906–1986) – who were most instrumental in founding the American Academy of
Neurology under Baker’s leadership in 1948. During his career, Forster served as President of the
American Academy of Neurology (1957-1959), the American Board of Psychiatry and Neurology (1960),
the American Epilepsy Society, and the Pavlovian Society, and was a consultant to the Surgeons General of
the Air Force, Navy, and the U.S. Public Health Service. In 1993 Forster received a Distinguished Service
Award from the American Academy of Neurology, and in 2005, the American Academy of Neurology
recognized his leadership in neurology over the course of his career by establishing the Francis M. Forster
Leadership Fund to support young investigators conducting clinical research. See appendix 5 for further
information.

Forster was a raconteur with a self-deprecating sense of humor. When Forster was honored in September
2005 at an American Academy of Neurology Foundation event in Cincinnati for his “lifelong efforts to
advance the field of neurology,” he remarked: “The city of Cincinnati has [also] recognized my
contributions by placing a plaque at my birthplace. It says, ‘Vine and Calhoun.’”

See also:
1. Lanska DJ. The founding of the American Academy of Neurology. American Academy of Neurology
founders, [one] of the Four Horsemen of the American Academy of Neurology… He, too, was a resident in neurology when [Joseph] Foley was a medical student at Boston City. I heard that Frank Forster was coming the following month to tour Air Force facilities and military facilities in Japan, because he was the Air Force Consultant in Neurology. I said, "I’m going to write him and tell him my sob story":

"Dear Dr. Forster. Here I am a neurologist [in Vietnam] trained by Gil Glaser and I’m practicing neurology. I’m the only neurologist here. I’m seeing a lot of people [soldiers] who pass out. There’s no EEG [Electroencephalography] machine. I’m having to make diagnoses of epilepsy and non epilepsy without…”—Forster was an epileptologist—“It would be great if you could come and visit me and really help me with these patients.”

I must admit, I had a secondary game. I knew they weren’t going to let him come, let a civilian come. So what happened?

I get a letter from him saying, “Dr. Daroff, I’d like to talk to you, but they won’t let me come. I’ve arranged for you to get TDY”—temporary duty—“for two weeks in Japan with me, following me around.” That was just great! It was wonderful! First of all, I got out of Vietnam for two wonderful weeks, [and I] became very, very close to Frank Forster, very close. He almost became like an uncle. It was mutual, because he was sick when he was over there, had all sorts of belly problems and stuff, and I was pretty supportive of him. It turned out very well.

DL: You kept up with him forever.

RD: I kept up with him to the very end.

I don’t know if I ever told you about “What do you do when you’re stuck and you don’t know what the hell the patient has?” Well, we went around to these military facilities and he actually was pretty slow. There were about four neurologists stationed in Japan, including the guy from Mount Sinai, John [H.] Ferguson, who was one of Foley’s residents, who was [in the] Air Force. And there was a Navy neurologist. They followed [him] around. We’d go to these military hospitals and Forster was slow. We, the neurologists, the kids right out of our residency, would pick up—[RD snaps his fingers several times]—on the diagnosis before Forster. He said to me, “You know, I’m pretty slow.” I said, “No, you’re not. You’re terrific.” He said, “No, I’ve been on sabbatical for six months. I haven’t examined a patient for six months. These are the first patients I’ve examined. It takes me a while to get in the groove.” I thought to myself [that] he’s been at it for thirty-five years. Six months and he’s out of the groove? I’ll never get out of the groove. [RD taps his hand on the table] Of course, I’ve broken that recently and I’m out of the groove. But that was important, that you sort of have to keep it up—at least go to grand rounds if you’re in a lab or do something like that—to stay with it.

In addition to the American hospitals, they took us to this Japanese hospital, this big amphitheater. There were nurses and everyone in there. They presented a case to Dr.
Forster. They had a resident who allegedly spoke the best English to present the case. He was nervous. We didn’t understand what the hell he was saying. It was mostly English so broken by Japanese that we looked at each other [wondering] what the hell it is. Every now and then we’d hear [the word] “ataxia,” “nystagmus,” something… So we knew it was in the posterior fossa, but that’s about it. What the hell is Frank going to do? Dr. Forster got up and he said, “May I borrow a stethoscope?” Somebody gives him a stethoscope. He takes the stethoscope and he puts it in the patient’s ears, and then he listens to the end, to the bell. Everyone is [whispering] “What the hell is he doing?” We were looking at each other. He takes it out and he says, “Sometimes, with posterior fossa disease, you get stapedius myoclonus and you can hear the click.” That was it. He went on. That settled it. Nothing he could say after that made any difference. That was wonderful.\(^{40}\) I do that occasionally, but I always tell this story first. And he was wrong. It turns out that you don’t get stapedius myoclonus except if you have essential

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\(^{40}\) In 2006, Daroff had recounted this experience with Forster while both were in Japan: “Upon finishing my neurology residency in June 1965, I entered the Medical Corps of the US Army and, several months later, received orders for Vietnam. Sometime in the spring of 1966, I heard that Frank, then Chair of Neurology at the University of Wisconsin, was visiting US military bases in the Pacific, in his capacity as the Neurological Consultant to the Air Force. I wrote him, requesting that he get permission to consult with me in Vietnam and advise me on distinguishing, without the availability of electroencephalography, among faints, fits, fugue states, and fakes. To my delight, Frank arranged for me to spend a week in Japan accompanying him on his tour. As a courtesy, he also made rounds at a Japanese teaching hospital in Tokyo. We were in a large room with the patient on a litter, surrounded by scores of Japanese faculty, trainees, students, and nurses. In addition to me, other US military neurologists stationed in Japan were in attendance. The resident presenting the case in English was extremely nervous and none of the Americans, Frank included, understood much of the presentation. We could recognize only a few English words, such as “sudden onset,” “ataxia,” and “dysarthria.” Our Japanese hosts were undoubtedly expecting a brilliant clinical performance from this distinguished senior American neurologist, and we young Americans wondered what Frank would do. We knew he hadn’t a clue as to the patient’s history or examination, except that it was probably a vascular event in the posterior circulation. Frank immediately requested a stethoscope. We suspected he would listen for bruits, but he put the earpieces in the patient’s ears, and the bell up to his own ear. No one knew what he was up to. Finally, Frank removed the stethoscope and said something like, “Sometimes with posterior circulation strokes, there is palatal myoclonus, and one can hear the clicking of the patient’s Eustachian tubes through the stethoscope.” It was a great moment of salvation. The Japanese professors nodded to each other, and the residents who understood English translated it to their colleagues. Frank didn’t hear any clicking, and the patient didn’t have palatal myoclonus, but there was a profound relief of tension among the Americans.

I don’t recall what happened next with the patient, but everyone seemed contented. It is irrelevant whether Frank knew that, as distinct from idiopathic nonlesional palatal myoclonus, the symptomatic variety secondary to cerebellar or brainstem lesions are almost never accompanied by auditory clicks [Deuschl et al 1990]. … [It] didn’t matter. The rounds were salvaged.”

Ludwig Gutmann replied: “Dr. Daroff’s anecdote captures the essence of Frank Forster’s teaching style. Always kind and gracious, he was the ultimate showman with the unique ability to make neurology fun and exciting. He was not always right, but he never left his audience in doubt.”

See also:
myoclonus [sic]. You only get it if you have the oculo-pharyngeal muscular dystrophy [sic] with oculo-pharyngeal myoclonus. You don’t get stapedius myoclonus with that. But that’s an aside. He pulled it off and it was great.

41 D. Lanska’s analysis of the literature suggests that Forster was not wrong.

Objective tinnitus is a perceived sensation of sound that occurs in the absence of external acoustic stimulation but that can also be heard by the examiner (eg, spontaneously or by placing a stethoscope over the patient’s external auditory canal) (Lanska 2014). Objective tinnitus can occur with either palatal myoclonus or middle-ear myoclonus (including stapedial muscle myoclonus) (Lanska 2014). Objective tinnitus associated with abnormal clonic muscular contractions of palatal or middle ear muscles may occur as an intermittent series of sharp, regular clicks, or with palatal myoclonus as a fairly regular, continuous clicking sound (Lanska 2014). The clicks occur over a wide frequency range in different patients (ie, from 10 to 300 Hz). Middle ear myoclonus has also been described as buzzing (thought to be due to stapedius movement), drum-like thumping (apparently especially with tensor tympani myoclonus), throbbing, tapping, crackling like a grasshopper, bubbling, ticking, twitching, blowing, whooshing, or gushing (Ellenstein et al 2013).

Rhythmic palatal myoclonus can be dichotomized into two relatively distinct types: (1) symptomatic palatal myoclonus and (2) essential palatal myoclonus (Deuschl et al 1990). Symptomatic palatal myoclonus is associated with present or past organic disease of the central nervous system, particularly of the brainstem and cerebellum, whereas with essential palatal myoclonus the medical history, the subjective complaints, and the neurological examination give “no hint of any related neurological disease” (Deuschl et al 1990:1647). Palatal myoclonus may be associated with objective tinnitus because of repetitive Eustachian tube opening and closing and resultant fluctuating middle-ear pressures (Stack et al 1986; Toland et al 1984; Virtanen 1983; Deuschl et al 1990). This may sometimes be audible to an examiner even without a stethoscope (Fabiani et al 2000). Objective tinnitus (“ear clicks”) is more common in patients with essential palatal myoclonus compared with those with symptomatic myoclonus, but it occurs in both (Deuschl et al 1990). Furthermore, given that symptomatic cases are approximately 3 times more frequent than essential cases, symptomatic cases with objective tinnitus are not, in fact, so rare. In an extensive literature review by Deuschl and colleagues (1990), 16 of 192 (8%) cases with symptomatic rhythmic palatal myoclonus had objective tinnitus, compared with 64 of 71 (90%) cases with essential rhythmic palatal myoclonus; of those with rhythmic palatal myoclonus and objective tinnitus, 16 of 80 (20%) had the symptomatic form of rhythmic palatal myoclonus (Deuschl et al 1990).

Middle-ear myoclonus is thought to be secondary to abnormal movement of the tensor tympani muscle and/or the stapedius muscle. The tensor tympani muscle (innervated by a branch of the mandibular division of the trigeminal nerve) inserts into the handle of the malleus and acts to dampen the noise produced by chewing. The stapedius muscle (innervated by a branch of the facial nerve) inserts into the neck of the stapes and acts to dampen stapedius vibration, thereby helping to control the amplitude of sound waves transmitted to the inner ear, and protecting the inner ear from high noise levels (particularly transmission of loud sounds from the subject’s own voice). Stapedius myoclonus may be precipitated by loud sounds and is often associated with facial nerve pathology (eg, hemifacial spasm and sometimes with Bell’s palsy) (McCurdy 1985). Middle ear myoclonus has also been reported in a patient with multiple sclerosis (Zipfel et al 2000). Inspection of the eardrum can demonstrate subtle movements due to contraction of the tensor tympani (Cohen and Perez, 2003), but this presumably does not occur with stapedius muscle myoclonus. Tympanometry in middle ear myoclonus may demonstrate rhythmic changes in middle-ear compliance (Abdul-Baqi 2004). Weak clicking sounds can be heard around the affected ear by auscultation in patients with middle ear myoclonus (Abdul-Baqi 2004), but can also be heard audibly without auscultation in some patients, and can also be recorded using a microphone placed within the ear canal.

See also:
DL: He gave you some advice there.

RD: Yes, “Keep records.” I had been there [in Vietnam] about three or four months and I just kept sloppy records. So [thereafter] every patient I saw, I kept records. So I had enough to write three papers on cerebral malaria, or four papers.42

RD: I gave the collection to Texas Tech, where they have the Vietnam Institute. They know that they can’t really open it, because it’s confidential with HIPAA [Health Insurance Portability and Accountability Act] and everything else, but every name, serial number, diagnosis of the patients that I saw [after being with Forster is in there].

DL: You told me you had that record retained even when I was a resident.

RD: I wasn’t involved with that Armed Forces Institute. They became…late, mid 1980s, something like that. I visited them, made a trip there, and gave a talk there. I became a life member. I sent them the book, but I copied it.

DL: The business of Forster’s recommendation regarding records was certainly not novel with neurologic clinicians in wartime. [Harvey W.] Cushing43 during World War I, [Silas] Weir Mitchell44 in the Civil war, etcetera… There was kind of a tradition of that.

42 Daroff’s papers on cerebral malaria from his military experience in Vietnam:

43 Harvey Williams Cushing, MD (April 8, 1869 – October 7, 1939). During World War I, Cushing was briefly in France in 1915 at the military hospital established at Neuilly outside of Paris, and again from 1917 to 1919 as chief of Base Hospital No. 5. Cushing experimented with the use of electromagnets to extract fragments of metallic missile shrapnel that were lodged severely within the brain. In 1918, Cushing was made senior consultant in neurological surgery for the American Expeditionary Forces in Europe during World War I. He served in the U.S. Army Medical Corps, attaining the rank of Colonel. In that capacity, he treated the only child of Sir William Osler (July 12, 1849 – December 29, 1919), Lt. Edward Revere Osler (December 25, 1895 – August 30, 1917), who was fatally wounded during the third battle of Ypres.

In 1918, not very long after the report in 1916 by French neurologist Georges Guillain (3 March 1876 - 29 June 1961) and colleagues of what became known as the Guillain-Barré syndrome (or Guillain-Barré-Strohl syndrome), based on their study of two French soldiers afflicted with this, Cushing was stricken with a debilitating case of the syndrome that prevented him from operating and forced him to bed for over a month. This problem developed about 6 weeks after a viral illness in August that he labeled “the grippe.” Cushing’s clinical findings included symmetrical lower extremity weakness and paresthesias which progressed to involve the upper extremities, with associated areflexia, bilateral facial and bulbar paresis, periods of diplopia and irregular pupils, fever, and later muscle wasting affecting particularly the legs. Although increasingly fearful that he would become a permanent invalid, by mid November—shortly after the Armistice—Cushing was improving. Despite several earlier reports of Guillain-Barré syndrome during the war, no one who saw Cushing at the time felt able to make a confident diagnosis (including Cushing himself); Cushing in retrospect felt he must have had louse-borne trench fever, and, curiously, Guillain in an obituary of Cushing in 1939 briefly referred to Cushing’s wartime illness as an unspecified polyneuritis.
Cushing’s illness was finally diagnosed as Guillain-Barré syndrome in 1987 by neurologist Stephen Reich MD, one of RD’s former’s residents and now The Frederick Henry Prince Distinguished Professor in Neurology at the University of Maryland School of Medicine.

See appendix 5 for further information including further biographical sources.

See also:

44 Silas Weir Mitchell, MD (1829-1914). American neurology had its birth in the American Civil War, particularly with the work of Mitchell. Mitchell began his military service as an assistant contract surgeon under Richard J. Dunglison (Nov. 13, 1834 - Mar. 4, 1901) at the 430-bed Filbert Street Hospital. Based on Mitchell’s expressed interest in cases with neurological disorders, Surgeon General William Hammond (1828-1900) set aside a larger ward for neurological cases. According to Mitchell, when the neurology ward “overflowed with cases” Hammond ordered the establishment of the 220-bed U.S. Army Hospital for Diseases of the Nervous System. This hospital opened on May 5, 1862 and George Reed Morehouse (1829-1905) and William Williams Keen (1837-1932), both then acting assistant surgeons, were ordered to join Mitchell at this facility. Again the available space “proved insufficient” and “a suburban estate on Turner’s Lane was rented in August, 1862, and pavilions built for 400 men.” The formation of this larger army hospital for nervous diseases had been suggested by Mitchell, and approved and supported by Hammond. Upon opening of the Turner's Lane Hospital in Philadelphia, Mitchell was placed in charge at the age of 33. There, with Morehouse and Keen, Mitchell studied gunshot wounds and other injuries of the peripheral nerves. Several monographs were published based on this work: Gunshot wounds and other injuries of nerves (1864) by Mitchell, Morehouse, and Keen; Injuries of nerves and their consequences (1872) by Mitchell; and Remote consequences of injuries of nerves and their treatment (1895) by John Kearsley Mitchell (SW Mitchell’s son). Mitchell also published journal article, other monographs, and even novels on a wide variety of neurological topics stemming from his Civil War experience: the topics included phantom limbs, causalgia, posttraumatic epilepsy, neurasthenia, and malingering. These publications brought international attention to American neurologists during the post-war reconstruction era. As noted by Mitchell: "Never has such an opportunity for the study of nerve lesions and their results presented itself. A multitude of cases, representing almost every conceivable type of obscure nervous disease was sent to us..."

See also:
RD: Among the giants, not amongst a little kid. Okay, sure. That’s what Forster picked up on. Exactly.

DL: Those records, in your experience there, your meticulous records later proved, I think, important when you testified about Agent Orange, did they not?

RD: Well… I didn’t need those records for that testimony. I didn’t see anybody in Vietnam with anything that could reasonably be called Agent Orange [neuropathy] and during my twelve years at the University of Miami at the VA Hospital, seeing hundreds and hundreds and hundreds [of Vietnam veterans], I didn’t see anything that seemed reasonable to attribute to Agent Orange. Everything else was more reasonable [as a diagnostic explanation of their issues]. There were three neurologists, Labe [C.] Scheinberg, the chairman of neurology who succeeded Labe at [Albert] Einstein [College of Medicine] who had spinal muscular atrophy… I’m blocking on his name. [Herbert H. Schaumburg] We all agreed. We all saw the patients. I think there were twelve or thirteen neurologists [sic, veterans] representing the class with various different problems and there was always an explanation other than Agent Orange.

The one that really got to me was someone who said that his son, after he got back from Vietnam, was born with polydactyly. Why did he have polydactyly? His doctor said, “Maybe it’s due to your exposure to Agent Orange.” Okay. How the hell do you disprove that? While I was examining him, I see a scar here and a scar here. [RD points to his hands in the area of his fifth metacarpalphalangeal joints]. The father had polydactyly. He didn’t fess up on it. In retrospect, maybe the doctor said, “Well, maybe it wouldn’t have been genetically passed if you weren’t exposed to Agent Orange.” Whatever it was, but it wasn’t anything that was clearly due to Agent Orange.

But it had [a] cost at that time – I think there were five or six drug companies involved in the suit. What irritated me [is that] they were producing Agent Orange at the behest of the government who told them exactly what they wanted chemically. So these companies did what the government did [requested], [and] gave the stuff to the government. They get sued and the government [didn’t support them]. I thought that was grossly unfair. At

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45 Labe C. Scheinberg, MD (December 11, 1925 - February 22, 2004) was Professor and Co-chairman of the Neurology Department, as well as Dean, at Albert Einstein College of Medicine in New York City. See appendix 5 for further information.

46 Herbert H. Schaumburg, MD, FAAN (born November 6, 1932) is Professor of Neurology and Pathology, and former Neurology Department Chairman, at Albert Einstein College of Medicine. See appendix 5 for further information.
any rate, the companies settled for $18 million. The lawsuit had already cost them about that just defending it. So it seemed reasonable [to settle].

Now, in more recent years, as we age, the Institute of Medicine did a study and said, “We cannot rule out Parkinsonism, coronary artery disease, several others that occur in older people, that tend to occur in younger older people if we were exposed,” and all of us were exposed.47 So they couldn’t rule out that Parkinsonism…couldn’t rule it out, so Congress ruled it in. So Parkinsonism is service connected. I have coronary artery disease. I’m ten percent service connected. I’m proud of it, because who the hell doesn’t have coronary artery disease when they’re seventy?

DL: But as far as you’re concerned from the evidence at hand, do you believe that Agent Orange causes neuropathy?

RD: I didn’t see it. We didn’t see unexplained neuropathies during my twelve years in Vietnam [sic, at the Miami VA Medical Center]. I did see it in Vietnamese. I saw several. Periodically, we’d go to Vietnamese hospitals and I saw a fair amount of neuropathy. Maybe their exposure was different. I don’t know.

DL: Maybe it was beriberi.

RD: Who the hell knows what it was? We didn’t know what it was. They didn’t know what it was.

But I think the Institute of Medicine handled it correctly. We can’t rule out a causal relationship. The Congress, probably at that time, must have been a Republican Congress, right? They’re pro-soldiers, you know, so that’s it.

DL: Forster had, over his career, quite a number of celebrity consultations. He saw President [Dwight D.] Eisenhower after a stroke.48 He was called to the White House. He saw several other foreign heads of state and several religious, prominent individuals.49

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47 In the most recent update (2012) of the original Institute of Medicine report (1994), the committee concluded that there is “limited or suggestive evidence of an association” with early-onset peripheral neuropathy.

