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Born October 18, 1907 in Milwaukee Wisconsin. I earned a BA and MA in Physics at the University of Wisconsin by 1931. I spent the last half of the last year working in the department of Radiology at UW. When I applied to Dr. Ernst Pohle the chairman, he gave me the keys to a lab to work and study in.

Through Dr. Pohle I worked for a year in the Rockefeller Research Laboratory in New York City. Took courses in Biology at Columbia University at night and enjoyed New York. Came back to Madison at the invitation of Dr. Pohle, to take a job running a radon plant, to be physicist to the department, and to have my old lab back.

One day I asked the Boss, if he thought that I should study Medicine. He rose from his seat, said "Come along". We ended up in the Medical Dean's office. The Boss said "Here's a candidate." and left. I was in Medical School. In the 4th year I was elected to AOA, The Honor Medical Society, limited to the upper 10% of the class.

During this time I met and worked with Dr. Lester Paul, in Radiologic Diagnosis. One day in my hearing, the Professor of Medicine, looking down the hall at Dr. Paul said, "There goes 75% of the diagnoses in this Hospital". It was Dr. Paul who made me decide to spend my life in Radiology

I interned in Research Hospital in Kansas City, Missouri because I wanted to see what it was like to live in a Boss-Run Town. The Pendergast Machine was in full operation.

I applied for residency at Stanford in San Francisco. I was accepted by Dr. Robert Newell. I enjoyed the Residency and fell in love with San Francisco. This was in 1937. At that time, all residents in Radiology were trained in both Diagnosis and in Therapy.

Four months of the first year I spent at the San Francisco General Hospital where I was exposed to Dr. Henry Garland. He taught by scare and scarification, an effective method.

At the finish of the second year of Residency, I applied to the Yale University Hospital for a third year Residency. Instead of that, I was offered and accepted an Instructorship. Dr. Hugh Wilson, the Chairman, was the best diagnostician I had ever met. I realized how much I had to learn. I calculated how much time I had left before the Radiology Board Certification exams were to be taken. It came out that I could read 10 years of RADIOLOGY and 10 years of the AMERICAN JOURNAL OF ROENTGENOLOGY if I read one half of the annual publication of one of the Societies every day. So I did. Sometimes I finished at 3AM. The Board exams were a breeze.

Dr. Robert Stone invited me to come to the University of California in San Francisco as an instructor. I spent the whole of my active career there. I loved it. WW11 came and Dr Stone was selected to run the Radiation Safety Section of what later became the Manhattan District. He moved to Chicago and later to Oak Ridge.

I was made Acting Chairman and later Chairman of the Department. My experience as Chairman taught me that I would never accept a Chairmanship again.

Colonel Dr. Stafford Warren recruited me to head the Radiation Safety Division of the Manhattan Project in Berkeley on a part time basis. In Berkeley I met, among many others, Ernest Lawrence, Ed McMillan, Luis Alvarez, Thornton, and Szillard, all future Nobel Prize winners.

In our monthly trips to Chicago, I met people like Oppenheimer, Wiegner, Teller, Fermi, Compton, and other giant intellects who came from all over the globe to help in the work of the Project. It was an awesome experience.

The War ended and Dr. Stone returned. I relinquished the Chairmanship with a great sigh of relief. I wanted time for research.

Dr Joe Hamilton and Dr. Mayo Soley had done the pioneering work that showed that Radioiodine could act as a tracer for iodine metabolism in the thyroid. Through Ken Scott, I was given access to sufficient supplies of Radioiodin to start basic and clinical studies of thyroid disease with the clinical help of Dr. Soley. This was an exciting and productive time. I was given an office that I turned into a laboratory for the iodine work. I spent about 6 years in that work.

These were busy days. Film reading, going to rounds and autopsies, preparing teaching files, and consulting with referring physicians, filled the days. I ran a teaching session for the residents starting at 5 PM and ended about 7 PM. A satisfying experience.

It was about this time that great interest in the study of the cardio vascular system and the vascular supplies to the various organs of the body arose. With Dr. Mary Olney we studied the blood flow through the heart in congenital heart disease. With Dr. Ed Boldrey we studied the blood flow in the brain in patients with cerebral aneurysms and tumors. The venous and lymphatic systems were exposed and explored. We began to take xray movies. With Dr. Howard Bierman manipulating the catheter under my watchful fluoroscopic eye, the blood supply of every major organ in the body was demonstrated. The difference in the blood supplies of normal and malignant tissues was demonstrated.

In 1957 I was offered the Chairmanship of Columbia University in New York. Through the good offices of Dr. Stone, I was entertained at lunch by Dr Robert Gordon Sproul, President of the University of California. I told Dr. Sproul, that if I was given a research

laboratory of my own I would not accept the New York offer. He promised me one. From the National Institutes of Health Dr. Sproul received grants to fund the building of laboratories. I was told to design exactly what I wanted. This turned out to occupy 3300 square feet of space. This was provided in the old Medical School Building. When that building was to be demolished and the new Medical School Facility was to be built, I was given equivalent space in the new building. I called it The Radiologic Research Laboratory.

This was the dream of my lifetime. I was allowed afternoons of every day to spend in the lab. I authored or co-authored 135 publications. The bound reprints occupy 5 inches of shelf space and weigh 11 pounds.

These were the exciting days when there was pioneering work to be done in Radiology in all fields of Medicine. I was involved in the study of error in interpretation of radiographs, the physiology of the lower urinary tract and of the the esophagus, the measurement of radiation exposure of patients during fluoroscopy, the influence of the quality and quantity of radiation on the density and contrast in radiographs, xray movie studies of the mouth and pharynx in patients with cleft palates with sound and sound spectrographic data presented simultaneously, the simultaneous display of anatomic and 8 lines of physiologic data shown in every frame of xray movies in the study of the function of the lower urinary tract, the manipulation of xray images using various television subtraction and addition methods, showing an infinite number of laminagrams from a finite number of films, and the application of television methods to the analyses of the quality of xray and other visual images.

In June 1978 the Regents of UC renamed the Radiological Research Laboratory. The Earl R. Miller Radiologic Imaging Laboratory.

During these years I became involved in the educational endeavors of the AMA, of the Research work of the NIH, and of the activities of the American College of Radiology. I became Chairman of the Board of Chancellors of the College in 1956 and later received its Gold Medal.

I became Emeritus in 1974.