See also:

48 In 1957, while Dean at Georgetown’s Medical School, Forster was called to the White House—along with neurologists H. Houston Merritt MD and James F. Hammill MD, both of Columbia, and Lieutenant Colonel Roy Elwood Clausen Jr, Chief of Neurology at Walter Reed Hospital—to treat President Dwight D. Eisenhower (1890–1969) after Eisenhower’s stroke. Eisenhower developed a mild anomic aphasia while speaking to his secretary on November 25, 1957. When Forster examined him later, Eisenhower’s pulse was regular and he had no sensory or motor deficits. Forster and his colleagues diagnosed a branch occlusion of the left middle cerebral artery. After remaining in seclusion for several days, Eisenhower returned to work, although he was still having word-finding difficulties and was making occasional
RD: Yes, and Jack Ruby.\footnote{50}

DL: Yes, and Jack Ruby. He was at least called on as part of the witness for the prosecution of it.\footnote{51}

paraphasic errors. Richard Nixon later wrote that when Eisenhower returned to the White House, Eisenhower described “the ordeal that simple speech had become. He complained that when he wanted to say ‘ceiling,’ it would come out ‘floor.’ When he wanted to say ‘window,’ he would say ‘door.’” Eisenhower’s speech remained fluent with only mild hesitancy and occasional stumbling. During a follow-up visit a day or two after the President’s stroke, Forster counseled Eisenhower against taking a scheduled trip to Paris for a NATO conference, but Eisenhower dismissed this idea: “If I can’t do the job, I’ll turn in my uniform.”

At the time of Eisenhower’s stroke, there was no constitutional basis for deciding who was in charge in the case of the incapacitation of the President; the following year, because of mounting concern about the President’s health status, Eisenhower wrote a letter authorizing Vice President Richard Nixon (1913–1994) to assume command if Eisenhower became incapacitated. The 25th Amendment to the U.S. Constitution, which clarified succession issues for both the Presidency and Vice Presidency, wasn’t ratified until February 10, 1967—a decade after Eisenhower’s stroke.

See also:

In addition to President Dwight D. Eisenhower (1890-1969), Forster’s other famous patients included the following: Eduardo Lonardi (1896-1956) who was later to become de facto President of Argentina; Philippine President Eplidio Quirino (1890-1956); Philippine Archbishop Gabriel Martelino Reyes (1892-1952); and Chicago Cardinal Albert Meyer (1903-1965).

See also:

\footnote{50} Jack Ruby (born Jack Leon Rubenstein; 1911-1967) was a nightclub owner in Dallas, Texas. On November 24, 1963, Ruby fatally shot Lee Harvey Oswald (1939-1963), who was in police custody after being charged with the assassination of John F. Kennedy (1917-1963) two days earlier.

\footnote{51} In 1964, while Chairman of Neurology at the University of Wisconsin, Forster was called as an expert witness for the prosecution at the trial of Jack Ruby in the slaying of assassin Lee Harvey Oswald. Ruby’s defense attorney, Melvin Belli (1907–1996)—known by detractors as “Melvin Bellicose”—argued that a rare form of epilepsy caused Ruby to kill Oswald. Forster examined Ruby and reviewed his EEG and then testified that Ruby did not have epilepsy. Forster argued that the 6 Hz positive spikes on Ruby’s EEG were not evidence of epilepsy (they are now considered as a normal variant), and that Ruby’s ability to perform many deliberate acts (e.g., concealing, pulling out, aiming, and shooting his gun) was inconsistent with an epileptic seizure. In retrospect, based on current knowledge of EEG and epilepsy, Forster was correct in his assessment.

See also:
RD: Who was that famous EEGer at Harvard? He and his wife… Anyhow, I’m blocking. [Dr. Frederic A. and Erna Gibbs52].

That’s one of the things I’ve discovered: [as you age you lose] proper [nouns and] names—there must be a place in the brain for proper [nouns and] names. I’ll find it. You have to get around it.

At any rate, there was some EEG pattern that was said to be associated with a disease that caused epilepsy – and maybe Jack Ruby had epilepsy. He testified, this Harvard guy [Gibbs]. Forster, who learned his EEG from this guy while he was at Harvard as a resident, he and all the EEGs like Glaser and all those guys, they dismissed that stuff once they got into it. Forster testified for the defense.

DL: The prosecution.

RD: I’m sorry. For the prosecution, right. He testified for the prosecution. Then, what happened?

DL: The jury sided with Forster and they convicted him [Jack Ruby] of murder, but then that got overturned later on a technicality.53

RD: I didn’t know that. So where is Jack Ruby now?

BWS: He’s dead.

DL: He’s dead, yes. [chuckles]

52 Frederic Andrews Gibbs (1903–1992) was a pioneer in the use of electroencephalography for the diagnosis and treatment of epilepsy. Although Gibbs joined the Harvard Neurological Unit at Boston City Hospital, he did not complete a neurology residency and was never board certified in any medical specialty. See appendix 5 for further information.

53 Despite the defense attorney’s best efforts, and pro-defense testimony of electroencephalographer Frederick A. Gibbs (1903–1992), that Ruby suffered from a seizure disorder of the psychomotor variant type, the jury sided with Forster and the prosecution and convicted Ruby of murder. Later, the verdict was overturned when an appellate court ruled that the defense should have been given a change of venue outside of Dallas. However, Ruby died in prison before a new trial could be held.

After Forster’s death in 2006, a collection from Forster’s personal files related to the Ruby trial, including original and photocopied documents and letters, was identified among materials received by Half Price Books. In 2008, these records were donated to The Sixth Floor Museum at Dealey Plaza in Dallas, a museum that chronicles the assassination and legacy of President Kennedy.

See also:
RD: As is Lee Harvey Oswald.

DL: Yes. But where I was going with this… He [Frank Forster] was kind of a mentor to you, a role model, if you will. You yourself have had some celebrity consultations, have you?

RD: In the Middle East, primarily.

DL: Can you speak to any of those?

RD: Well, I sort of became a headache specialist in addition to a neuro-ophtalmologist. Lew Levy, as I mentioned, was trained by Harold Wolff. He knew more about headaches than anybody else at Yale. So I knew about headaches. In the Army, of course, I saw headaches. But when I got to Miami, Bob [Robert A.] Davidoff was into headaches but he didn’t see patients. He was just strictly at the VA.

Peritz Scheinberg wanted to computerize records in 1968. He wanted us to keep records of every diagnosis we saw. We’d check it off. Under headaches it had, “Headaches, psychogenic.” There was no other headache. I said, “Peritz, how come you have headaches, psychogenic?” He said, “Why not?” I said, “If they have a brain tumor, I’d put brain tumor. If they have meningitis, you put meningitis. What about migraines?” “Well, that’s psychogenic. Tension headaches are psychogenic.” So that was that. He wasn’t going to be a headache doctor, because he was going to call every headache “psychogenic.” Nobby [Noble J.] David[^54], my buddy, would tell patients, “Well, when I

[^54]: Noble Jonathan (“Nobby”) David, MD, FACP, FAAN (December 20, 1927 – November 30, 2011) was an American neurologist and neuroophthalmologist. In 1962, he joined the faculty at the University of Miami School of Medicine, where he became Professor of Neurology and Ophthalmology and Chief of the Neurology Service at the Miami VA Medical Center. He was a pioneer of fluorescein angiography. See appendix 5 for further information.

In an autobiographical account, David remarked on his experience with Daroff at the Miami VA: “In 1968, Robert Daroff, MD, joined me at the VA and set up his studies of ocular motility. For the 12 years that he remained in Miami, I enjoyed the company of an ideal colleague and friend. His many successes have not surprised me.”

In an interview with Trobe in 2002, David recounted, “Bob Daroff (MD) came down to spend six months as a fellow with Lawton Smith in 1965. Lawton would come to the VA once a week, have rounds, and then go off to lunch. We’d show him our best cases, and he’d tune into whatever kind of research we were doing…. In 1966, Daroff, who was in the military, told me he’d like to come back to Miami to work with me at the VA. When Daroff got out of the army, he spent a year with Bill Hoyt in San Francisco. And when he finished, although San Francisco had offered him a position, he elected to come back here in 1968. He was my first faculty recruit. …. Small amounts of research money were easy to get then. Daroff wanted to study ocular motion. We got the money for him, and soon Lou Dell’Ossio (PhD) and Larry Abel (PhD) and others joined him.”

See also:
get a headache, I just drink a few tumble-fulls of Scotch and I go to bed and I wake up without a headache.” Well, that’s his therapy. That’s not something you could…

So I, by default almost… Since most people have this erroneous belief that headaches are due to eye problems, which they rarely are due to, a lot of headache patients wound up going to the Bascom Palmer Eye Institute in Miami. Since I had a joint appointment at the Eye Institute as a neuro-ophthalmologist, they’d examine these headache patients and say, “There’s nothing ophthalmological,” and they’d send them to me. So I became a headache specialist.

Now, I don’t know what happened first. Two things happened. A princess in the United Arab Emirates [UAE], the daughter of Sheik Zayed55 who was the head of the UAE, had terrible headaches. She had such a bad headache, she couldn’t leave the palace. That’s a bad headache. They had Frank Clifford Rose56 come from London, and various other people, and she still had a headache. Somehow…somehow, the royal physician found my name. It was under some headache something or other. He called me and asked me whether I’d come and exam the princess for these intractable headaches. I said, “Will you send me the records?” I saw she’d been on everything except DHE 45 [dihydroergotamine] intravenously. So I brought it there and got rid of her headaches. She was happy.

It was an interesting exchange. She was in the palace with a British nurse and they always have nurses who don’t speak Arabic in the room so they can talk privately with their relatives and they don’t have to worry about the nurse. She was a very lovely lady, and I was examining her, and I get to the knee jerks. I pull up her gown and she said, “Oh!” She had a reflex [withdrawal] response and the British nurse said, “Oh, you saw the princess’ knees!” No one ever told me that knees were something. [DL: (chuckles)] She pulled herself together and apologized and I tapped on her knees, which were normal. But every time I examine a woman now and I pull up skirt to examine her knees, I get this flashback of the princess.

At any rate, she got rid of her headache. She was very, very happy and Jane I both got very expensive watches. Mine is in the safe. Jane is wearing hers now. The insurance on the watch costs more than most watches. This guy was very, very grateful to us. Then he found out that the princess, the wife of the King of Bahrain, had a neurological problem and I wound up seeing her.

[Accessed March 31, 2014].

55 Zāyed bin Sultān Ál Nahyān (c1918 – November 2, 2004) was the principal driving force behind the formation of the United Arab Emirates (UAE), the Emīr (ruler) of Abu Dhabi, and first Raʾis (President) of the UAE, a post he held from 1971 to 2004.

56 Frank Clifford Rose, MBBS, FRCP (August 29, 1926 - November 1, 2012) was a British neurologist who was was director of the academic unit of neurosciences at Charing Cross and Westminster Medical School, London. One of his clinical interests was migraine. See appendix 5 for further information.
Then, started Vietnam [sic, Saudi Arabia].

You weren’t here with Sami Harik, were you?

DL: I was, yes.

RD: Let’s see… It wasn’t Sami who did this.

We had a resident from Saudi Arabia — I’m blocking on his name … who went back—Hatem Murad. Anyhow, he trained with us and became a neurologist in Saudi Arabia. He had some Royal connections. Then, the guy from the UAE had recommended me to a doctor for the royal family in Riyadh and I wound up seeing a number of high-up Royals, daughters and sons of King Abdulaziz Al Saud. Saudi Arabia was a bunch of kingdoms. It wasn’t a country. The Al Saud family was a prominent family. He was the leader of that family. He decided to unite the country. This was in the 1920s and 1930s. He went from village to village marrying the eldest daughter of the village heads, so he became a relative. When he wound up—you were allowed to have four wives—when he got to four and he wanted a five, one had to go and he kept it at four. The one who went was kept in same palace that she was [in] when she was Queen. He wound up [with] sixteen wives, I think, who gave thirty-two sons. It was that sort of thing. So there are a lot of second generation [family members] from Abdulaziz Al Saud. He had daughters and sons and I’ve seen several of them, two really closely. One of the senior daughters has a dementing illness. She’s still alive.

King Fahd—not the current [King, but] the King prior to the current King—we were his neurologists, his second group. He had a guy at [from] UCLA [University of California-Los Angeles] and, then, some of the people weren’t happy with him, so they brought in me and my team. So we saw him a number of times before he died.

DL: I’m switching gears here a little bit. One of the things that kind of closed out some of the era of your military experience was a relatively recent trip to North Vietnam where you were able to meet General [Vo Nguyen] Giap. General Giap was a charismatic and tenacious communist revolutionary who is now credited with bringing Vietnam from colonial rule under the French in 1954 in the First Indochina War and, later, fighting the U.S. to a stalemate during the Vietnam War. After the U.S. withdrew in 1973, North Vietnamese forces ultimately captured the South Vietnamese capital of Saigon in 1975 under General Giap. The General continued as minister of defense and was promoted to deputy prime minister in 1976 until he retired in the early 1980s. When you met him, he was ninety-five.

RD: Ninety-five, yes. One thing you left out… After we [the United States military] left in 1973, the Chinese came in from the north and he drove them back out. They wanted a

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57 Võ Nguyên Giáp (25 August 1911 – 4 October 2013), General in the Vietnam People's Army and a Vietnamese politician. He grew to prominence during World War II, where he served as the military leader of the Viet Minh resistance against the Japanese occupation of Vietnam. Giáp was also a commander in the First Indochina War (1946–54) and the Vietnam or Second Indochina War (1960–1975).
quick, easy capture. They realized it wouldn’t be quick and they decided to pull out. So he essentially drove them out as well.

DL: Tell us about your meeting with him.

RD: A Vietnamese-American neurologist who befriended, Daniel [D.] Truong⁵⁸, whom I met him when he was a resident at the University of South Carolina. When he found out I was in Vietnam, he sort of befriended me. He took a fellowship in movement disorders with Stan [Stanley] Fahn and he practices in Orange County [California]. He’s made several trips seeing patients in Vietnam, and he wanted to have a group go, and I was part of the group. He had seen General Giap in consultation and he arranged for me to see him in Saigon. It didn’t work out, but the next trip did. He, and I, and a Vietnamese politician, and a businessman who had a Mercedes, drove us to General Giap’s palace [villa] in Hanoi, where we met him. He was a little guy. He may not have been little [originally].

All the years I was in Miami, I would see all these little Jewish people walking around. That’s in Miami before South Beach became a hippie place.

[General conversation. Jane Daroff gives RD a kiss, and DL a hug goodbye, and then leaves..]

RD: Before South Beach became a hippie place, it was a place for Jewish people to retire from New York and they were all little. But, you know, little people live longer. That was my conclusion.

About a year or so ago, [I noticed that] some things aren’t fitting me [any longer]. I’ve lost three inches. It turns out [that] I have spinal stenosis. Little people live longer? No, if you live longer, you get littler. [chuckles] The longer you live, even if you don’t have spinal stenosis, you know things sort of shrink. We all get smaller. If you have spinal stenosis, you really get small.

Why did I bring that up?

DL: General Giap.

RD: General Giap. He’s little. I don’t know, maybe he was always little.

In his den, there were pictures all over the place of him with Ho Chi Minh.⁵⁹ He was his General. He came in and we were introduced. Daniel Truong introduces me to him. The

⁵⁸ Daniel D. Truong, MD, is a Vietnamese-American neurologist who specializes in movement disorders. See appendix 5 for further information.
⁵⁹ Ho Chi Minh (original name Nguyen Sinh Cung; May 19, 1890 – September 2, 1969) was a Vietnamese communist revolutionary leader who was prime minister (1945–1955) and president (1945–1969) of the Democratic Republic of Vietnam (North Vietnam). He founded the Indochina Communist Party (1930) and its successor, the Viet-Minh (1941), a communist national independence coalition formed to seek Vietnamese independence from the French Empire. During World War II, Japan occupied French
introduction was in Vietnamese, but Daniel translated for me afterwards. He made me into the second coming of Hippocrates, the world’s greatest neurologist, that sort of thing, a giant. [He] just kept going on and on exaggerating. Giap said—once it was translated—something like, “Dr. Daroff, in your presence, I think my brain is getting bigger.” It was not quite that, but you’ve got the original quote. And I had to answer it. I said, “General Giap, I believe you were the greatest General”—then I had a dilemma—Alexander the Great? Genghis Khan? If I go back to… I decided no. “[For] the last three hundred years,” [I said.] Not bad.

“I disagree,” he said with a straight face. “I disagree,” [he reiterated.] Maybe he smiled; I don’t remember. So he disagreed. “Well, perhaps, only secondary to Napoleon,” [I said, trying to salvage the dialogue.] I figured [that] he was brought up under the French. Obviously, he’s [knowledgable about] Napoleon. “I was not inferior to Napoleon,” [he replied firmly.] Oh, my God! What I came up with next Jane thinks, in all our fifty-plus years of marriage, is the greatest thing I ever came up with. “General, I agree with you. Napoleon was defeated by Wellington at Waterloo and you never lost a defining battle.” And, indeed, he smiled and that was the end of that.

Then, I brought this book, Victory at Any Cost by Cecil B. Currey for him to inscribe. [RD retrieves the book] I said, “Are you familiar with this book?” He said, “Yes, I disagree with the title, Victory at Any Cost. It implies that I didn’t care about my troops and I did care. It wasn’t at any cost.” I said, “General, the publisher must have made him put that in there. The title should have been A Genius. They just put that in there to sell books. I’ll write the author.” I did, and it turned out [that] he [the author] never responded. At any rate, he [Giap] liked the book, except for the title. I said, “Would you inscribe it for me?” He said, “Thank you for the gift of the book,” and he throws it aside. So Daniel said, “He’s not giving you the book, General. He’s not giving you the book. He wants you to inscribe it.” “Thank you for the gift of the book,” [Giap replied.] So Daniel thought he was losing it. The meeting ended and he [Giap] pulls out a pen, and writes – this is not the original, the original is in the safe – he writes in Vietnamese this

Indochina, and the Việt Minh fought against both the French and the Japanese. In 1945, after World War II, Ho Chi Minh established the communist-ruled Democratic Republic of Vietnam. The Việt Minh, led by Ho Chi Minh and General Vo Nguyen Giap, fought the French Union in the First Indochina War (or what the Vietnamese call the French War; 1946-1954), ultimately expelling the French in 1954 after the Battle of Dien Bien Phu. As a result of the subsequent Geneva Conference in Geneva, Switzerland, Vietnam was divided into North Vietnam and South Vietnam at the 17th Parallel as a temporary measure until planned unifying elections could take place in 1956. When the elections failed to occur, the Second Indochina War developed (now more commonly known as the Vietnam War in the West, and the American War in Vietnam). Ho Chi Minh played a key role in the foundation of the People’s Army of Vietnam (the regular North Vietnamese Army) and the Việt Cộng (the Vietnamese communist guerrilla force that, with the support of the North Vietnamese Army, fought against South Vietnam and the United States during the Vietnam War). Ho Chi Minh stepped down in 1965 due to health problems, but remained a highly visible figure head. In 1976, after Ho Chi Minh’s death, North and South Vietnam were officially unified under a communist government. After the war, Saigon, the former capital of the Republic of Vietnam, was renamed Hồ Chí Minh City.

60 See Appendix 2.
[RD shows a copy of the inscription], and he asked Daniel to translate it into English. The translation reads, “Friendly gift to the Honorable Daroff. I wish the Honorable good health and to bring a scientific achievement in neurology to a higher peak than it currently exists and try with all your efforts to help Vietnam and contribute to the friendship of the people of Vietnam and the people of the United States. Vietnam. 30 November 2005.” His signature, “Senior General of the Army Vo Nguyen Giap.”


Here’s a guy who’s ninety-five years old. He wants to give me a gift. He doesn’t have a gift. He accepts…that’s ingenious. Who would think of that except the General? Thinking ahead, the next step, the next step. A ninety-five-year-old general and he pulls that off. It’s incredible. Well, that’s the General Giap story. He died at one hundred and four or five.

DL: One hundred and two in October of last year.

RD: He’d been unconscious for a while. They sent me a picture of him in bed. They wouldn’t let him die.

BWS: Was he in Minnesota? He didn’t come to the United States?

RD: He never came to the United States.

DL: I’m going to switch from the military and go back to…

BWS: We’ve been going for an hour and a half. Are you okay still or do you want to take a little break?

RD: I’ll give you a Joe Foleyism, okay? His seventy-fifth anniversary party in a big museum in Cleveland [Ohio], formal attire. People from all over the world that he trained came to Joe Foley’s seventy-fifth. Everyone gets up and talks about the great Joe Foley. Then, somebody said—I think it was Jack [John P.] Conomy, who was moderating—“Now, let’s hear from Dr. Foley himself.” We all stood up and clapped. His [Foley’s] wife Allie [Alice] said, “He’s in the men’s room.” So we sit down. It seemed like an interminable wait, a seventy-five-year-old guy in the men’s room. He comes in from the side and we all stand up and start clapping. So he realizes (a) he’s been introduced, and (b) we know where he’s coming from. He gets up to the podium, quiets us down, and says, “For a public speaker, better an empty mind than a full bladder.” That was great!

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62John P. (“Jack”) Conomy MD, JD, FAAN, is an American neurologist who was Chairman of Neurology at the Cleveland Clinic. See appendix 5 for further information.
That’s my telling you I want to go [to the restroom].

BWS: We’ll take a break.

[break in the interview]

DL: How did you come to do a fellowship with the neuro-ophthalmologist William [F.] Hoyt?63

RD: He was regarded as the number one academic neuro-ophthalmologist. Lawton Smith was fun, and a great diagnostician, funny, and a great lecturer, but Hoyt was a real thinker. I had met him at several eye-movement meetings. I was the first neurologist trained by a real neuro-ophthalmologist. That was when I spent my three months with Lawton. He discussed it with Hoyt and said, “Good neurologists can learn neuro-ophthalmology.” So when I went in the Army, Lawton Smith took Norman [J.] Schatz64 and trained him in neuro-ophthalmology and Hoyt took somebody whose

63 William Fletcher Hoyt, MD (born c1926), is a preeminent American neuro-ophthalmologist and Professor Emeritus of Ophthalmology at the University of California, San Francisco. With Walsh, Hoyt co-authored the third and fourth editions of the three-volume Clinical Neuro-Ophthalmology. See appendix 5 for further information.

In an interview on November 12, 2001, Hoyt expressed considerable pride in having trained Daroff. When asked how many fellows he had trained, Hoyt replied, “71. 48 of those 71 have become professors of neuro-ophthalmology. So obviously I wasn’t completely successful in the education of teachers. But eight became chairs of neurology departments, and six became chairs of ophthalmology departments. A couple even went further in the administrative level, into management of an entire academic health enterprise. Bob Daroff (Robert B. Daroff, MD, executive director, University Hospitals, Case Western Reserve University, Cleveland) is an example of someone who moved that high.” [Kline, 2002:44]

Hoyt continued, “I didn’t feel that I was trying to mold fellows. I was just trying to have a period of interaction with them in which, if anything, I showed them how much fun it was to run and to do your work as hard as you can. Daroff used to say, ‘When I worked with you, we were walking at full pace.’ … Daroff came with an interest in the brain stem. This intimidated me some. I wondered, “How am I going to teach this man anything? He already knows more than I do. … A neurologist like Daroff, an ophthalmologist like Michael Sanders (United Kingdom), a neurologist like James Keane (Los Angeles), an ophthalmologist like Myles Behrens (New York) working side by side. They generated a lot of very interesting information, and I stood by learning it.” [Kline, 2002:44]

See also:

64 Norman J. Schatz, MD, FAAN, is an American neurologist and neuro-ophthalmologist. See appendix 5 for further information.
name I can’t remember and trained [him—John Loeffler], and that became it. When I got out of the Army, I had the year with Hoyt, which was a great year.

DL: What was he like?

RD: He was tough. Every night, I’d give him a call. I was sort of the senior fellow because I was the only neurology fellow. He had two eye fellows. The patients he saw were all in neurology and neurosurgery, so he thought that I would understand. He wanted the case presented to him the night before, at least, so he would be prepared and he’d come with the literature. He would not know the diagnosis, but he’d know what area it was. … I’d have to call him and always after one or two rings, “Hoyt here.” I’d tell him what cases we were going to present. He’d say, “All right.” He came on rounds. We started rounds at seven-thirty in the morning. If you were late for rounds, you’re out of there. Out. Done. The end. So no one was ever late.

One Australian visitor was late and Hoyt looked at him. He said, “I’m terribly sorry, Professor Hoyt, but I dropped my toothbrush in the toilet bowl.” Obviously, he didn’t, but it was so funny that even Hoyt had to give him a pass for that reason for his being late.

We were never late and the reason why we weren’t late, or at least I wasn’t late, was I always met him for breakfast at seven o’clock. I’d come up on the elevator with him to the floor and by the elevator at seven-twenty-nine or so, the team would be there, the other fellows, several rotators from ophthalmology, etcetera. And we’d go on rounds and present the cases. It was great! Since he read about the cases the night before, we had to [also].

DL: It was there or during that time that Fred Plum visited, and that proved, ultimately, to be a defining moment for you, was it not?

RD: It did. Fred Plum was Chairman of Neurology at Cornell. He was going to Japan on a trip. His plane was either delayed or cancelled from San Francisco to Japan. It was in the afternoon, so he had nothing to do. He calls up Bob [Robert A.] Fishman who is

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65 See also: Daroff RB. Fred Plum, friend, mentor, and a force in the field. World Neurology 2009;24(4):12.


Fishman was known for his “unfailing good humor, his wit and kindness” as well as his aphorisms (“Fishmanisms”). The latter include: (1) “The smartest neurologist is the last neurologist to see the
Chairman of Neurology at UCSF and he said, “Bob, Fred Plum here. I’m stuck in San Francisco. I have nothing to do. I want to come and make rounds with your residents.” Plum was a forceful guy. Fishman said, “Come on over.” Fishman then finds out that all his residents are in clinic, and they’re going to be in clinic, and they couldn’t make rounds. So he comes down to the neuro-ophthalmology office where Hoyt and I and several other neuro-ophthalmology people were. He said, “I need a favor. Fred Plum is coming to make rounds and I can’t use my own residents. Would you come around with me and I’ll pick the Chief Resident of neurology to come so he could at least present the cases and stuff like that?” Okay, so we went around.

The first patient we saw was a black—prior to [use of the term] African American—lady from Oakland who had an encephalopathy. It was what we called then “subacute encephalitis.” She had some cells in the spinal fluid. It turned out maybe ten years later to be named—I don’t know when—as herpes encephalitis, because that’s what it was. But we called it subacute encephalitis then. We come in with the group and her husband is sitting there, a big guy. He has on this sweatshirt that says, “Black Panthers,”67 which for young people was a group in Oakland of black people who were the reciprocal of Martin Luther King. He [Martin Luther King] wanted to do it the legal way. He [the Blank Panther] wanted to do it by defeating the whites. He was tough. They all were. They were hostile. Fishman said to him, “Sir, we want to examine your wife. I wonder if you’d excuse us. We’ll speak to you afterwards.” He [the husband] said something like, “I’m not leaving. You can do what you have to do.” He stands up and says, “I’m not leaving.” We were paralyzed into inaction—except for Fred Plum. He went up to him—Fred was the smallest guy in the room—and said, “Sir, I’m Dr. Fred Plum from New

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67 The Black Panther Party (“for Self-Defense”) was a black revolutionary socialist organization active in the United States from 1966 until 1982. The group was founded in Oakland, California in 1966, with its stated purpose to protect black neighborhoods from police brutality. The group instituted armed patrols, and gained notoriety as a result of their confrontational, militant, and violent activities directed against police. They also undertook more constructive activities, and in particular instituted a variety of community social programs designed to alleviate poverty, and to improve health among residents of inner city black communities (e.g., their “Free Breakfast for Children” program). Nevertheless, popular support for the Black Panther Party declined as a result of open disagreement among prominent members, and as a result of reports detailing the group’s involvement in illegal activities (e.g., drug dealing and extortion schemes).
York City. Your doctors are so concerned about your wife, they’ve had me come here from New York City at no charge to you and we can’t really talk amongst ourselves if you’re here. We will do a much better job…” And the guy starts to tear up; he said, “I’m terribly sorry. I shouldn’t have… I’m sorry,” and he left. And Plum did his thing.

It turns out, as I found out later, that he [Plum] was a very brave guy. When he was Chairman of Neurology at the University of Washington-Seattle, they were taking care of a polio ward. Patients were in these iron lungs. I wonder what it’s like to be in there, totally paralyzed and having a machine breathe for you and not fight it. So what did he do? He had himself curarized [paralyzed with curare], catheterized, [and] put into the machine, just so he’d know what it was like to let it breathe for you. Then, he encouraged some of his residents to do it. It got interesting. They didn’t have any lady residents then. Are you going to refuse when the Old Man does it? So the guys sort of had to do it—maybe they didn’t have to do it.

When he was at Cornell—he may have still been in Washington—the Schmidt-Kety [Kety-Schmidt] technique\textsuperscript{68} for cerebral blood flow was you inject the carotid and the jugular where you have needles in there, and you put oxygen in the carotid, and you measure the oxygen saturation in the jugular to see how much oxygen is being taken out by the brain. That was the Schmidt-Kety Technique or Kety-Schmidt. They were both from Penn. That’s a hell of a thing, an 18-gauge spinal needle in your carotid and in your jugular. Then he asked his residents—I don’t know if the residents cooperated or not or ran off. I would have [cooperated]; otherwise, you’re a wimp. Guys have to…

It’s like my… Did I ever tell you about when I was gunner on a combat mission in a helicopter? That gets to Vietnam.

All right. Where are we now? We’re with Fred Plum. [DL: We’re with Fred Plum.] So he saved the day by standing up to this guy, the Black Panther.

Several years later, Plum becomes visiting professor at the University of Miami and Dr. Scheinberg, the chairman, asked me to take him back to the airport. In the airport, I said, “Dr. Plum, we met when you made rounds with Bob Fishman.” He said, “Yes, I

\textsuperscript{68} In 1944, American neuroscientists Seymour S. Kety, MD (August 25, 1915 – May 25, 2000) and Carl Frederic Schmidt, MD (July 29, 1893 – April 4, 1988), working at the University of Pennsylvania in Philadelphia, devised a method for measuring global average cerebral blood flow and global average cerebral metabolic rate of oxygen based on the Fick principle (i.e., blood flow to an organ can be calculated using a marker substance based on the amount of marker substance taken up by the organ per unit time, the concentration of marker substance in arterial blood supplying the organ, and the concentration of marker substance in venous blood leaving the organ). See appendix 5 for further information.

See also:
remember that.” I said, “We presented this patient to you, and this patient’s husband was a Black Panther, and you saved the day.” Then he told me this: “Well, when you have a sensitivity for patients and illnesses, these things sort of come naturally.” Okay.
[chuckles]

We started talking. It turned out that he didn’t have such very good luck with his children. He had a bright son who got a Ph.D. and gave it up and became a farmer. He had a daughter who got a Masters and didn’t really pursue science; she was a journalist. He had another son who was mentally retarded.

So years later he said to me once over dinner, “If your father is a successful scientist, you’re never going to be one—unless you’re Jewish.” I said, “What?” He was talking about himself. He was a successful scientist. I think he gave some examples of Jewish people who became successful scientists if their father… I said, “What do you mean, Fred? I didn’t realize I was Jewish until I couldn’t get into certain fraternities at the University of Chicago.” He said, “I don’t believe that! Your parents drove it into you to succeed and do this and do that and do better than your… That’s what Jewish people do and it’s great! If you’re not Jewish, forget it.” Okay, that’s an aside.

Fred had this problem with his kids. At the time, we were having problems with our middle son who told us he was gay and he was depressed and a variety of other things. It turns out [that] he’s now a great guy. He’s a professor of psychiatry at UCSF, head of psychiatry at the VA at UCSF. Great! He wants to join the military reserves. He’s fifty, so he can really take care of soldiers. That’s great! At any rate, I talked to Fred about my kid and what we were going through and he talked about his. We kind of bonded. I couldn’t help him in any way, except—

He was then editor in chief of the Archives of Neurology and he appointed me to the editorial board. Then, when he broke up with the AMA [American Medical Association] and wanted to leave the Archives, we started the journal of the Annals [of Neurology], and he put me on the editorial board of the Annals. He made me head of some scientific thing in the Annals. Finally, we just were close. He helped me.

Gil Glaser would always say great things about me if somebody asked, but he didn’t go out of his way. Fred Plum went out of his way to kind of promote me.

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69 Daroff was Editor for Neurological Progress (Founding Editor), 1981-1984.
70 Others said similar things of Plum. In an obituary, Jeronme Posner, MD, wrote: “Fred did not ‘suffer fools lightly.’ He was often sharp in his criticism of those he thought deserved it. Conversely, if he believed that one had good potential as a neurologist or investigator, he would go to great lengths to assist that person, often giving credit beyond what was deserved.” In another memorial article, Stephen L. Hauser, MD, and S. Clairborne Johnson, MD, PhD, wrote: “Although sometimes blunt with those whom he judged mediocre, he was also enormously generous and supportive to young people who shared his passion for the field.”

See also:
Then in Munich in 1986, I think, at the World Congress of Neurology—It wasn’t Munich. It was north. What’s a northern big city? At any rate, it was the World Congress—He comes up to me at a dinner and said, “Daroff…” [Usually] he called me “Bob.” Hoyt told me this: “If a guy who calls you by your first name calls you by your last name, he wants something from you and he’s going to get it. In addition, if he grabs you in the upper arm, that settles it.” So he comes up to me and says, “Daroff! Do you want to be Editor-in-Chief of Neurology?” I said, “What? What about Bud [Lewis P.] Rowland?” “He’s stepping down next year. I’m head of the search committee. Do you want to be Editor-in-Chief of Neurology?” Then, he said, “So and So”—I’m not going to tell you who So-and-So was who’s a terrific guy—“has applied for the job.” When I’ve told this story before, I said he mentioned several people who applied for the job, because I didn’t want to single out So-and-So, who Fred didn’t like. “Several people applied for the job.” I said, “They’re fine if they want it. I didn’t even know there was a job.” He grabbed my arm and said, “Daroff, [this isn’t a pissing contest!] This is what’s right for American neurology. He isn’t. You are. Do you want the job?” That was it. I got it, of course. He was [a] great [promoter] for me.

DL: He was a brilliant guy.

RD: Brilliant…a brilliant guy.

DL: Sometimes a bit hard-edged, though.

RD: Hard-edged, tough. More residents of his committed suicide than, I think, any other program director. He just drove people. And some of them, when they were weakened, he would intimidate them in rounds. Hoyt did that, by the way, occasionally. Hoyt was very much like Fred back then. He’s an ophthalmologist, but he disliked ophthalmologists, because they made so much money. [DL: (chuckles)] A neuro-ophthal[almologist] is like a neurologist. Unless you’re doing procedures, you’re not making any money. So when an ophthalmologist would rotate, he’d be very tough on them. He’d be tough on medical students, except for the girls. He’d be very gentle with the girls [whispered].

Senior eye residents rotated through neuro-ophthalmology. They’re months away from going out and making their fortune. Hoyt asked this guy a question. It was a tough question. It was really one an ophthalmologist wouldn’t know. It was a neuro-ophthal[almology] question. Then, he asked him another question, which was harder than the first, and he kept going up. Instead of finding a common denominator of where the

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71 Hamburg, Germany
72 Lewis P. (“Bud”) Rowland, MD, FAAN, is Professor of Neurology at Columbia University. He was the Editor-in-Chief of Neurology from 1977 to 1987, and the chief editor of Neurology Today from 2000 to 2009. He has been President of the American Neurological Association (1980-1981), President of the American Academy of Neurology (1989-1991), Chairman of the American Academy of Neurology’s Education and Research Foundation, President of the Parkinson’s Disease Foundation, and a member of the Institute of Medicine. See appendix 5 for further information.
guy’s knowledge ended, he was just getting higher and higher and higher. The guy teared up. He was embarrassed. Everyone is looking at him and all that. Hoyt said, “Enough of this foolishness. Let’s go eat.” So he brings me to the elevator and he said, “I was pretty tough on that guy, wasn’t I?” I said, “Yes, you were.” He said, “I knew it while I was doing it, but I couldn’t help myself.” He’s not that way anymore. He’s now in his late eighties and he’s a gentle person. I’m going to have dinner with him next weekend in Puerto Rico where we have a neuro-ophthalmology meeting.

So we just finished Fred Plum.

DL: Let’s move on to how you got to Miami now.

RD: Okay. I’m in with Hoyt. I wanted to stay in San Francisco, but Fishman wasn’t wild about the way Hoyt didn’t do scientific stuff. He just was a phenomenologist. [According to Fishman,] you have to be in the lab. So he discouraged me from staying on. Now, later on during my fellowship, after I made a great presentation, he said, “Bob, how would you like to run our EEG lab? You were trained by Gil Glaser. I need somebody.” It was too late and I wasn’t going to go back to EEG, even though I was damn good at it because I trained with Glaser and Eph Roseman, but Eph Roseman came earlier—but that’s another story.

So I went down to UCLA, and I went to Los Angeles. It didn’t sort of work out. I could have done UCLA, and maybe even UCSD [University of California at San Diego], but for some reason, I didn’t: expenses, the cost of living, various other things. It was difficult.

Then Nobby David, who was a good friend of mine, who I met and became very close to when I was doing my three months with Lawton Smith in Miami during my second year of residency – he was in Miami. He was head of the VA. And Jane moved to Miami with the two kids when I went to Vietnam, because she liked it there. They stayed at a condo and Nobby took good care of her. He said, “Bob, we need somebody at the VA. Would you like to come?” Then also what I learned was, as a neuro-ophthalmology fellow, that I didn’t like to do service neuro-ophthalmology, which is vision, blurred vision, stuff like that. I was an eye-movement person and neuro-ophthalmologists don’t admit patients. They’re sent to neurology. I wanted to take care of patients myself. So I went to the one place that didn’t need really another neuro-ophthalmologist. There were four or five there already, but they needed one at the VA. So then I could concentrate on eye movements. I didn’t have to do service neuro-ophthalmology.

But Scheinberg writes me a letter. after we settled it that I would come in July, and said, “Tell me what research you plan to do.”73 I said, “I’m a phenomenologist, like most

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73 Daroff reported this interaction in a paper in 2002; “In early 1968, I was negotiating by mail with Peritz Scheinberg to join his faculty at the University of Miami. He asked what research project I planned, and I replied that I didn’t do research but was quite productive as a descriptive phenomenologist … Scheinberg wrote back, “Everyone on my faculty does systematic research. Submit a project.” [Recounted in: Daroff RB. A personal introduction to eye movements. Ann NY Acad Sci 2002;956:1-6.]
other neuro-ophthalmologists. I’ve written twenty papers on phenomenology.” There was only one research paper and that was under Don Higgins at Yale and he was the guy who did the research. I was just telling him [i.e., Higgins] what he was seeing. He [Scheinberg] said, “Every one of my faculty does basic research. Tell me what you’re going to do.” So I picked something, which was determining the blood levels of Dilantin in nystagmus or something, which we never got to do, but that was something.

The VA, at the time, in December, if they hadn’t spent all their research money, had to give it back to the government. Nobby said, “You can buy anything you want in equipment.” They needed to buy equipment so they wouldn’t have to give money back and get less the next year after that. So I got this great eye movement equipment, which turned out to be more than I needed, which also was a godsend… Prior to that, eye movements were recorded bitemporally and you’d summarize. The notion was the two eyes, in normals, were doing the same thing. But I had enough electrodes to actually do each eye individually. No one had ever done that. They’d either done one eye at a time or both eyes together, not each eye individually. We discovered [that] even [in] normals, one eye will overshoot and the other wouldn’t or [would] undershoot. That was because we had an eight-channel machine and everyone else had four channels or three channels or whatever. That turned out to be great.

BWS: That was kind of a breakthrough.

RD: It was.

BWS: It was a big breakthrough.

RD: It was a big breakthrough, yes.

Then, luckily, one of the chief residents decided he wanted to do neuro-ophthalmology, Ron [Ronald B.] Weber. So he was my fellow. Then, Lou [Louis F.] Dell’Osso…

DL: Can we talk about Ron first?

RD: Yes. Ron was a very, very good neurology resident. We published a number of papers together. He was a good eye-movement guy. He went to Georgetown or GW [George Washington], I’m not sure where. He was on the fulltime faculty. He left and went into practice in South Florida.

DL: For a while.

RD: Then, he got ill.

DL: Well he may have, but his passion was, I think, something else all the way along.

RD: Music.
DL: Yes.

RD: That’s right. He was a musician.

He named the term we have with eye movements. Instead of the eyes doing that [RD demonstrating with his hands], one eye would meet the other eye there and fall short and, then, slowly drift. He called that a glissade, from glissando. That’s a glissadic eye movement named because, he said, it looks like glissando.

He became a musician, but he developed bad back problems. He became incapacitated and just started doing things. He worked for orchestras and he got into something, but he dropped out.

DL: He was a drummer, a very good drummer, semi-professional.

RD: Yes. Right.

DL: He played with Phineas Newborn [Junior], Stan Getz, Joe Henderson.

RD: See, I didn’t know that.

DL: Yes.

RD: That was afterward, I guess.

DL: He started as a college student and as a medical student. He was drumming semi-professionally. He never could give that up. He retired in 1993 and now is a music producer. He’s actually the president of South Florida Jazz.

RD: Great! Right, whatever it was, he got a disability for something. I think it was terrible back pain, so he couldn’t stand or whatever. A drummer doesn’t have to stand.

DL: Yes.

The glissade story is interesting because in some of the prior discussions about it that you’ve given, you’ve also linked this to the term for glissade in ballet and in climbing, but in climbing, it’s kind of sliding down on your boots or your butt.

RD: Well, that all came from music, I think. I would think that music glissade was the first that people started using it.

DL: It could very well have. Well, let’s talk about Lou Dell'Osso then.
RD: Lou Dell’Osso was born in Brooklyn and he has congenital nystagmus. So all his life he has congenital nystagmus. He got a Ph.D. in biomedical engineering. I forgot where [It was at the University of Wyoming]. He did his thesis on his nystagmus. He then spent six months or so with Larry [Lawrence W.] Stark who is a neurologist-biomedical engineer. Actually, he was on the Yale faculty for a while [with] Glaser. He was not really into neurology. He’s an engineer. He sort of pioneered eye-movement research. Dell’Osso did a fellowship and spent some time with him and then got a job in the Biomedical Engineering Department at the University of Miami. The head of the department and he didn’t get along and [Dell’Osso] didn’t have any equipment.

Somebody said, “Well, Bob Daroff’s got this big laboratory at the VA and he doesn’t know how use the damn equipment,” which was true. [DL: laughter] I didn’t know how to use it. Ron Weber could minimally use it, but I was through. Lou came over and there it was. We were the team. He understood all of that intuitively. That’s what he did.

When we got to Cleveland and I got some money to set up a laboratory, we named it the Daroff-Dell’Osso Ocular Motility Laboratory.

DL: You’ve had a very long relationship with Lou Dell’Osso.

RD: Lou retired two years ago. He spends half-time in South Florida.

DL: Let’s go back. We didn’t really discuss Peritz Scheinberg much, did we? He served in the Pacific in World War II as a Navy medical officer and he was chief of neurology at the Chelsea Naval Hospital in the Korean War. He was the founding Chair of Neurology at the University of Miami, a position he held for three and half decades. He was ANA [American Neurological Association] President in 1980.

RD: Yes.

DL: Miami neurologist, Ray Lopez, said of him, “What I always found in Peritz was a special devotion to students and patients and a compassion for academic excellence. He

74 Louis F. Dell-Osso, PhD, an engineer by training, was Professor of Neurology and Biomedical Engineering at Case Western Reserve University School of Medicine, and also held an appointment in the Daroff-Dell’Osso Ocular Motility Laboratory at the Cleveland Veterans Affairs Medical Center. His research interests are in the neurophysiology and pathology of eye movements. See appendix 5 for further information.

75 Lawrence W. Stark, MD (Feb. 21, 1926-October 22, 2004) was a professor of physiological optics and engineering at the University of California, Berkeley. See appendix 5 for further information.

76 Peritz Scheinberg, MD (c1920-July 19, 2005) was the founding Chairman of Neurology at the University of Miami School of Medicine, a position he held for more than three decades until his retirement (1955-1989). At the University of Miami School of Medicine, Scheinberg established a research laboratory and studied human cerebral circulatory physiology using the Kety-Schmidt technique. Scheinberg served as President of the American Neurological Association (1979-1980), and President of the Association of University Professors of Neurology (1976-1977). He was later named an Honorary Member of the American Neurological Association. See appendix 5 for further information.
had a great ability to stimulate his students and make them excel as physicians.” What do you think?

RD: Well, that’s an obituary.

DL: Yes, it is.

RD: You always say nicer things in the obituary.

Peritz was brilliant. He didn’t have a [neurology] residency. I think what happened was, he was stationed in Boston for a while and he used to attend brain cutting and rounds at Boston City [Hospital] and Mass[achusetts] General [Hospital]. He picked up neurology. Then, you didn’t really have to be boarded or something, but he took his boards. He passed them and he became chair, the first Chair of Neurology [at the University of Miami School of Medicine]. That’s when the University of Miami began, at that point. He was head of the section of neurology of the Department of Psychiatry or something like that. Gradually, he moved into a separate department. Well, he got me to do research. He was pretty tough on students. I think they were scared to death of him.

The students had this yearly charade thing when they get up and they make fun of the faculty. It’s a ritual. I attended one and they really laid into Scheinberg hostilely. I wrote a letter saying, “That’s absolutely wrong. He’s this, that, and the other. Everyone is telling me I’m a great teacher and he recruited me.” Whatever it was, Peritz was very pleased with that letter that I wrote.

He was somewhat idiosyncratic. [He believed that all] headaches were psychogenic. “I can’t help you,” was often a response. “I think I should admit you to the hospital.” I think if he had to spend more than twenty minutes with a patient, he either discharged them or admitted them and worked them up. A lot of work-ups!

DL: How about Nobby David?

RD: Nobby David was great! He was full of jokes, always off-color.

Lawton Smith was a Southern Baptist, but he became a hell raiser in college, in medical school. He drank too much. He screwed around, peed in umbrella stands. Do they have them anymore, those things you put umbrellas in? Anyhow, he went to a country club and he peed in one; Nobby tells this story. When I was his [Lawton’s] fellow in the spring of 1964, he was loose. He was loose. The only religious thing he would say was, “If thine eye offendeth thee, pluck it out.” If someone needed enucleation, he’d give this Bible quote. He’d be able to talk Bible talk. [pause] He wasn’t religious, really.

That next winter, I get a birthday card from him telling me about Jesus Christ as the Savior and all that stuff. What the hell is going on? I called him and he said that he was convinced by a former resident [sic, colleague] of his from Hopkins who at a meeting said, “Lawton, how many people did you saved for Christ today?” Lawton said,
“Nobody.” He said, “Well, I saved the cab driver. I saved the luggage guy. I saved the stewardess on the plane.” Somehow, it got to him [i.e., Lawton] that unless you save people for Jesus and have them recognize Jesus, you’re not a good Christian. And he really came out with it. It was incredible.

DL: That’s Lawton Smith.

RD: That’s Lawton.

We were talking about Nobby.

I’m in Vietnam and he writes me, “I hope you’re well. Do you have a Bible?” “No.” He sends me a Bible. He said, “I’m having a problem.” He believed that everything in the Old Testament, every prophecy in the Old Testament, was fulfilled in the New Testament. So he said, “Try it out.” And he’d give a prophecy and he’d give a fulfillment. Prophecy, fulfillment. Prophecy, fulfillment. That was kind of interesting. I had the Bible and a bunch of guys, we were drinking. “Yes, that’s interesting.” “I don’t think this is true.” We called over the chaplain. “No, no, that really isn’t a fulfillment.” So I write him back saying, “We didn’t think that such and such…” “Oh, yes, you’re probably right, but try these three.” It was that. We got into that and it was fun.

DL: This is Nobby?

RD: Nobby comes later. This is Lawton. Nobby is an atheist.

DL: That’s what I thought. He tells the most off-color jokes I’ve ever heard.

RD: Exactly, off-color. But they were very friendly—at least sort of.

DL: [chuckles]

RD: Lawton then sends me one saying, “There are two ways that you can be saved. One is being born Jewish, which you are. The other is witnessing for Christ as your Savior. Bob, please do me a favor. Get your self excused from duty for an hour, go to some quiet place, get on your knees, and ask Jesus to come into your life and accept him as your Savior.” But I’m already Jewish. … No, no, no. This really will cinch it. He’s asking me to do it as a favor. So I write Nobby. I said, “Nobby, you’ve got to get him off my back,” and he did. He really chewed him out. He told him, “This guy is in Vietnam and getting shot at and you’re having him do this. Wait till he comes home before you do something like that.” Lawton writes me back, “I’ve got an interesting patient I’d like your advice about,” and he asked me neuro-ophthalmology question. So he switched him. Nobby had gotten him to switch.

Now, years later, Nobby has a frozen shoulder… What the hell did he have? Something like that and it was hurting like hell. He couldn’t move it. Lawton calls him up and says, “How you doing?” He says, “Oh, my shoulder is killing me.” He said, “Do me a favor,
Nobby. Put the phone receiver on your shoulder and I’ll say a shoulder prayer.” He said, “What?” He said, “Just do it for me, Nobby.” Nobby said, “My goddamn shoulder got better.” [chuckles]

He did it with Peritz Scheinberg, a similar sort of situation. Peritz had a droopy eyelid or something. He went to the Eye Institute. They [i.e., he and Lawton] had disaffected. I’ve forgotten why they disaffected. Lawton would pray with patients and it was very awkward. He prayed with this Jewish family – this Jewish doctor and his wife and their boy who probably had MS [multiple sclerosis]. No one told the doctor about [the] MS and Lawton out of the blue gets on his hands and knees and puts his hands on the boy’s head. “Dear Lord, take the multiple sclerosis out of the brain of this poor Jewish boy, etcetera, etcetera.” The family goes ballistic and they write a complaint. The Dean gets involved. I had to go to the family and straighten it out.

I haven’t thought about those Lawton stories in a long time, but we were talking about Lawton and what else?

DL: Nobby.

RD: Nobby actually got better because of that.

He was a jokester. “When I have a headache, I just drink wine,” [he would say.] He would drive Peritz crazy, because he didn’t show the kind of respect. They were similar age—Nobby, not really. He’s ten years younger. He was sort of disrespectful. At a meeting he was talking to Peritz about something, complaining about something, “We’ve got to see more patients,” [Peritz would say.] Nobby is half-asleep or talking to his friend, Ray Lopez, who was his buddy. Peritz would say, “Nobby, what do you think about this?” Nobby said, “I’m not sure about that, Peritz, but can you tell me how breasts and martinis are alike?” “What?” “Just sort of tell me how breasts….,” Of course, Peritz didn’t know. Nobby told him. Do you know they’re alike?

DL: The shape of the glass?

RD: No [whispered]. One is not enough; three are too many. [chuckles] Something like that and Peritz just lost his train of thought. He [Nobby] would do things like that. He was irreverent.

DL: Clearly.

RD: It worked—and he was a great neurologist.

DL: He was then Chief [of the Neurology Service] at the VA, [and] had a secondary appointment in ophthalmology.

RD: As did I.
DL: He was into fluorescein angiography.

RD: He discovered it.

DL: He had been stationed in Fukuoka, Japan, during the Korean War and was a medic in the Army, I understand.

RD: Yes. He and Lawton were in Korea together. He’s into food and he knows a lot of language. He can go to a Japanese restaurant and talk Japanese.

DL: Really?

RD: Yes, at least food Japanese.

DL: That’s pretty impressive.

RD: He was great!

DL: How about Abraham [M.] Rabiner?

RD: Well Abe was this little guy who took pictures. We talked about him. He took motion pictures of patients. He was a terrific neurologist.


RD: Oh, God! Okay, I’m sorry. I take that back. Not Abe Ornste [Chair]n, but Abe Rabiner.

As you were told, as residents we were sent to meetings. My first meeting was an ANA meeting and they always met in Atlantic City for years, all through the [19]60s and probably [19]70s, I think. My first year of residency, we met in the spring of ’63, I think. I’m sitting at breakfast in the hotel. We stayed in at the Claridge Hotel. I spent my youth in Atlantic City so I know these things about hotels. We spent summers there. I’m having breakfast and there’s a table with a lot of people and one person is holding forth and everyone is listening to him. “Yes, yes, Dr. Rabiner.” “Yes, yes, yes.” He was just terrific. I heard him say [in a] loud booming voice, “The critical question isn’t why some people have epilepsy but why, given the organization of the nervous system, we all don’t have seizures.” That’s kind of bright. The table got up and I wanted to find out who he was. So I went over and I looked at his nametag. Abraham Rabiner, Brooklyn, New York.

It turned out he was head [Chair] of Neurology at [SUNY] Downstate in [Brooklyn,] New York, in the medical college downstate and was the neurologist in Brooklyn. He also [had previously] started neurology at Montefiore [in 1922] when he came from NYU.
[sic. Mount Sinai]. I wrote a paper about that or a letter to the editor\textsuperscript{77} [after] he told me about it.\textsuperscript{78}

At any rate, Abe Rabiner retires in his early eighties from New York and comes to Miami in retirement. He comes to [grand] rounds in neurology. It was very embarrassing, because he was highly critical. And he’d get up [and say], “That’s wrong!” “Thus and such and such and such…” Then, he’d lose his train of thought and he’d say, “Oh, forget it. Just go on.” I mean, it was just awful. Now, he was bald. Nobby was sitting in the back and he said, “Rabiner’s scalp was getting redder and redder. It’s going to reach Rabiner’s rage point.” He’d get up and start his thing and then sit back down again.

He told one interesting story about his reflex hammer. Let me just think. He was at a meeting. I’m trying to think what the disagreement was about. What was the disagreement?

DL: The basis of the Babinski sign.

RD: The basis of the Babinski sign?

DL: I think it was in Vienna.\textsuperscript{79}

\textsuperscript{78} Rabiner AM. Historical reflection. Ann Neurol 1978;4:553.
\textsuperscript{79} As reported by D. Lanska in 1989, “Around 1920, Babinski and other neurologic colleagues met in Vienna for a ‘black tie affair.’ One of those present was American neurologist Abraham Rabiner (1892–1986). ‘Following the dinner, during the cigar and brandy stage, he and Babinski got into a discussion with fellow colleagues on the physiology of the Babinski response” (R.J. Schwartzman, personal communication, based upon conversations with Rabiner). Rabiner noted that Babinski had never proposed a mechanism for the response and offered his own belief, based largely on phylogenetic speculations, that the Babinski sign was due to ‘removal of the pyramidal influences… [producing] a reversion to a lower scale with a preponderating influence of the extrapyramidal system.” Babinski and Rabiner disagreed strongly. ‘This discussion was very heated and there was some pushing and shoving and other nonprofessional physical activity’ (R.J. Schwartzman, personal communication). Following this altercation, Babinski gave Rabiner his own personal reflex hammer ‘as a token of support.’ Rabiner brought the hammer back to New York and had a modified version produced in which the shaft could be screwed into the Shank either perpendicular or parallel to the head. Rabiner’s version combined the best features of both hammers described in Babinski’s 1912 monograph.”

D. Lanska later designed a new telescoping version of the Babinski-Rabiner hammer, which the AAN designated as the “Telescoping Reflex Hammer, Lanska Edition,” and which became a “Signature Product” of the American Academy of Neurology Store. As noted in the 2013 AAN Store Catalogue: “This newly redesigned hammer incorporates suggestions Lanska made to optimize its utility with greater precision, less effort, and increased patient comfort, including: (1) New patented Spring-loading Locking System secures the articulating head in parallel or perpendicular position; (2) Weighted head offers more controlled striking; (3) Softer silicone bumper provides comfort and effective percussion; (4) Wide and thicker telescoping handle delivers convenience and added functionality; (5) Pointed end tip and hidden brush useful for eliciting cutaneous reflexes.”

See also:
RD: I’ve forgotten what Rabiner’s point was.

DL: He argued with Babinski, at any rate.

RD: About something, right. Babinski had his theory; Rabiner had his. They got into an argument. They started yelling at each other, apparently. It almost came to blows. The next day, Babinski came up to him and apologized and said, “I’m terribly sorry. I’ve got a gift for you. Here is my reflex hammer.” And he gave Rabiner his, Babinski’s, reflex hammer [whispered with awe].

When Rabiner decided to pack it in from the University of Miami, I was very nice to him during his several years there, as was Robert [J.] Schwartzman who was on the faculty at Miami and went on to become Chairman of Neurology at Jefferson Medical College in Philadelphia, I think, and then at Hahnemann [Medical College of Philadelphia].

DL: Yes, which became Drexel [University College of Medicine].

RD: Which became Drexel. Rabiner gave me his reprints, which was great, and he gave Schwartzman Babinski’s reflex hammer, which was a lot greater, a lot greater [whispered]. Schwartzman has it and he said… What did Clint Eastwood say about…? Was it Clint Eastwood? I’m going to be buried with my… I don’t know, one of the actors. He [Schwartzman] said at a meeting, “I’m going to be buried with it. There’s no way anybody is going to get it.” I don’t know what he’s going to do with it. He’ll probably send it to the Academy [American Academy of Neurologist] or the ANA.

DL: Schwartzman?

RD: Schwartzman.

DL: He retired last June.

RD: Yes. He was a great neurologist. He was one of these guys who knew everything, fully trained in medicine and neurology.

DL: Focused on pain, chornic pain management.


80 Robert J. Schwartzman, MD, FAAN, was Professor of Neurology, Chief of the Division of Neurology at the University of Texas Health Science Center, San Antonio (1978-1982), Chairman of Neurology at Jefferson University (1982-1995), and Chairman of Neurology at MCP Hahnemann University (now Drexel University College of Medicine). Schwartzman focused on chronic regional pain syndrome/reflex sympathetic dystrophy. Schwartzman retired in 2013. See appendix 5 for further information.
RD: That’s what he went into, because that’s where the money was. It wasn’t Nick the Greek but who said, “Why do you rob banks? That’s where the money is.” A famous bank robber, okay.81 The money is not [in] doing neurological exams, admitting patients, but he believed it. He was a great neurologist. He was like the Pied Piper. When he would make rounds, students would follow, because he always had the answers.

DL: Bob Schwartzman sent me a picture of that hammer.

RD: It got it in the article, didn’t you?

DL: Yes. I put it in a paper on the history of the reflex hammers.82 We had a conversation, several of them actually on the phone, prior to him sending me a letter. His letter summarized the event that you spoke of that Rabiner had with Babinski. But what he told me on the phone was a lot more colorful version of that story than what he wrote. He felt he had to tone it down when he wrote me the letter.

RD: Okay, that’s good. Is that going to appear somewhere?

DL: I don’t know.

RD: Well they’re both dead [Babinski and Rabiner], so you can…

DL: Yes, perhaps.

I think we better shift gears now. We’ve covered some of that history. You brought up in another question about the founding of Annals of Neurology. I want to talk a little bit

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81 American bank robber William "Willie" Sutton (June 30, 1901 – November 2, 1980). During his forty-year criminal career Sutton stole an estimated $2 million. He spent more than half of his adult life in prison. Sutton is known for the apocryphal remark that he robbed banks "because that's where the money is." Sutton himself denied making the remark, and instead attributed it to “some enterprising reporter” who fabricated the quotation for an article. This was later traced to an article in a southern California Newspaper, Redlands Daily Facts, on March 15, 1952. Nevertheless, the apochryphal remark has become entrenched and is frequently referred to as “Sutton’s Law,” when the point is to consider first the obvious.

See also:

about the *Annals* and whether you think the ANA and the Academy are overlapping, complimentary, similar. How do you see those two organizations?

RD: It’s changed recently.

And I’ve got to do a “Joe Foley” [go to the restroom].

DL: Okay.

[break in the interview]

DL: Let’s talk about the ANA versus the Academy and how you see those two organizations.

RD: It started out with the ANA as a nineteenth-century organization that maybe had ten people to begin with, people who did neurology. Then, it grew over the years. It was an academic society. It was dead-man’s shoes. They had a fixed number—I’m talking about the early part of the twentieth century—a fixed number of members. Somebody had to die before somebody came in. And then that broke and they sort of opened it, but you had to write a thesis. When I got in in 1973, it was the first year that you didn’t have to write a separate thesis to submit. You had to submit an article in which you were the first author which you say reflects your academic interest or something like that. So that was that. The ANA—how did I get on the ANA structure? I think it was Bill [William M.] Landau who appointed me to the Membership Committee early on [sic, the Scientific Program Committee, in 1977]. I’m not sure why. Then I got involved.

Glaser and Fishman got me in(to) the Academy [leadership]. Yes. No, they didn’t get me in the Academy. What they did was they got me as head of the Membership Committee [sic, Chair of the AAN Scientific Program Committee in 1973]. I’m getting them confused.

83 The founding the American Neurological Association (ANA) was the inspiration of William Alexander Hammond, MD (1828-1900), then a former Surgeon-General of the Union Army during the U.S. Civil War, who was developing a thriving practice of neurology in New York. The organizing committee of the ANA was comprised of eight individuals: William Hammond, Graeme M. Hammond (William Hammond’s son; 1858-1944), Thaddeus (T.M.B.) Cross (one of Hammond’s residents; 1839-1922), Meredith Clymer (1816-1902), and Edward Constant Séguin, M.D. (1843-1896) of New York, Roberts Bartholow (1831-1904) of Cincinnati, James Stewart Jewell (1837-1887) of Chicago, and James Jackson Putnam (1846-1918) of Boston. The organizing committee met in December 1874, and as a consequence 28 physicians were invited to participate in the establishment of a “society to be called The American Neurological Association, devoted to the cultivation of Neurological Science, in its normal and pathological relations. The number of members not to exceed fifty.” The first meeting was held in June 1875.

84 William M. Landau, MD, FAAN, is a professor of neurology at the Washington University School of Medicine in St. Louis, Missouri. See appendix 5 for further information.

85 RD was later on the American Neurological Association Membership Advisory Committee (1980-1983) and was Chairman from 1981-1983.
After World War II, there was just this organization of academic neurologists [i.e., the ANA] and neurology was expanding, [with] people going into practice. They needed an organization, so the Four Horsemen: Abe Baker leading the attack, Frank Forster, a guy from Iowa…

DL: [Adolph L.] Sahs

RD: Sahs, and…

DL: [Russell N.] DeJong

86 Abraham Bert (Abe) Baker, MD, PhD (March 27, 1908 - January 18, 1988) was an American neurologist and neuropathologist and former Regent’s Professor and Chairman of Neurology at the University of Minnesota in Minneapolis, Minnesota. Baker served as a catalyst for the emergence of neurology as a strong independent medical discipline in the United States in the second half of the twentieth century. Baker was the primary organizational leader behind the founding of the American Academy of Neurology as an inclusive neurological academy in 1948. Baker recruited fellow neurologists Russell N. DeJong (1907-1990), Francis M. Forster (1912-2006), and Adolph Sahs (1906-1986) to collaborate in founding the Academy. Collectively they became known as “the Four Horsemen.” In addition, in the late 1940s, Baker aggressively lobbied senators and representatives to provide federal support for academic neurology training programs and was instrumental in garnering support for creation of the National Institute of Neurological Diseases and Blindness, which was founded in 1950 (and later evolved into the National Institute of Neurological Disorders and Stroke). In addition to his role as founding President of the American Academy of Neurology, Baker was the editor of Clinical Neurology (1955), the first comprehensive reference of neurology in the United States, and was also Chairman of the National Committee for Research in Neurological Disorders (1952-1969), President of the American Board of Psychiatry and Neurology (1963), President of the American Neurological Association (1970-1971), and President of the Epilepsy Foundation of America (1971-1973). His commitment to education within the American Academy of Neurology led the Academy to name its Education Section and its teaching awards in his honor. See appendix 5 for further information.

As Francis Forster, MD, summarized in 1999, “A.B. Baker foresaw the need for a society consisting primarily of neurologists with an all-inclusive membership goal from first-year residents through emeritus professors, academicians, and practitioners. This became the American Academy of Neurology…”

See also:

87 Adolph Louis (“Ady”) Sahs, MD (May 27, 1906 - December 6, 1986) was professor and head of the Department of Neurology at the University of Iowa in Iowa City, Iowa (1948-1974). With Abraham B. Baker (1908-1988), Francis Forster (1912-2006), and Russel N.DeJong (1907-1990), Sahs was one of the four organizational leaders (the “Four Horsemen”) responsible for founding the American Academy of Neurology in 1948. He served as President of the American Academy of Neurology (1961-1963), President of the American Board of Psychiatry and Neurology (1967), and President of the American Neurological Association (1967-1968). See appendix 5 for further information.
RD: DeJong, right. They formed the Academy. They met in this strange place. Where was that place of the first meeting?

DL: It was in Chicago, I think.89

RD: No, no, no, no, no. It was in a small city somewhere.90 All right, putting that aside...

BWS: Why were they called the Four Horsemen?91

88 Russell Nelson DeJong (March 12, 1907 - August 20, 1990) was Professor and Chairman of Neurology (1950-1976) at the University of Michigan. With Abraham B. Baker (1908-1988), Francis Forster (1912-2006), and Adolph Sahs (1906-1986), DeJong was one of the four organizational leaders (the “Four Horsemen”) responsible for founding the American Academy of Neurology in 1948. He was the first and longest-serving Editor-in-Chief of Neurology (1950-1976), the official journal of the American Academy of Neurology. In 1950, he published the first of six editions of his classic textbook, The Neurologic Examination, and in 1982 he published A History of American Neurology. He also served as President of the American Epilepsy Society (1955-1956), President of the American Board of Psychiatry and Neurology (1958), and President of the American Neurological Association (1965). See appendix 5 for further information.

See also:

89 An organizational meeting was held in Chicago, coinciding with the annual meeting of the American Medical Association. At the organization meeting, the 52 charter members, chaired by Abraham (Abe) Bert Baker (1908-1988), approved the formation of the American Academy of Neurology.

90 The organizational meeting was in Chicago and the subsequent scientific meeting was held at French Lick Springs, Indiana, at which time 80 neurologists assembled.

As Francis Forster, MD, summarized in 1999, “The first meeting occurred at French Lick, Indiana. The meeting attracted primarily young clinical neurologists. The AAN was supposed to meet biennially in the Midwest, but the enthusiasm generated at French Lick was great, and meetings became annual and were held in various parts of the United States.”

See also:
91 As former AAN President Robert Joynt (1925-2012) noted in a historical perspective in Neurology in 2000, “I do not know how the designation ‘Four Horsemen’ came about for these remarkable men, but it is an apt one. I suspect that [former AAN President] Maynard Cohen [1920-2014] came up with it. The original Four Horsemen were the Notre Dame backfield of 1924 that went on to win the Rose Bowl. This nickname was initiated by Grantland Rice, a famous sports writer, who likened them to the Four Horsemen of the Apocalypse... Our Four Horsemen were all talented neurologists who established great departments and trained many leaders in the field. They were courageous, as establishing the Academy was opposed by many at the time. They all felt it was a necessary organization for younger people in the field and also to revivify a flagging and staid specialty. I am certain it has gone beyond their dreams. However, the thing I
RD: Because they were the four guys: they were four leading academics. They weren’t from the East Coast, right? They were all…

DL: Yes, the Midwest.

RD: Midwest. People like Ray [Raymond D.] Adams wouldn’t join. I mean a number of people on the East Coast wouldn’t join.92

DL: Joe Foley talked about that.

RD: Yes. They wouldn’t join because…letting in this riff-raff. [chuckles] But it was obviously essential as neurology expanded with people going into private practice and not academics. You’ve got to have a place for them.

BWS: It’s post-war [World War II].

RD: Post-war, yes. I wrote in the history of neurology in that fifty-year book or whatever it was… My chapter in there is the history of the journal and how that started.93

Now, gradually the Academy gets bigger. The Annals [sic, ANA] sort of stays the same. The Annals [sic, ANA] has a hard time competing with the Academy. They were both meeting in the spring, so the Annals [sic, ANA] switched their meeting to the fall, so they’re not almost back-to-back.

We had the journals. The journals are kind of important. The Archives of Neurology became the official journal of the ANA. Fred [Plum] was the editor.94 Prior to him…

See also:
92 As Francis Forster, MD, summarized in 1999, “Could antipathy arise between the patrician ANA and the plebian AAN? The founders of the AAN (the Four Horsemen—A.B. Baker, R.N. DeJong, F.M. Forster, and A.L. Sahs) were also members of the ANA. Some older members of the ANA were overtly supportive, including Robert Wortenberg, Walter Scaller, and A.R. Vonderahe. The latter suggested that the 2 associations were similar to the legislative branch of the US government in that the AAN was comparable to the House of Representatives and the ANA to the Senate. The AAN pioneered postgraduate education, developed sections to include the basic sciences, and ultimately became the largest neurologic society in the world.”
93 Daroff R. Fred Plum: Chief Editor. Arch Neurol 1972;
94 Merritt HH. Fred Plum: Chief Editor. Arch Neurol 1972;
I’m blocking on who the editor was.\textsuperscript{95} I used to know all this stuff going all the way back. He [Fred Plum] got upset because the AMA [American Medical Association, the publisher] wanted to put ads between articles rather than ads in the front and the back. He just was incensed and got the editorial board to agree to bolt and then found a publisher. He was somewhat concerned financially about whether we could make it and made the mistake of bringing in the Child Neurology Society just so – it’s their official journal too, and I think they get one-third of the action, but we didn’t really need them, and the Annuals \textit{sic, ANA} would have gotten 100 percent. The Child Neurology Society with their membership made it seem more reasonable for a publisher to invest, and so we bolted. Fred was convinced the Archives would drop out. Nobody would want to replace him. But Iowa…

DL: Sahs?

RD: It wasn’t “Ady.” It was the guy who succeeded him.\textsuperscript{96}

DL: I don’t know.

BWS: He became the editor…

RD: Of the Archives. The Archives has thrived.

BWS: DeJong wasn’t…?

RD: DeJong was Neurology. He was editor for twenty-six years. He had to get sick and incapacitated before they flipped him out and made it a ten-year term.

At any rate, the Annals is doing fine. Neurology is doing very well. When I was editor, they wouldn’t allow us to publish twice a month. Now they publish weekly. The publisher said, “We can’t afford it; the advertising.” Somehow, they’re able to do it and it’s wonderful, and he’s a great editor, [Robert A.] Gross.

\textsuperscript{95} Harold George Wolff, MD (1898-1962). In 1959, the American Medical Association decided to discontinue to Archives of Neurology and Psychiatry, and instead chose to publish separate journals of psychiatry and neurology. Harold Wolff had been co-editor of the Archives of Neurology and Psychiatry with the founding Chief Editor, American neurologist and psychiatrist Roy R. Grinker, Sr. (August 2, 1900 – May 9, 1990). Wolff was made Chief Editor of the new Archives of Neurology; he continued in this role until Plum was named the second Chief Editor in 1972.

\textsuperscript{96} Maurice W. Van Allen, M.D. (April 3, 1918 – May 2, 1986) was Professor and Chairman of Neurology at the University of Iowa in Iowa City, Iowa. He succeeded Adolph L. Sahs (1906-1986) as Chairman of Neurology there. Van Allen became the editor of Archives of Neurology in 1976, but resigned in 1982 because of his health (although he continued in a limited emeritus capacity). He was also a member of the editorial board of the Journal of the American Medical Association. The Van Allen radiation belts were named after his older brother, James Van Allen, PhD (September 7, 1914 – August 9, 2006), who was professor and head of the University of Iowa Department of Physics and Astronomy; James Van Allen’s instruments launched on the Explorer 1 satellite in 1958 provided evidence that regions of intense radiation surround the Earth. See appendix 5 for further information on Maurice Van Allen.
The ANA has changed. Now, I haven’t been that active in the ANA administratively, but I think they felt that there’s just not enough action and they’ve got to open it up. We had to have ten published papers to apply. Unless you had fifteen or twenty first-authored papers, you’d not have a shot; and unless you were an associate professor, you didn’t have a shot [as an] assistant professor if your institution doesn’t want to make you an associate professor. That’s not working for the ANA, apparently, so now they’ve opened it up. It’s now not the society for the elite but society for the academics, all the academics. Everybody with an appointment in a medical school department of neurology is eligible for membership and doesn’t have to write any papers. Now, when you become an associate professor, you can be a real member. I’ve forgotten what it’s called…associate member. I wasn’t a Fellow. Maybe I was an Honorary Member.97 I don’t remember. Honorary Fellow. Whatever it was, elevated something or other. I assume that they’re doing the right thing. I don’t have a problem with that. I’m not in on the ground floor. I don’t know about their finances, but it’s obviously better for them.

DL: I think for a long time, they struggled because they had this very small cadre of people. The elitist business was fine—it’s a club—but it [ANA] excluded too many and the Academy was open arms. I think they [AAN] really trumped them [ANA].

RD: Also ads. If the drug companies can no longer sponsor your banquets and various other things over the years that they did, you had to pay for it yourself, and they needed the money.

DL: Let’s get to Cleveland now. You left Miami for Cleveland. How did that come about?

RD: I wanted to be a chair[man of a neurology department]. I looked at the Medical College of Georgia… Where else? Was it UCLA? No. A couple of other places, and I didn’t interview. The only [other] place that I interviewed was Cincinnati.98 Then, I get word that Joe Foley is stepping down and they were looking for a chair. I wasn’t in the top group. It was going to be a Division of Medicine. That’s what it was and it was going to stay that way. They couldn’t get any takers and they made it into a separate department and they still didn’t have enough money to attract somebody. Then, Mister Gilbert Humphrey died and the family endowed a chair and told the school, ‘Wherever you need it, it’s yours.” Well, Neurology… [whispered]. I get approached to be the first Chairman of Neurology, the Gilbert W. Humphrey Chair of Neurology. I came up to Cleveland. I looked at it. I knew Joe Foley. Where did I know Joe from?

DL: ANA?

RD: No, it was a meeting in New York, the Society for… What the hell is that? I met him in New York and Joe remembers everybody. He’ll see a kid in the elevator and say,

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97 Honorary Member, American Neurological Association, 2001
98 In a personal communication from Daroff to D. Lanska on March 19, 2014, Daroff reported that he interviewed for Neurology Chair positions at two institutions prior to interviewing in Cleveland: “MCG [Medical College of Georgia at Augusta] and [the University of] Cincinnati. I turned them both down.”

66
“Oh, I saw you last when you were a second-year student. Where are you going to be a resident?” There’s something about him. He’s one over prosopagnosia [i.e., inverse of prosopagnosia].

DL: [chuckles]

RD: He can remember [everyone]. He said, “Oh, Bob, nice to see you.”

Oh, the film! Did you get the Joe Foley film?

DL: No.

RD: There’s a film from 1961 of Joe Foley interviewing a whole bunch of people: Abe Baker… You’ve got to write a note. I’ve got to send you… That film, you need. That film is fantastic! He makes mincemeat out of everybody! He was then, in 1961, just fantastic.

He was coming out of a meeting and Glaser and I were coming in. Gil said, “Joe, I saw that movie. Terrific. This is one of my boys, Bob Daroff.” “Oh, hi, Bob.” That’s that. That night I go into a bar with Jane and Joe’s there and he says, “Oh, Bob. Nice to see you again.” It was that way ever since. Every time I saw him, he was just that way. He’s just incredible.

DL: When I was a resident, you guys had a great relationship.

RD: Oh, well, for a whole variety of reasons. Number one is when I get here, I’ve got to figure out how to pay people. What does an assistant professor get? So I asked the Chairman of Medicine. I’ve got to get it [to] at least that level, and what other places? Joe Foley was being paid by the Department of Medicine less than I would have had to offer to get an assistant professor. They just took advantage of him.

DL: Wow!

RD: With Joe, money is not an issue. It used to drive the hospital crazy because he didn’t like private patients. He wanted to take care of poor people.

You know the story about the priest and getting him…

DL: Yes, he had a heart of gold.

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99 See Appendix 2.

100 Charles C.J. Carpenter, MD (born January 5, 1931) was the John H. Hord Professor and Chairman of the Department of Medicine at Case Western Reserve University, and Director of the Department of Medicine of University Hospitals of Cleveland, from 1973 to 1986. Since 1986, Carpenter has been Professor of Medicine at Brown University, and Physician-in-Chief at the Miriam Hospital in Providence, Rhode Island. D. Lanska did his internship in internal medicine with Carpenter.
RD: Right.

So I came and I looked at the position. Jane let me come, but she was wedded to Miami. She played tennis every day and all that. She was just wedded to Miami. What is this crazy Cleveland place? So she came up there with me for my last visit. She looked at houses and things and she decided to do it, reluctantly.

I’m back to Miami and I’m attending a meeting of the faculty and Harvey Blank101 was Chairman of Dermatology at Miami, a distinguished guy, ten [sic, twenty] years older than I. He’s with his new wife. He had divorced his old wife. He looks at me and he says, “Bob, at your stage of development and career, you either needed a new wife or a new job. I think you made the right decision.”

DL: [laughter]

RD: Suddenly, Jane puts it in this kind of perspective. [laughter] I don’t know if he did that on purpose just to get her onboard, but, whatever, she was onboard... onboard.

DL: Wow!

RD: I increased Joe’s salary. I allowed him to do anything he wanted. I always complimented him under any circumstance, at any meeting. I loved the guy.102 You know Joe.

DL: Yes.

RD: I’ve got to tell you the two Joe stories...

DL: Okay, go ahead.

RD: Other than the urinal… We have to sign every year a hospital reappointment form. It’s a perfunctory thing. They say, “Just sign it,” so you’re reappointed for another year. He ignored it. His secretary, Dorothy [Schott]—his secretary for many years—chases him down the hall and says, “Dr. Foley, sir. You’ve got to sign this in order to be

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101Harvey Blank (June 21, 1918 – October 4, 2001) was an American dermatologist. See appendix 5 for further information.
102And Joe Foley, in turn, thought the world of Bob Daroff. As Foley recounted in his Oral History Interview for the AAN Oral History Archives on December 8, 2011: “He [Daroff] was always very generous to me. We had no quarrels, no arguments at all. When I withdrew, I let him do his thing. I didn’t get in his way. I think he was grateful for that. He went on and developed one of the great [neurology] programs.” When DL asked Foley about what key attributes Daroff brought to the program, Foley replied: “Intelligence, energy, a capacity for organization, and an ability to raise money.”

validated.” He looks and he says, “Validated? I’m not even circumcised!” [DL: (chuckles)] That’s Joe Foley.

Another one. He gets made Emeritus Professor. An old friend of his says, “Joe, how does it feel to be emeritus?” He says, “It’s kind of like the balls on the Pope.” Now, being a devout Catholic, he could say something like that, right? He [the friend] says, “What do you mean balls on the Pope?” He [Foley] said, “Well, you know, they’re hanging around somewhere. You certainly hope they’re never seen in public, and, Lord knows, you hope they’re never put to any good use.” [DL: (chuckles)] That’s Joe Foley!

DL: Classic Joe, yes.

RD: That’s Joe Foley [whispered].

DL: Yes. [laughter]

Let’s talk about three other stalwart members of the department for many years: [R.] John Leigh, Sami Harik, and Bob [Robert L.] Ruff.

RD: Okay. Where do we start first?

DL: John.

RD: No, Sami came first.

DL: Okay, Sami.

RD: When I got here, I needed a faculty. There was only one person left. People left because they had this arrangement in Medicine where you got what you generated. I said, “No, no, no. They’re going to be on a salary system and there may be a bonus, but they’re going to make this.” People had just left and went into practice. So I started recruiting. I wanted a senior person. Sami and Joe [Joseph C.] LaManna were in Miami. Sami was then doing very great research in everything that he does but mostly in Parkinson’s, I think, and drugs. Joe LaManna was a terrific scientist. At any rate, we recruited them and Sami became Vice Chair. Joe [LaManna] went into the Physiology Department and, then, he became Chairman of Anatomy. He’s had a great career and now has an endowed chair. It was a good move for Joe. Terrific!

Sami didn’t get along with Bob [Robert A.] Ratcheson, the Chair of Neurosurgery, because Sami didn’t believe in neurosurgery. He thought they hurt people. Ratcheson

103 Joseph C. LaManna PhD is Silber Professor for the Study of Brain Sciences in the Department of Physiology/Biophysics, and is also a professor in the departments of Neurology and Neuroscience, at Case Western Reserve University. See appendix 5 for further information.

104 Robert A. Ratcheson, MD (born August 24, 1940). See appendix 5 for further information.
was very aggressive. He wanted to learn...stroke. He started the stroke program. There was no way Sami could live with Ratcheson when I moved on to become Chief of Staff of the hospital, which I did.

I was thirteen years as Chair. When you get there, they feed you money and give you all that stuff. Then, it starts to shrink. Neurology is not making a lot of money. We’re losing money. The hospital was supporting me. New chairs are coming in. They get on top of it and you get further away from the trough. I was really concerned that I couldn’t generate the funds to really keep the department and keep the good people.

So the Chief of Staff position [opened], and [this individual also serves as the] Senior Vice President at the University Hospitals, which is not owned by the medical school—it’s a separate corporation. They’re linked, but they’re separate corporations with separate budgets and things. The Chief of Staff left. There was [had been] a search for the new President of the hospital. The Chief of Staff was, indeed, a candidate. He didn’t get it. Someone he didn’t like got it, so he went to Columbia as Chairman of Dermatology. The new head of the hospital needed a new Chief of Staff. I got along well with her. I thought it was best for the department to start with somebody fresh. So I became Chief of Staff [who also carried the title of Senior Vice President].

D. Lanska spent two months with Dr. Ratcheson during his PGY3 or PGY4 year of neurology residency at University Hospitals of Cleveland, and he shares one anecdote from that experience: Ratcheson could be quite intimidating, and did not tolerate questions concerning his decisions, and certainly did not tolerate what might be construed as the countermanding of any of his decisions (even if not intended as such). In one Neurosurgery ward case, after checking first with Ratcheson, the Neurosurgery Chief Resident had ordered a chest CT scan to evaluate what was interpreted as a coin lesion on the admission chest x-ray. The neurosurgery resident hadn’t actually examined the patient or reviewed the chest x-ray, however, leaving such mundane tasks to the rotating neurology resident. I had reviewed the chest x-ray and could confirm the lesion only on the AP film. I examined the patient and discovered a dense superficial horny growth protruding from the patient’s back in exactly the area that might project as a putative pulmonary “coin lesion” on an AP chest x-ray. As Ratcheson was unavailable, and the neurosurgery residents were in the OR or clinic, or attending to other tasks, I ordered a fluoroscopic study with a marker placed on the horny skin lesion. This study (which I assisted with) confirmed that, indeed, the skin growth was the basis of the chest x-ray abnormality. I then cancelled the chest CT, intending to bring this up on rounds the next morning. However, before that could occur, I was paged and told to report immediately to Dr. Ratcheson’s office. I had no idea what I was being summoned for, but soon found out when I knocked on Ratcheson’s door and entered his office. He lambasted me without interruption for several minutes about cancelling the chest CT, which I found harrowing, but at least I felt confident that what I did was medically justifiable (and certainly more justifiable, I still think, than ordering a chest CT on the basis of a chest x-ray report without examining the patient). When Ratcheson demanded that I explain my actions, I did, and to his credit he immediately calmed down and said something like, “Ok then, good work.” He then gruffly dismissed me without further ado. Somehow the neurosurgery residents all soon knew about this issue, and clamored to know how I fared with Ratcheson. Several seemed surprised that I hadn’t been summarily sacked. After that defining event, though, the neurosurgery residents and the neurosurgery attendings all left me to manage the medical and (non-surgical) neurological aspects of their cases without micromanaging things, and they took a greater interest in having me do some relatively simple neurosurgical procedures (burr holes, a ventriculoperitoneal shunt, and a tracheostomy), rather than using me as just a handy retractor-holder.
Then, there was a search [for my successor]. We looked at a number of people from the outside and Dennis [M.] Landis\textsuperscript{105} was [an] inside candidate. He’s very good. He came from Harvard, a terrific scientist. His wife is a great neuroscientist, Story [C.] Landis\textsuperscript{106}, who is now head of the NINDS [National Institute for Neurological Disorders and Stroke]. She came in the Physiology Department. Actually, what happened was the Chairman of Anatomy said to me, “We need a guy who does freeze-fracture morphology,” whatever the hell that is.\textsuperscript{107} He said, “The best guy in the country is a neurologist by the name of Dennis Landis and he’s at Harvard. Can you recruit him?” I said, “I’ll speak to the dean.” “He’s got a wife, Story Landis, who’s a great physiologist and the chairman of physiology. Why not her?” So it became this sort of package. What got it was, there was a neurologist at UCSF, whose name I’m blocking, as all names—a famous guy. I’m on the phone with him. We’re talking about something. My secretary says, “You’ve got to get to the airport to pick up the Landises.” I drove to the airport to pick up the faculty I really wanted. I said, “I’m sorry, I’ve got to go to the airport to pick somebody up.” [He asked,] “Are you going somewhere?” I said, “No. I’m recruiting a neuroscience couple.” He said, “Oh, the Landises. We’re all after them. You don’t have a chance!” You say that to me? [RD hits the table with his hand for emphasis and DL chuckles] I don’t have a chance? That competitive… Well, we got the Landises. We got him in Neurology as Professor and she started the Neuroscience Department here. He became head [of Neurology] because Sami knew…. When I left to become Chief of Staff, Sami went to Little Rock [Arkansas], because he knew he couldn’t work with Ratcheson in Neurosurgery. That was that. And the ritual was [that] the Chairman of Neurosurgery always headed the search committee for the Chairman of Neurology, and \textit{vice versa}.

DL: That makes sense.

RD: If I pick Ratcheson, he’s going to not pick Harik. So that was that. So Landis came. He was a good guy, but got into problems with the hospital.

DL: Sami?

RD: No, Landis.

\textsuperscript{105} Dennis Landis, MD, FAAN, was Gilbert W. Humphrey Professor and Chairman of Neurology at Case Western Reserve University School of Medicine (1996-2006), and subsequently Professor and Chairman of Neurology at Baylor College of Medicine (2007-2008), and Professor of Neurology at Georgetown University School of Medicine (2009-2014). See appendix 5 for further information.

\textsuperscript{106} Story Cleland Landis, PhD, was the first Chairman of the Department of Neurosciences at Case Western Reserve University. In 1996, she was appointed as the Scientific Director of the National Institute of Neurological Disorders and Stroke, and in 2004 became Director of the institute. See appendix 5 for further information.

\textsuperscript{107} Freeze-fracturing is a method used to examine cell structure with electron microscopy. The specimen is rapidly frozen in liquid nitrogen. The frozen block is then cracked or “fractured” with a microtome so that the fracture plane passes through the hydrophobic middle of the lipid bilayers. This exposes the interior of the cell membranes. The resulting structure is then shadowed with platinum vapor, and strengthened with a carbon film, before the underlying organic specimen is dissolved away. The platinum-carbon replica of the exposed surfaces is floated off and then examined in the electron microscope.
DL: Landis, yes. He had trouble later, too.

RD: That’s right.

DL: I just love Sami.

RD: He’s wonderful.

DL: He’s a character. He’s so brilliant, and so wild, and so confident. My wife told a story [of] when she was rotating with him, which I just love. They had a myasthenic woman that they were rounding on and she was having trouble breathing. My wife said, “Oh, Dr. Harik, let me call the respiratory therapist to come and do the bedside pulmonary function tests.” He said, “Oh, we don’t need that.” [Then, addressing the patient, he said,] “Blow in my hand.” My wife looked at Dr. Harik and said, “We should get a respiratory therapist!” “No, no, I can do this,” he said. “Blow in my hand…” [The patient does, and Harik announces the result:] “It’s 1.2 liters for a forced vital capacity. Now you go call that respiratory therapist. You get her up here right now, pronto, stat! I want to have a comparative reading.” [RD: (chuckles)]. So this fat, tubby respiratory therapist comes thinking there’s a medical emergency and pants into the room. This woman [patient] is doing okay but having a little trouble. He was off by like ten percent or something. My wife said, “Oh, my God, I’m never going to be able to live this down with him.”

RD: Just like [Harik’s boast that,] “I can take on ID with my left hemisphere tied behind my back.”

DL: Exactly!

RD: He had that overwhelming confidence.

DL: It was brilliant.

RD: Was Selwyn-Lloyd McPherson here as a resident when you were here?

DL: I remember the name.

RD: He was an African American who was having a relationship with a white psychiatry resident rotating on neurology. No problem. Harik, instead of saying, “Hi, how you doing?” or "How are you?" —that sort of thing— would say, “How’s your sex life?”

DL: [laughter]

108 Mary Jo Lanska, MD, MS, FAAP is a pediatric neurologist and pediatrician. She and D. Lanska trained at Case Western Reserve University School of Medicine, and University Hospitals of Cleveland. She rotated with Sami Harik when she was a resident in Adult Neurology (1986-1987).
RD: That’s what he’d say. He didn’t mean *anything* about it other than how ya doing? If you’d say, “How’s yours?” or something like that, he’d say, “My sex life is so bad, I was booed by a peeping tom,” which was great! [chuckles]

Selwyn-Lloyd [E.] McPherson, this young kid…and Sami says, “Hi, Selwyn-Lloyd, how’s your sex life?” And he’s [McPherson’s] involved with this relationship with this woman and he says, “Can we come to your office, Dr. Harik?” He starts laying into Sami about this and that and all the problems he’s having with a white woman and this and that and their parents.” He [Harik] never said it again.

DL: Yes. I never heard that one, I’ll say that.

Let’s talk about John Leigh.

RD: By the way, Sami didn’t like Fred Plum. Maybe we’ll get to that when we get to Bob Ruff, who actually comes before John Leigh.

DL: All right. Let’s talk about Bob.

RD: Bob Ruff\(^{109}\) was a Fred Plum-trained person. Fred Plum, over the years when somebody wanted a job, I’d call Fred up and he’d say, “He’s a B.” The B’s were sometimes a very solid B. Now, a C – down there, but a B, really? He regarded Sami as a low B. When he [Harik] was being recruited to the University of Miami, he [Plum] tried to talk Peritz out of [hiring] him.

DL: Really? Wow!

RD: Because Sami talked back to him [whispered].

DL: Oh, well, that I could see.

RD: He [Plum] loved Jerry [Jerome B.] Posner, but he never talked back to Fred. But Sami is not going to take that crap from some little guy.

DL: Jerry Posner is a gentleman all the way.

RD: Right.

Speaking of Fred Plum and Joe Foley… Joe said… I wrote that in the letter to you.

DL: You did.

\(^{109}\)Robert Louis Ruff, MD, PhD, FAAN, is Professor of Neurology and Neurosciences at Case Western Reserve University, and the National Director for Neurology and the Acting Director of Rehabilitation Research for the Department of Veterans Affairs. See appendix 5 for further information.
RD: Joe said, “The only way you can understand Fred is if you realize he had bad acne as a teenager and his father was an alcoholic.” It was that kind of situation.

DL: Tough-edged.

RD: Yes. So where are we now?

DL: Bob Ruff…

RD: [B.] Todd Troost was one of my people in Miami with Lou Dell’Osso and Larry Abel. Abel went off to Australia, very successful. He’s a PhD biomedical engineer. Troost was terrific. We wrote a number of papers together. When [Oscar] “Mack” Reinmuth left Miami to become Chair of Neurology at Pittsburgh, he recruited Todd to become head of the [Neurology Service at the] VA in Pittsburgh. So Todd left to become head of the VA. He didn’t really like it. So when I was coming here, Lou was coming with me and Larry was coming with me. I called Todd and he said, “I’d like to move from Pittsburgh to Cleveland and get back with the old group.” He felt sort of lost and alone in that group. … Todd left as head of the VA there in Pittsburgh and became head of the VA here. The previous head of the VA was part of the Department of Medicine and was an internist who did EEGs.

So when Todd left to become Chair of Neurology at Winston-Salem, we needed a new head of the [Neurology Section at the] VA. We put in this advertisement and I get this letter from Robert Ruff in Seattle. He was trained by Plum and spends ninety percent of his time in the laboratory and five to ten percent seeing patients, making rounds. He’s a lab man. He said he wants to return to clinical neurology. I said, “I’ll call Fred,” expecting that he’d get a …

DL: B or a C.

RD: …B or a C. He said, “Bob Ruff was among the top three residents I ever trained, and that included Jerry Posner and Marcus [E.] Raichle. Unbelievable! Unbelievable. So he came [whispered].

110 B. Todd Troost, MD, is Professor of Neurology and Anesthesiology, and Associate in Surgical Sciences – Ophthalmology at Wake Forest School of Medicine.

111 Oscar M (“Mack”) Reinmuth, MD. (October 23, 1927 - September 23, 2011) was Professor and Chair of the Department of Neurology at University of Pittsburgh from 1977 until his retirement in 1993. He was the Editor of Stroke (1987-1991).

112 1977

113 Jerome B. Posner, MD, FAAN (born 1932) completed a Neurology Residency under Fred Plum at the University of Washington in Seattle. In 1962, when Plum left the University of Washington to accept the Chairmanship of a newly formed Department of Neurology at Cornell (which had previously been a division of the Department of Medicine), Posner joined Plum as an Assistant Professor at Cornell. In 1967, Plum convinced Posner to become the chief of the Neuropsychiatric Service of the Department of Medicine at Memorial Sloan-Kettering Cancer Center, where Posner focused on neurological complications of systemic cancer, developing laboratory models of CNS metastases, and later investigating paraneoplastic syndromes. Posner is currently Cotzias Chair of Neuro-Oncology, Memorial Sloan-Kettering Cancer Center, Professor of Neurology and Neuroscience, Weil Medical School of Cornell University, and
DL: Yes.

RD: He spent the first eleven months on service, because, you know, he’s that kind of guy.

DL: He always gave more than one thought was humanly possible. He was dedicated to the patients. He believed in patient care. He was a great asset to residents and students. He really promoted their careers.

RD: He is a wonderful guy.

DL: Yes, absolutely.

RD: He got divorced and he’s got a very, very supportive wife now. She’s a nurse and they’re doing very well.

American Cancer Society Evelyn Frew Clinical Research Professor. Posner has served as President of the America Neurological Association (1998), and is a member of the Institute of Medicine of the National Academy of Sciences and the American Association of Arts and Sciences. Posner also served on the advisory council of the National Institute of Neurological Diseases and Stroke (NINDS). With Fred Plum, Posner co-authored the classic monograph, The Diagnosis of Stupor and Coma (1966), a work described by neurologist Marcus Raichle as having "put stupor and coma on the map as an important consideration in neurology." Posner received the American Academy of Neurology 2013 President’s Award.

See also:

Marcus E. Raichle, MD (born March 15, 1937) is a Professor of Radiology, Neurology, Neurobiology, Biomedical Engineering, and Psychology at Washington University in St Louis. He is a member of the National Academy of Sciences, The Institute of Medicine, and the American Academy of Arts and Sciences, and a Fellow of the American Association for the Advancement of Science. See appendix 5 for further information.

Ruff is a fantastic clinical teacher on ward rounds, and also warmly welcomed residents and fellows as junior collaborators on research projects.

See also, for example:
DL: I was here for the…[conference to honor him]^{116}

RD: You were here for that?

DL: I gave a talk.^{117}

RD: Yes, you did.

DL: It was nice to see him again.

RD: He’s had his medical problems, but he’s better now.

DL: He surely went through it, didn’t he?

Let’s talk about John Leigh.^{118}

RD: All right. Todd leaves and I need somebody in the lab to replace him. John Leigh was number two to Dave [S.] Zee^{119} and David Robinson^{120}. Robinson is the PhD [sic, Dr. Eng.]. David Zee was the MD in eye movements. I call Fred. He [John] is a Plum-trained guy. He said, “John’s a fine person.” He didn’t put him up at that level, but he said, “He’s a very good neurologist.” I knew he was a good researcher. He published well. He was great! He was terrific! He and Lou didn’t get along very well. They would both admit it. They just didn’t.

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^{116} Frontiers in Neuromuscular Disease and Neuro-Rehabilitation: A Conference to Honor Robert L. Ruff, MD, PhD, October 18-19, 2012. University Hospitals of Cleveland and Louis Stokes Cleveland VAMC, Cleveland. The conference was organized by R. John Leigh, MD.


^{118} R [Richard], John, Leigh, MD, is the Blair-Daroff Professor of Neurology at Case Western Reserve University School of Medicine, and a Staff Neurologist at the Louis Stokes Cleveland Department of Veterans Affairs Medical Center. With David Zee, MD, FAAN, he is the author of a highly regarded monograph, The Neurology of Eye Movements (1983), which is now in its fourth edition (2006) and with a new edition in preparation. Leigh is a fantastic clinical teacher on ward rounds, and also warmly welcomed residents and fellows as junior collaborators on research projects concerning the vestibulo-ocular reflex and oculomotility. See appendix 5 for further information.


^{119} David Zee, MD, FAAN, is Professor of Neurology at Johns Hopkins, with joint appointments as Professor of Ophthalmology, Otolaryngology and Head and Neck Surgery, and Neuroscience. See appendix 5 for further information.


^{120} David A. Robinson, Dr. Eng. University Professor Emeritus of Ophthalmology and Biomedical Engineering at Johns Hopkins University School of Medicine.
DL: John and Bob and Sami were all very good to me. I worked on a number of projects with John.\footnote{During his residency, D. Lanska was developing his interest in the neuro-epidemiology of stroke using large national data sets. While Leigh welcomed learning about box plots and other tools of exploratory data analysis and graphical presentation, he kept trying to convince Lanska of the fun of \textit{collecting} scientific data, rather than simply analyzing it: “Doug, half the fun is \textit{collecting} the data!” Leigh inscribed a first-edition copy of his monograph, “To Doug Lanska, Colleague and fellow skeptic, with best wishes for the future. John Leigh 4/88.”} I thought he was just brilliant and it was a pleasure to interact with him on things. He just had a tremendous depth of knowledge. He was very efficient. We went on rounds with him and it was bing-bing-bing-bing-bing, but he was very careful and thorough. He was terrific! He was a good mentor. He really was. I think all those guys are terrific, really.

RD: They are…they are.

DL: When you came to Cleveland, your research direction obviously changed. You focused more on teaching.

RD: And recruiting good researchers.

DL: Yes, exactly.

RD: Actually for the first several years, the output of the lab was better than when I was in it. I refused to be on any paper, unless I was involved. I would not be on any of the papers if I wasn’t intimately involved.

DL: Joe Foley was the same way. In fact, he got put on one paper and, then, he disowned it because he said that very same thing.\footnote{The paper Foley disowned was: Feldman RG, Kelly-Hayes M, Conomy JP, Foley JM: Baclofen for spasticity in multiple sclerosis: double-blind crossover and three year study. Neurology 1978;28:1094-1098. Foley listed it in his CV with the notation below it, “published without my knowledge or permission; I had nothing to do with the preparation of the paper; ergo, I disown it.”}

You focused a lot in later years…

RD: By the way, Gil Glaser would allow his name to be put on papers…

DL: Is that right?
RD: …if he edited it. He was a great editor. If he edited it, his name was on it.

DL: You focused a lot on editing various monographs, various books, some very big projects, two major multi-volume works. The first, the very well received two-volume textbook, *Neurology in Clinical Practice*…now through six editions from 1991 through 2012.\footnote{Bradley WG, Daroff RB, Fenichel GM, Marsden CD. *Neurology in Clinical Practice*. Boston: Butterworth-Heinemann, 1991 (and succeeding editions).} It had been guided by Walter [G. “Wally”] Bradley until the most recent edition and now in the most recent one, you are the first of four editors and now titled, *Bradley’s Neurology and Clinical Practice*. You and Jerry Fenichel are the only two who have been editors for all six editions, actually.

RD: That’s right. It’s alphabetical order, number one. It was Wally’s idea. He had to recruit three other editors. I know he wasn’t going to recruit someone whose name was Anderson.

DL: [laughter]

RD: There’s no doubt about it. He signed up [C.] David Marsden, [an M].\footnote{C[harles] David Marsden (1938 – September 29, 1998) was a British neurologist who helped to establish the subspecialty of movement disorders. With Stanley Fahn MD he founded the Movement Disorders Society. He was the editor of *Movement Disorders* and the *Journal of Neurology, Neurosurgery, and Psychiatry*. He was appointed to the newly established Chair of Clinical Neurology at the Institute of Psychiatry in London, in 1987 became Chair of Clinical Neurology at Queen Square, and in 1995 became Dean of the Institute of Neurology, Queen Square. See appendix 5 for further information.} He signs me up, a D. Then, we were looking for someone who did EEG and I suggested Fenichel. He said, “Good idea.” So it’s an F.

I’ll admit it that when he steps down last year for the sixth edition and we’re looking at people, I wasn’t wild about people with an A, a B, or a C.

DL: [laughter]

RD: Because that’s what it is.

DL: I get it.

RD: It turned out that we did very, very well with John Mazziotta.\footnote{John Mazziotta, MD, PhD, FAAN, is the Executive Vice Dean of the David Geffen School of Medicine and Associate Vice Chancellor at the University of California – Los Angeles. Mazziotta is also Chair of the Department of Neurology, Director of the UCLA Brain Mapping Center, Associate Director of the Semel Institute, and Professor of Neurology, Radiological Sciences, and Pharmacology. Mazziotta has been elected to the Institute of Medicine of the National Academy of Sciences. Mazziotta’s awards and honors include the S. Weir Mitchell Award and the Wartenberg Prize of the American Academy of Neurology. See appendix 5 for further information.}

RD: Joe replaced David Marsden when David died. David Marsden was spectacular. He was bipolar. The reason why he published 700 papers…

DL: Was on the manic side.

RD: That’s right and when he was on the other side, he was out of it for about a year.

DL: Oh.

RD: He was totally incapacitated, just couldn’t function. But, then, he gets back up.

DL: You’ve also now been the editor with Michael [J.] Aminoff of the four-volume *Encyclopedia of the Neurological Sciences* with two editions, the first in 2003 and now…

RD: Now, we’re finishing up on the second edition.

DL: Which is I think in press.

RD: It’s in press. We’re editing a few minor things. It’s being put together. It will be published in a couple months.

And we’re working on the seventh edition of *Neurology in Clinical Practice*. Now, they made it Bradley’s much to the consternation… They didn’t ask the four of us.

DL: Ah!

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126 Joseph Jankovic, MD, FAAN, is Professor of Neurology and Distinguished Chair in Movement Disorders at Baylor College of Medicine in Houston, Texas. Jankovic is past president of the international Movement Disorder Society and an honorary member of the American Neurological Association, Australian Association of Neurologists, and French Neurological Society. Jankovic received the 2007 Movement Disorders Research Award from the American Academy of Neurology. See appendix 5 for further information.

127 Apparently Marsden, in fact, published a remarkable 1070 papers (Teive 2009).

128 Michael J. Aminoff, MD, DSc, FRCP, FAAN, is Distinguished Professor and Executive Vice Chair of Neurology and Director of the Parkinson’s Disease and Movement Disorders Clinic at the University of California San Francisco. Aminoff was Chairman of the American Board of Clinical Neurophysiology (1990-1996), President of the American Academy of Clinical Neurophysiology (1991-1993), Chairman of the American Board of Electrodiagnostic Medicine (1994-1996), President of the American Clinical Neurophysiology Society (1994-1995), Editor-in-Chief of *Muscle and Nerve* (1998 to 2007), and Chairman of the Board of Directors of the American Board of Psychiatry & Neurology (2011). He is the recipient of the Lifetime Achievement Award of the American Association of Neuromuscular & Electrodiagnostic Medicine (2006), and the A.B. Baker Award for Life-time Achievements and Contributions to Medical Education of the American Academy of Neurology (2007). He is an Honorary Member of the Canadian Society of Clinical Neurophysiologists (1996) and an Honorary Foreign Member of the French Neurological Society (2008).

RD: The reason why they did that was there’s Merritt. There’s Plum and Posner. All the neurology texts have a name [associated with them]. In other words, Adams and Victor.

DL: Plum and Posner.

RD: Right. It’s that sort of thing. I could relate to the publisher and, in point of fact, it was Wally’s idea. It was his idea. Jerry and I weren’t interested in doing it. He convinced us.

DL: As was evident during my residency in addition to neuro-ophthalmology, you also had clinical interests in myasthenia gravis, headache, and neurotology. I think from looking at your CV [curriculum vitae] and from my experiences, your interest in myasthenia developed out of your study of eye movements in myasthenics in the late 1970s. Your headache interest, we talked about, starting in your residency at Yale and later in Miami with referrals to Bascom Palmer Eye Institute to exclude an ophthalmologic cause of headaches. But we didn’t talk too much about the neurotology. Tell us about the Brandt-Daroff eye exercises, please.


133 See also:
RD: Well, let me go back to myasthenia.

DL: Okay, go ahead.

RD: Gil Glaser was an authority on epilepsy and myasthenia gravis. He actually published a book on it or something. When I was a resident at the VA, we had a myasthenic in crisis. Steroids were contraindicated, because when it was originally given, it was given in a high dose and he got worse. So we couldn’t use steroids. He was in an iron lung. I spent the whole night with him. Then, his heart stopped. I couldn’t get to him. It was an awful situation. If somebody dies in an iron lung or is dying, you have to unscrew all these fricking things. It was just driving me crazy. And I presented him at grand rounds to Dr. Glaser and the residents regarded me as the myasthenia expert. I got involved with ocular myasthenia. So it was really back then that I got involved in eye movements in myasthenia.

So where are we?

DL: Brandt-Daroff exercises.

RD: Neuro-ophthalmologists, we did caloric testing and things like that. Thomas Brandt is a neurotologist, a brilliant guy. He was Chairman of Neurology at the University of Essen in Germany, trained by Richard Jung and [Hans Hellmut] Kornhuber…, the giants of German neuro-ophthalmology in the 1950s and 1960s. He

134 Glaser published several books related to epilepsy or electroencephalography. WorldCat doesn’t list any monographs by him on myasthenia gravis.

See also:

135 Thomas Brandt, MD, FRC, is Professor and Director of the Institute for Clinical Neurosciences at the University of Munich. Brandt was previously the Director of the Neurological Clinic at the Alfried Krupp Hospital in Essen, Chairman of Neurology at the University of Munich and Director of Department of Neurology at the Klinikum Grosshadern in Munich. From 1990 to 1998, he was Deputy Director of the Medical Faculty of the Ludwig-Maximilians-University of Munich. Brandt has been President of the German Neurological Society, President of the International Society for Postural and Gait Research, and President of the European Neurological Society. Brandt received the Bárány Gold Medal (2000) from Uppsala University in Sweden, and was elected an Honorary Foreign Member of the Association of British Neurologists (2001). Brandt is joint Editor-in-Chief of the Journal of Neurology and Neurological Chief Editor of Nervenarzt. See appendix 5 for further information.

136 Richard Jung (June 27, 1911 – June 25, 1986) was a German neurologist. He was appointed as Professor of Neurology and Neuropsychology at the Albert Ludwigs University of Freiburg in 1951, and was Director of the Neurological University Clinic in Freiburg. He was a Past-President of the German Society for Clinical Neurophysiology. See appendix 5 for further information.
became chairman at Essen and he wanted to expand a little bit out of neurotology, which he was doing. He went and spent some time with Hoyt. Hoyt said, “You ought to see Bob Daroff.” So he spent some time with me. Then he came back and he had invented these exercises. It was his, his process, but I put it in English. [chuckles] He wrote it in English, but it was German English. Sorry, Thomas. I did contribute to it, but it really was his idea. It was the first treatment.\textsuperscript{137}

DL: And it still works.

RD: It still works, but it’s not the treatment of choice.

DL: No.

RD: Because the Epley…

DL: Semont

RD: [Alain] Semont\textsuperscript{138} came first [sic], but if you’ve ever read his papers, they’re incomprehensible.

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Hans Helmut Kornhuber (February 24, 1928 – October 30, 2009) was a German neurologist and neurophysiologist. He received his clinical training under Richard Jung at the Neurological University Clinic, University of Freiburg, where he received his habilitation in 1963. In 1967, Kornhuber received the Hans-Berger Prize from the German Society for Clinical Neurophysiology. See appendix 5 for further information.

\textsuperscript{137} The Brandt-Daroff exercises.


\textsuperscript{138} John M. Epley, MD, is an American otolaryngologist, while Alain Semont PhD, PT, is a French physical therapist. Epley’s canalith repositioning maneuver was first described around 1980. Epley had presented his procedure as an instructional course at the American Academy of Otolaryngology, Head and Neck Surgery meetings since 1980. However, because his work was not initially accepted in the otolaryngology community, his scientific papers concerning this procedure were rejected from the initial submission in 1983 until 1992 when his first paper was published. Semont’s liberatory maneuver was first mentioned in a limited report in French in 1980, then described at a conference in 1983 in Leuven, Belgium, and his first English-language paper was published in 1988. In general, the Epley maneuver is more popular in the United States, while the Semont maneuver is more popular in Europe.

See also:

3. Rojas-Burke J. Doctor and invention outlast jeers and threats. The Sunday Oregonian, December 31, 2006. A1,A10. [D. Lanska was a primary source for this article. The article is available on Timothy Hain’s site at http://www.dizziness-and-balance.com/disorders/bppv/epley/epley%20article%202006.pdf
Accessed March 30, 2014]
DL: Yes. It’s in French, anyway. [chuckles]

RD: Well, it’s in English, but it’s incomprehensible. We couldn’t figure it out when I got it. He came and visited Cleveland and I met with him for a couple of hours. I said, “Tell me what you do.” He went through it and I wrote it all down and sent it to Dell’Osso and Leigh. “This is the way you do it”. Now, I can do it. I was doing [the] Semont [liberatory maneuver].

[John ] Epley comes along. I don’t need another maneuver. [The] Semont [liberatory maneuver] was working [for me] and Epley’s initial one had a buzzer…

For relevant articles by Semont see also:

Semont’s original limited communication concerning his maneuver was in French, as indicated by DL, but some of Semont’s later publications were in English. Semont’s verbal description was given without a figure, and without elaborating a mechanism for the technique. His English-language report (1988) is indeed hard to follow, particularly for those who are not already experienced using the procedure.


Epley attended medical school at the Oregon Health Sciences University, completed an internship at the University of Miami Medical School in Miami, Florida, served 3 years with the Strategic Air Command at Vandenberg Air Force Base in California, and completed a residency in otolaryngology at Stanford Medical Center in California.

For relevant articles by Epley see also:
DL: Vibrator

RD: ... a vibrator, which he [later] dropped. I do the Semont. Now, it turns out in head-to-head studies, they’re equal. If they work in one shot, you’re done; you don’t have to do the Brandt-Daroff. But if it doesn’t work, you do the Brandt-Daroff.

DL: Right.

You’ve also written with Thomas Brandt about multi-sensory vertigo syndromes, space motion sickness with John Leigh, and migrainous vertigo with Thomas Lempert.¹⁴¹

I remember, in particular, an interesting experiment that you and John Leigh never did publish—you discussed this when I was a resident in the mid or late 1980s—concerning a contributing mechanism of caloric nystagmus other than thermal convection. As I recall, you tested John for caloric nystagmus in both the supine and prone positions in one of your offices and you noted a prone-supine asymmetry, but didn’t publish it.

RD: I remember doing it. I don’t remember why we didn’t publish it. But that’s a good thing to write John about.

DL: Okay. I’ll write John.¹⁴²

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14¹ See also:  

¹⁴² In an email on June 10, 2014, John Leigh replied to D. Lanska’s inquiry: “Spacelab 2 showed that it was possible to elicit nystagmus in microgravity by blowing cold (very cold) air into astronauts’ ears. Barany had postulated that nystagmus induced by hot and cold irrigation of the external auditory canal was due to a convection current being induced in the endolymph of the labyrinth. Such a convection current should not occur in microgravity. However, as Gary Page [sic, Paige, MD, PhD] nicely showed, there are two mechanisms when in earth gravity -- the most important is the convection current, but cooling the ear also decreases the spontaneous firing rate of vestibular afferents, thereby inducing an imbalance and nystagmus. That was the report.
RD: Write John. Send it to me or do you have his email? He’s now in Baltimore.

DL: I’ll send it to you.

RD: Send it to me and I’ll send it to him. He’ll remember. That’s right. Why the hell didn’t we publish that? Maybe we did it on somebody else, whatever.

DL: It was kind of ahead of the curve of the experiments in Space Lab and some of that stuff.143

The anecdote is that Bob was unconvinced about Gary's result and so I bet him a six-pack of Bass Ale that if he induced (cold) caloric nystagmus in me supine, and then I turned prone, the direction of my nystagmus would reverse (because the direction of the convection current depends on gravity). We did this experiment, with me lying on the table in our conference area and, as I turned from supine to prone, I nearly vomited, but I proved my case and won the six-pack.

A modern comment is that the stronger MRI fields commonly cause vertigo and induce nystagmus by causing endolymph motion (since endolymph carries a weak charge due to the electrolytes). David Zee [MD] has written some nice papers [sic, a nice paper] about this.?

See also:


143 DL’s recollection of the timing of the European Spacelab experiments was in error [see also footnote 142]; these occurred before the Leigh and Daroff testing of supine-prone asymmetries in caloric nystagmus. During the European Spacelab mission (SL1) in 1983, caloric testing in long-term weightlessness demonstrated that unequivocal caloric nystagmus as present after two days of orbital flight (Scherer et al 1986; Scherer and Clarke 1987).

The standard thermal convection mechanism of the caloric nystagmus is from Robert Bárány’s publications from 1906 and 1907, work for which he was awarded the Nobel Prize in Medicine or Physiology in 1914 (although there were subsequent allegations that he usurped the work of others). With the patient supine with head up 30 degrees, so that the lateral (horizontal) semicircular canal is oriented vertically, instillation of cold or hot water or air will induce a thermal change in the density of the endolymph of the nearby horizontal canal (which is the semicircular canal located closest to the tympanic membrane), and a resulting thermal convection in the endolymph. This convection current then causes cupular deflection (ampullopetal with cold stimuli, and ampullofugal with warm stimuli).

As summarized by Stahle (1990), “Four arguments against Bárány's theory have been put forward: that (1) a caloric response can be elicited from "dead" ears [or ears with canal plugging], (2) the two points of reversal of the caloric response from right- to left-beating do not lie 180 degrees apart, (3) the duration of the caloric response, to both cold and warm stimuli, is greater in the face-up than in the face-down position, and (4) caloric nystagmus can also be evoked in a weightless environment.”

Bárány's thermoconvective theory would predict that the intensity of the caloric nystagmus would be equal in intensity in the supine and prone positions (though oppositely directed) and that the head positions in which the nystagmus reverses direction should be 180 degrees apart in the pitch plane. However, it has been known since the 1940s that caloric responses are stronger in a supine than a prone position, and that the reversal points are not 180 degrees apart (Behren 1940; McNally et al 1947; Coats and Smith 1967).
Coats and Smith (1967) studied the relationship between the caloric response and body position through 360 degrees in the pitch plane. The maximum response was in the supine position with the head elevated 30 degrees; a rotation of 180 degrees in the pitch plane reversed the direction of nystagmus but the nystagmus was then of lesser intensity. The supine-prone asymmetry and the other findings suggested that the caloric response was comprised of two components: the standard gravity-dependent convective mechanism, and a nonconvective component that does not vary with gravity or hence head position and that results in excitation with warm stimuli and inhibition with cool stimuli. With the head 30 degrees up from supine these different mechanisms are additive, while in the prone position with the head down 30 degrees the two mechanisms operate against each other, with the typical thermoconvective component still dominating (but in any case with less intense caloric nystagmus in this position because of the oppositely directed effects). Coats and Smith suggested a direct thermal effect on the hair cells or vestibular nerve.

A number of human and animal experiments have also been done in subjects with plugging of the horizontal canal (duct). For example, Young and Lowry (1994) studied a patient with a unilateral plug of granulation tissue in the horizontal duct. Caloric stimuli on the non-plugged side produced nystagmus that reversed directions in the supine and prone positions, while caloric stimuli on the plugged side did not vary in the supine and prone positions (slow phase deviations were ipsilateral with cold stimuli). As the authors concluded: “The findings imply that a caloric mechanism exists which is independent of the conventionally accepted one involving convection currents within the canal.

Current understanding of the caloric reaction is that both a gravity-dependent, thermal-convective mechanism and a simultaneous gravity-independent, non-convective, thermal mechanism act together in the caloric response. In regular clinical testing the thermal convective mechanism is dominant. However, the other mechanism explains the problems leveled against Bárány's theory as the sole explanation of the caloric reaction. Various explanation of the gravity-independent mechanism have been suggested, including changes in endolymphatic pressure within the semicircular duct, a direct thermal effect on vestibular hair cells, etc. Animal experiments suggest that a direct thermal effect on hair cells is the most likely explanation (e.g., Zenner & Zimmerman 1995; Suzuki et al 1998), but it is possible that multiple contributing mechanisms are involved in the generation of the caloric reaction in weightlessness.

There are additional issues which complicate interpretation of the available studies, including the discrepant findings of a disappearance of caloric nystagmus during short episodes of weightlessness, and the presence of caloric nystagmus during periods of extended weightlessness (Clarke et al 1988). Even the issue of convection is now controversial based on experiments in animals (Valli et al 2002-2003).

See also:
RD: It was, but to get a guy to volunteer to vomit in this experience?

DL: Yes, it’s no fun.

RD: You can’t do it on a patient that you needed to do calorics on, because we didn’t know what it meant.

DL: One of the things I also have noticed is that you have quite an ability to synthesize the literature and distill new and useful clinical rules from disparate experimental studies and anecdotal reports. I have two examples that come to my mind. First, there are the Daroff rules for nuclear third [cranial] nerve palsy\(^ {144}\) and, second, your differential diagnosis of ophthalmoplegia, the so-called “T's”\(^ {145}\) — You started with three of them.

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\(^ {144}\) Based on an understanding of the anatomy of the oculomotor nuclear complex, Daroff proposed rules (Daroff's rules) for the clinical diagnosis of nuclear third nerve lesions (Daroff 1971).

Obligatory nuclear lesions:
- Unilateral third nerve palsy with contralateral superior rectus palsy and bilateral partial ptosis. Because of the crossed projection of the superior rectus subnucleus, unilateral third nerve lesions with involvement of the contralateral superior rectus oblige a nuclear lesion.
- Bilateral third nerve palsy (with or without internal ophthalmoplegia) associated with spared levator function. Because the central caudal subnucleus sends projections to both levator muscles, a bilateral third nerve palsy that spares the lid on both sides obligates a rostral nuclear lesion.

Conditions that cannot represent nuclear lesions:
- Unilateral external ophthalmoplegia associated with normal contralateral superior rectus function
- Unilateral internal ophthalmoplegia
- Unilateral ptosis

Conditions that may be nuclear:
- Bilateral total third nerve palsy
- Bilateral ptosis (Conway et al 1983)
RD: Then, I added Turkey.

DL: No, I added Turkey

BWS: [chuckles]

RD: You added Turkey. What did I add?

DL: You started with Thiamine, and Tensilon, and Thyroid, and then you added Tropia and Trauma.

RD: And you added Turkey. That’s great!

DL: You said, “There’s also a convergence spasm.” I said, “Yes, Turkey.”

RD: It was great! Wonderful!

DL: Then, you said, “Doug, perhaps that’s not something you want to have on CV right at the beginning of a neurology career.” [chuckles]

RD: You have to be a little older.

DL: Yes, exactly. Those are very useful clinical rules. They’re still commonly referred to and they’re very helpful.

RD: The first three I did when I was a resident, because I missed them.\textsuperscript{146} I missed it in myasthenia and I missed thyroid eye disease, and I missed… What was the third one?

\begin{itemize}
\item Bilateral internal ophthalmoplegia
\item Bilateral medial rectus palsy
\item Isolated single muscle involvement, except the levator and superior rectus muscles (Pusateri et al 1987)
\end{itemize}

See also:

\textsuperscript{145}Thiamine, Tensilon, Thyroid, Tropia, Trauma, and “Turkey”

\textsuperscript{146}Daroff previously explained that, “Because of a propensity I had early in my career to miss 3 treatable conditions that manifest with eye movement disturbances, I evolved what I call the ‘three T’s’: thiamine to rule out Wernicke’s encephalopathy, treatable; Tensilon for myasthenia gravis; and thyroid because many patients with thyroid eye disease without thyrotoxicosis can have restrictive ophthalmopathy. Now, I’ve added over the years a few more T’s to the three T’s: tropias – congenital squints can be very, very difficult to sort out, particularly if somebody states that they didn’t have double vision and now they have double vision, and they have a congenital squint – it requires a sophisticated strabismologist at times to make the
DL: It might have been Wernicke’s.

RD: Okay, whatever.

DL: I’m going to tell you two other little anecdotes of my own about you.

I remember chairman’s rounds with you. I was a chief resident, I think, when this happened. We were at the VA and we were going around. You asked all of us to watch you do the eye exam, but you told us to go behind the patient. I was kind of gung-ho and I wanted to see the guy’s eyes! So I wanted to be on your side with the fellow so I could see the eyes. You were adamant. You said, “Absolutely not. You all go on the other side. I want you to observe how I do this exam.” As you’re doing horizontal pursuit, all of a sudden, his eyes [sic, ears] were flapping back and forth and I laughed.

RD: His ears!

DL: Yes. Yes!

RD: The gaze-evoked ear retraction.

DL: I laughed. I said, “He’s acting like a deer or a rabbit.” That was my first exposure to Wilson’s oculo-auricular phenomenon from 1908.\(^{147}\)

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\(^{147}\) Samuel Alexander Kinnier Wilson (December 6, 1878 – May 12, 1937) was a British neurologist who was among the first to describe Wilson’s disease.

See also:
When it first came out, the people that followed up on Wilson’s observation were looking to see in kind of a semi-racist way, I think, whether it was more common in what they considered more primitive people [e.g., Stannus, 1909]. So they started looking in Africa to see if it was more common there. That was way off the mark for a variety of reasons. But what I think you noticed was that it was more common in people whose ears stuck out.

RD: Because in all of us, that retro-auricular muscle contracts but if your ears are here [RD shows with his hands the ears sticking out], you don’t see it. If you have ears [sticking out] like that, it’s going to [be obvious]… That was great!

DL: You are the only neurologist I’ve ever run across who carried a small bottle of cocaine drops in his medical bag to test for Horner syndrome.

RD: Right.

DL: I was rounding with Jim [James W.] Schmidley⁴⁴⁸ one day in the department of the library. We were discussing patients. You had forgotten your medical bag. You left it in there. You came back to get it. I made the mistake of joking that maybe the cocaine was gone. I can tell you that was the sternest look you ever gave me. You didn’t say anything. You just looked at me, [and] gave me the sternest look I ever got [from you]. Then, you walked out the door. So I never made a joke like that again.

RD: (chuckles)

DL: Later, when I was Chief of Staff at the Tomah [Wisconsin] VA, I tried to get cocaine eye drops to test on a single patient. I did get them, but the rigmarole was unbelievable and I switched to apraclonidine after that.⁴⁴⁹

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⁴⁴⁸ James Warne Schmidley, MD, FAAN, FANA, is Professor of Neurology in the Department of Internal Medicine at Virginia Tech Carilion School of Medicine in Roanoke, Virginia. He has previously been on the faculty at Case Western Reserve University School of Medicine and was Professor of Neurology at the University of Arkansas for the Medical Sciences in Little Rock, Arkansas before moving to Virginia Tech Carilion School of Medicine. Schmidley subspecializes in stroke. See appendix 5 for further information.

⁴⁴⁹ Topical cocaine can be used to confirm Horner's syndrome in subtle or questionable cases. Because cocaine blocks reuptake of norepinephrine from the synaptic cleft, it causes pupillary dilation if the sympathetic innervation is intact (i.e., greater dilation of the non-Horner’s pupil). Two drops of cocaine 4% to 10% are instilled in both eyes – usually 1 drop in both eyes twice, spaced 5 minutes apart. When cocaine is instilled in an eye with intact sympathetic innervation, the pupil dilates with a maximum response in 40 to 60 minutes after instillation. In contrast, a sympathetically denervated pupil (due to a lesion anywhere along the sympathetic pathway) dilates poorly in response to cocaine because of an absence of endogenous norepinephrine in the synapse. Measuring post-cocaine anisocoria is a better predictor of Horner syndrome than calculating the net change in anisocoria: a post-cocaine anisocoria of
greater than 0.8 mm is sufficient to diagnose Horner syndrome. However, because of regulatory issues, it is now very difficult to obtain cocaine eye drops for testing.

Problems with the cocaine test (Brallier et al 1989; Freedman and Brown 2005; Lanska 2006; Jacobson et al 2001):
• Can be equivocal, because the indirect action of cocaine makes it a weak pupillary dilator
• May not help diagnose a partial/subtle Horner syndrome (i.e., in which norepinephrine release is not sufficiently reduced)
• Cannot be used to localize the responsible lesion. The test simply confirms or refutes the existence of a Horner syndrome, but provides no information about the localization of the lesion along the 3-neuron pathway.
• Cocaine for diagnostic testing is difficult to obtain.
• Cocaine is a controlled substance that must be kept locked in a secure location.
• Cocaine has a short shelf life and must be compounded for each patient.
• Cocaine stings when instilled into the eye.
• Drug metabolites can be detected in urine drug screens 24 to 48 hours after instillation of cocaine eye drops, potentially giving an erroneous indication of illicit drug use.
• False-positive results can occur with mechanical iris dysfunction. If this is questioned, a Horner pupil will dilate with mydriatic eye drops (eg, tropicamide or phenylephrine) while a pupil with mechanical iris dysfunction will not.

Alternatively, topical Apraclonidine can be used to confirm a Horner's syndrome. Apraclonidine is an adrenergic agonist (strong alpha-2 and weak alpha-1 activity) that causes pupillary dilation in the Horner's pupil due to denervation supersensitivity, while producing a mild pupillary constriction in the normal pupil (presumably by down-regulating norepinephrine release at the synaptic cleft). Within 30 to 60 minutes after instillation of 1 drop of apraclonidine 0.5%, most patients with Horner syndrome develop a reversal of anisocoria of at least 0.5 mm, and a decrease or resolution of the corresponding ptosis. The anisocoria reversal, even when slight, is detectable with the unaided eye. In contrast to the cocaine test, apraclonidine dilates the affected eye (rather than the unaffected eye with cocaine) and also improves or resolves the ptosis (Garibaldi et al 2006). The sensitivity of the reversal of anisocoria with the apraclonidine test for Horner syndrome is estimated to be 0.91 compared to customary pharmacologic agents (Freedman and Brown 2005).

Benefits of apraclonidine (compared with cocaine) (Freedman and Brown 2005; Koc et al 2005; Lanska 2006):
• The apraclonidine test is better tolerated.
• The apraclonidine test has a sensitivity and specificity similar to that of the cocaine test.
• Apraclonidine is readily available in a multidose preserved bottle.
• Apraclonidine can be used as formulated by the manufacturer.
• Apraclonidine requires no excess regulatory controls.
• The effect of apraclonidine on the eyelid may be useful for the long-term relief of the ptosis associated with Horner syndrome (if it is bothersome to the patient).

Problems with the apraclonidine test (Freedman and Brown 2005; Kardon 2005; Lanska 2006):
• False negative results may occur with a recently acquired Horner syndrome (ie, prior to the development of denervation supersensitivity).
• Further studies are needed to assess the sensitivity, specificity, and predictive value of the apraclonidine test in specific populations (eg, compressive lesions, tumors, dissections) and at different ages.

Topical Hydroxyamphetamine is helpful in differentiating between pre- and post-ganglionic Horner's syndromes. Hydroxyamphetamine causes release of norepinephrine from intact adrenergic nerve endings with resultant pupillary dilation. One hour after instillation of 1% hydroxyamphetamine eye drops, dilation of both pupils indicates a lesion of the 1st-order (central) or 2nd-order (preganglionic) neurons, whereas failure of the smaller pupil to dilate indicates a lesion of the 3rd-order (postganglionic) neuron.
See also:
RD: Of course.

DL: One of the things I’ve always admired about you is your willingness to listen to opposing viewpoints and then provide input or make decisions based on the merits of the viewpoints, rather than on the relative academic standings of the protagonists. I must say this came up repeatedly in clinical discussions and any disagreements in the department when I was there. You went on issues, not on rank or standing. You went on what the substance was of a situation. That truly, I thought, was terrific. There are very few people that really will listen to the issues and judge on that basis. I still respect you greatly for that.

You also made promises and kept them. People could count on you to keep your word and could count on you not to hem and haw. Your integrity, consistency, and decisiveness engendered tremendous respect among faculty and residents. Those characteristics were, in fact, what impressed me the most when I interviewed for a residency position with you and were what influenced my wife and me to come to Cleveland for residency.

RD: Well, the letter from your Dean was pretty helpful.

DL: Thank you.

RD: “He is the smartest student in his class and possibly the smartest student ever to graduate from this medical school.” You don’t get that very often!

DL: I didn’t know he said that.

RD: Yes he did. I didn’t want to tell you that then. [chuckles]

DL: I’m moving toward this now. In 2006, you were part of a Working Group on brain death that met in Vatican City. Tell us how that came about, what its significance was, and what impact it had.

RD: There were a couple of conferences on brain death given by the Pontifical Academy of Science in the Vatican. I actually wrote down those years, 1986 and 1989. Although they said that it was published, it was internally published. They picked a group of scientists. It didn’t have any impact, particularly.

For some reason—nobody told me this—but this third group was selected with eighteen pro-brain-death individuals, [and] only two anti-brain-death individuals. I think it was set up. Pope Benedict [XVI], I believe, gave them permission to do this. It says in there that this is the opinions of the speakers. The fact that they published a book where ninety

percent of the articles are pro-brain death and after the two negative people, that German guy [Robert] Spielmann [sic, Spaemann], I think is his name… I’ve written that down. Spielmann [sic, Spaemann] is a German ethicist and [D. Alan] Shewmon is a pediatric neurologist from California who has written a lot about why brain death isn’t really death. After they gave their talk, we had the final [say], so anybody who would take the position that the Catholic Church is against it… They’re not for it, but they’re not against it. I think that’s the essence of this book.

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150 Robert Spaemann (born May 5, 1927) is a German philosopher whose focus is on Christian ethics, and is a former Professor of Philosophy at the Universities of Stuttgart, Heidelberg, Salzburg, and Munich.

151 D. Alan Shewmon, MD (born 1949) is a pediatric neurologist, and is head of Pediatric Neurology at Olive View-UCLA Medical Center, and Vice Chair of Neurology, University of California – Los Angeles.

152 In 1985, the Pontifical Academy of Sciences held a working group on “The Artificial Prolongation of Life and the Determination of the Exact Moment of Death,” and the scientists who participated in that working group were unanimous in affirming that “death has taken place when: a) spontaneous cardiac and respiratory functions have irreversibly ceased, or b) there has been an irreversible cessation of all brain functions.” The proceedings and conclusions of that working group were published in 1986 and received concurrence and support among physicians, scientists, and proponents of organ transplants. However, because “among certain moralists and philosophers, questions and even strong opposition arose,” the Pontifical Academy convened another meeting in 1989 on “The Determination of Brain Death and its Relationship to Human Death” with the participation of medical scientists, philosophers, theologians, and legal experts. This group “confirmed the conclusions proposed in 1985 and upheld the criterion of brain death as determining the death of the human being.” In an address on August 29th, 2000, to the 18th International Congress of the Transplantation Society, Pope John Paul II declared that the criterion adopted “for ascertaining the fact of death, namely the complete and irreversible cessation of all brain activity (in the cerebrum, cerebellum and brain stem) if rigorously applied, does not seem to conflict with the essential elements of a sound anthropology.” Then, in response to a request by Pope John Paul II, the Pontifical Academy held a preliminary meeting on “The Signs of Death” on February 3-4, 2005, to verify the validity of the criterion of brain death, and to outline the scope of existing controversy concerning these criteria. Finally, at the request of Pope Benedict XVI, the Pontifical Academy organized a further seminar on brain death, entitled “Working Group on the Signs Of Death,” that was convened at the Vatican on September 11-12, 2006, “with experts of international prestige and representatives of the principal regions of the world in order to explore, at a purely scientific level, the application of the criterion of brain death since its full definition.” The Pope had also “requested that Academies of Neurology or related research centres in the world be asked to present statistics, if possible, on the cases of the diagnosis of recognised brain death since its full definition, its application, and the clinical histories involved.” The conclusions of the majority of the group, including 3 cardinals and the organizing bishop, reaffirmed the validity of the concept of brain death as a definition of death.

On the title page of the proceedings was a quotation from Saint Augustine (354-430), an early Christian theologian: “Thus, when the functions of the brain which are, so to speak, at the service of the soul, cease completely because of some defect or perturbation – since the messengers of the sensations and the agents of movement no longer act –, it is as if the soul was no longer present and was not [in the body], and it has gone away.”

Ses also:

cardinals plus the bishop\textsuperscript{153} who moderated it—three cardinals signed on to “Why the concept of brain death is valid as a definition of death.”\textsuperscript{154} I can make a copy of it. Three cardinals plus the eighteen of us who were pro-brain death said this is valid. It’s


This was reprinted in a separate document:


This was reprinted in a separate document:


\textsuperscript{153} H.E. Msgr. Marcelo Sánchez Sorondo (born September 8, 1942) is a Roman Catholic Bishop, and Professor of the History of Philosophy, Libera Universitá Maria SS. Assunta. He is Chancellor of the Pontifical Academy of Sciences and Chancellor of the Pontifical Academy of Social Sciences. See appendix 5 for further information.

\textsuperscript{154} The three cardinals:
1. H.Em. Cardinal Georges M.M. Cottier, O.P. (born April 25, 1922; Switzerland), Dominican, Theologian emeritus of the Pontifical Household, and former professor at the Universities of Geneva and Fribourg;
2. H.Em. Cardinal Carlo Maria Martini, S.J. (born February 15, 1927 – August 31, 2012; Italy), Jesuit, and former Chair of Textual Criticism at the Pontifical Biblical Institute, and former rector magnificus and chancellor of the Pontifical Gregorian University;
futility. We know, despite what you see in newspapers and all, that if somebody confirms the brain [is dead]—particularly with scans now—and see that there’s no blood flow, they’re not even going to… You can keep him alive—well, you can keep their heart beating. They’re heart-beating cadavers. But it’s futility and it’s a waste of money. The Church doesn’t want to do that. They don’t want to do that. It doesn’t make sense. That’s why I think they permitted it, but they didn’t want to get into a battle. Maybe the new Pope [Francis] will, because he’s sort of into that. But Benedict didn’t want to get into a battle and have them split like the Episcopalians or whatever groups split when they disagree with something. You don’t have to believe it.

BWS: What’s happened to that book now or how has that been used?

RD: I don’t know. I’ve never seen it on the market. It has one of those numbers.

DL: It’s available free.

BWS: Available through the Catholic…?

DL: You can download the whole book.¹⁵⁵

BWS: On the Internet.

RD: It has an ISBN number.

DL: It’s free. You can download it.

BWS: As far as its use or setting any kind…

RD: I think since so many of the participants are really neurologists, they all got the book. They were part of it. How did I get? I never wrote a paper on brain death.

DL: You did for that.¹⁵⁶

RD: Oh, yes, but how did I get in the club?

DL: It’s a pretty good club.

RD: It’s a hell of a club. They’re all the guys.

DL: They are the big guys.

BWS: And you end up over in Vatican City.

RD: Yes. I have to tell you that story. The Bishop Sorondo, who moderated it and is in charge of the Pontifical Academy of Science, is from Buenos Aires. He’s a good friend with Conrado J. Estol\textsuperscript{157}, who is a neurologist in Buenos Aires, who is a very good friend of mine. Conrado sends me a letter saying, “How would you like to come to the Vatican?” So I got on because of him.

DL: That’s okay.

RD: I picked a paper that you don’t have to be an expert on. You just have to read the literature, the history, and how it evolved.

DL: It was clear, concise, and you got it.

RD: Now, at that meeting, we’re in this place where the cardinals stay and it’s spartan. There’s a light switch in the room. There’s no radio. There’s no TV. There’s no phone. It’s spartan, incredibly clean, and nice. They’re individual rooms. Married couples have to be separated, adjoining rooms maybe, but separated. A group of Canadian cardinals were there. Every five years or so, they come to the Vatican.

Several weeks prior to that, I’m in Saudi Arabia and I was asked whether I would see a young twenty-one-year-old prince who was brain dead at one of the local hospitals. It turned out that this kid was in a car accident—[he’s] twenty-one; he’s not a kid—and had terrible head trauma. He’d been brain dead for months. The Saudi neurologist said, “He’s brain dead.” There was no argument for that, except for the very orthodox, but none of them were neurologists. Every western neurologist that came to Saudi Arabia to see one of the members of the royal family were asked to come and see this boy. So, I go. I meet the mother of the father, the boy’s grandmother. I go in to examine him before the father gets there, the high-up prince. He’s brain dead, without any question. He’s brain dead. Every criteria, no cough, no this or that. The father comes in, “Yet another American neurologist telling me to do something against my religion.” He said, “I’m sorry, Doctor.” He apologized. “Let me just tell you something. Allah is omnipotent and omniscient. I believe that. He knows everything and he can do anything. Allah knew he was going to get into a car that day. Allah knew he was going to get into an accident. He could have stopped it. He didn’t. Allah knew that his brain was going to be… He could have stopped that. He didn’t. Allah can stop his heart and he’d be dead by all your criteria. But he’s not. It’s going to be up to Allah, not you and not me.”

\textsuperscript{157} Conrado J. Estol, MD, PhD, FAAN, is an Argentinian neurologist trained in internal medicine and neurology in the United States and then returned to Argentina. In 2005, Estol participated in a conference at the Vatican on brain death. In 2006, Estol was asked by Pope Benedictus XVI to organize a second conference on brain death to which Daroff was invited. Subsequently, Estol was invited by the Pontifical Academy of Sciences to organize the meeting “Atherosclerosis: the 21st century epidemic” held in May 2010 at the Vatican. See appendix 5 for further information.
That’s that. That was early 2006. That kid is still alive. They did a scan on his brain and it’s all shrunken...

At any rate, I’m now at the Vatican. It made sense to me. If Allah can do anything and knows everything, I guess he could do right. There’s no question about it; he could have stopped that. I go with this Canadian cardinal and we’re chatting. I said, “I’ve got an issue for you. What do you think of this?” and I tell him that. He said, “That denies free will.” I guess it does. He said, “If you accept that, then we’re not responsible for anything, because Allah knows we’re going to do it and he could stop us.” Wow! So I laid this on a very religious Muslim who said, “It’s not quite that simple. There are two kinds of free will,” and he went into this… They have a way around it, but, whatever. “As we understand free will, that story doesn’t cut it.” You get to the Rabbi [Harold S. Kushner]… *When Bad Things Happen to Good People.* He has a kid born with porphoria.

Do you know the book?

DL: No.

RD: He had a child born with porphyria. He’s getting old and he’s even dying. “I’ve obeyed your commands. I’ve done everything right.” He actually renounced his religion. And he came about… [to consider that] God is a big picture person. He doesn’t care whether I brush my teeth today or whether this, that, or the other [thing]. He’s into the big picture. He’s not into small little things. There will be a heaven. Things will be straightened out. In order to think you should be treated well because you’re a nice person is like thinking you’re not going to be gored by the bull because you’re a vegetarian. [chuckles] He developed this notion that God… Yes, he’s omnipotent, but he elects not to use it. Bad things happen to good people, but it’s okay. It’s okay, because it will be made up and there’s a reason.

The free will… That was a good experience for me, because the cardinal straightened that out. I didn’t have an answer. I didn’t think of free will.

Go on.

DL: I’m going to finish up with a set of quick things, I hope.

RD: Okay.

DL: I want to move through them relatively quickly, because we’ve run out of time. I want to have at least an answer on the books here.

RD: All right.

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DL: Of the various roles you’ve held, clinician, researcher, teacher, administrator, leader which have you enjoyed the most?

RD: Being chairman initially until it got harder. I’m enjoying what I’m doing now. I don’t have many responsibilities. I can do what I want. We’re editing the book, the Encyclopedia. I’m not being paid very much. I’m about a third of what I used to get, but I’ve got my own life.

DL: Of the various roles, which do think has made the greatest impact?

RD: Well, I didn’t make the Case Western Reserve Department of Neurology a Harvard or a Penn or a Hopkins. It was a good department when it began and it was a good department when I left it.

In terms of impact, I would guess I’m the first person to really record eye movement scientifically.

DL: So you view that…?

RD: The way you’ve worded the question in terms of impact…

DL: Right.

RD: Yes.

DL: What do you view as your greatest medical legacy?

RD: The residents that I’ve trained.

DL: I expected that answer, quite honestly. I believe it’s true. I believe that’s where you have had a tremendous impact. Your educational abilities were outstanding.

RD: Was it Osler who said…? It was either Osler or one of those guys [who said,] “A teacher affects eternity. One never knows where [his influence stops,]” by Henry Booker Adams].” You’ve got a patient. You’ve got a patient’s family. They’ve got kids. You’ve got their kids. It just goes…

DL: After all these experiences, what do you see as the characteristics that make a good leader?

RD: I’ve got to quote somebody. There are three things. I’ve got it written down somewhere. It’s sort of apocryphal. “You’ve got to learn how to accept disappointment, tolerate anxiety, be patient.”

DL: It sounds like Joe Foley.
RD: Yes, like Joe Foley.

DL: How do you see those different characteristics in terms of your own experience?

RD: Well, good leaders have had those characteristics.

DL: I think you have actually.

RD: Well, that’s not for me to say.

DL: It is for me then.

RD: Okay.

DL: If you were going to give advice to someone contemplating neurology now, what kind of advice might you give them?

RD: Do it!

DL: If you were seeking out a mentor, what type of mentor might you recommend?

RD: A Joe Foley, a sweet bright, honest, lovable…

BWS: What about academic neurology?

RD: Well, academic neurology… Joe [Joseph Boyd] Martin.159

159 Joseph Boyd Martin, PhD, MD, FAAN (born October 20, 1938) is Edward R. and Anne G. Lefler Distinguished Professor of Neurobiology at Harvard Medical School. Martin completed a residency in neurology under Joseph Foley, MD, and a fellowship in neuropathology at Case Western Reserve University in Cleveland. Since then Martin had a very successful career, being appointed Neurology Chair, Dean, or Chancellor at three different major academic institutions. Martin is a past president of the American Neurological Association. See appendix 2 for an anecdote concerning Joseph M. Foley, MD, FAAN, and also see appendix 5 for further biographical information on Martin.

See also:

Note: When D. Lanska interviewed Joe Foley, M.D. for the AAN Oral History Archives Project on December 8, 2011, Foley presented him with a copy of Martin’s memoir: Alfalfa to Ivy: Memoir of a Harvard Medical School Dean (2011). Foley was very pleased to have been recognized in it. The following is a quotation from it:

“It was a great privilege and honor to work for Joe Foley. He had arrived at Case Western only three years earlier from the Boston City Hospital, where he worked as the neurologist/neuropathologist with the eminent and often difficult Derek Denny-Brown. Stories were legendary of Foley’s good virtues as he
DL: Where do you see neurology going from here?

RD: Where is medicine going from here? We don’t know what’s going to happen. Economically… Several things. I think we’re missing the boat about the problem, [President Barrack] Obama is.

Get tort reform. When I get a patient sent to me by an internist, they’ve had every damn study done. Most of them didn’t need to be done. They’re afraid of being sued. Get rid of that stuff and really have tort reform. Despite the three percent that people claim you get rid of, I don’t believe that. I think it’s significantly higher. That’s (a).

And (b) admit that the progress in medicine has caused this to happen. How much is an MRI scan? How much is a CT scan? What did we get? Skull x-rays? That costs eighty bucks or something like that, rather than eight hundred or three thousand or whatever. It’s great… It’s great for medicine to be able to make a diagnosis, but it’s damned expensive…and the drugs that we’re using! What did we have for migraine back then? Methysergide and phenobarbital. Epilepsy? Dilantin and phenobarbital, when I was a resident. That was it. Now, there’s a ton of drugs for epilepsy and they’re expensive. That’s medical progress. To have medical progress, it’s going to cost more. I don’t know the answer and I’m not going to say socialized medicine or one party and all that sort of thing, because that’s what some people would say and it would get people upset.

DL: Any closing comments, Bob?

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rescued students and residents in training from the wrath of Denny-Brown. Foley was a graduate of Harvard Medical School…, raised in Dorchester in the heart of Boston, and one of the few lads from this Irish neighborhood to get a Harvard education.

Dr. Foley, as we called him out of respect, led the weekly neuropathology brain-cutting rounds. We were intimidated by his relentless insistence on anatomical detail, putting us on the spot and eagerly anticipating our failure so he could cheerfully malign us. I loved the experience…

Foley was a superb doctor who emphasized to us the importance of showing our patients the respect they deserved. He was very visible in our clinics and on the ward. He never lashed out, and I never heard him gossip in unkind or unpleasant ways about colleagues in the division or in the Department of Medicine. He was friendly with the dean, with the other chiefs and with the administration. He loved teasing the nurses, and they adored him. He taught us to appreciate how much learning came from talented nurses and would not permit a word of complaint about them. ‘Be nice to them. I can do without you, but not without them,’ he would chide us. His sense of humor was ubiquitous, and I never heard him tell the same story or repeat the same joke twice. His repertoire of Irish stories, told in vernacular accent was unmatched in my experience except perhaps by Robert Joynt…

Neurology training under Joe Foley turned out to be everything I’d hoped for. He recruited a formidable group of world-class neurologists to Cleveland…”

See: Martin JB. Alfalfa to Ivy: Memoir of a Harvard Medical School Dean. Edmonton, Alberta, Canada: University of Alberta Press, 2011. [Permission to quote this material granted by J.B. Martin to D. Lanska on March 26, 2014]
RD: Closing comments… Thank you very much. I really enjoyed this. Make sure you request from me in writing the big picture [montage] the Joe Foley film, and Abe Ornstein’s movies.

DL: It’s been a privilege and an honor to be with you today. Thank you.

RD: Okay. That’s great!

[End of the Interview]

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