

MEMORIAL RESOLUTION

JOSEPH P. KRISS (1919 – 1989)

Dr. Joseph P. Kriss died suddenly and unexpectedly on the morning of the 9th of September, 1989, only nine days after he had retired from his administrative duties as chief of the Division of Nuclear Medicine at Stanford University Medical Center to become Professor Emeritus.

He was born in Philadelphia, Pennsylvania, in 1919, and spent his formative years in the town of State College, Pennsylvania where his father was a faculty member in the Department of Biochemistry. Joe entered Penn State college in 1936 and graduated summa cum laude in 1939. He entered Yale University Medical School and received his M.D. cum laude in 1943. Internship and residency in internal medicine and metabolism were completed at the New Haven Hospital where he was an instructor in medicine from 1944 to 1945. There followed research fellowships in metabolism at Washington University School of Medicine, in St. Louis, and endocrinology and metabolism at Michael Reese Hospital in Chicago. In September of 1948, Joe moved to San Francisco to begin private practice and was appointed Clinical Instructor in Medicine at the Stanford University School of Medicine, the clinical portion of which was still in San Francisco at that time. While he was on the voluntary clinical faculty, two factors drew him back to full time academic medicine. One was contact with the late Dr. Robert Reid Newell, who introduced him to the field of isotopic medicine, now known as nuclear medicine; and the other was Joe's active involvement with and interest in medical education. As a result, Joe became Assistant Clinical Professor in 1951, associate professor of medicine and radiology on January 1, 1957 and professor of medicine and Radiology in 1962. In 1958 he was appointed Director of the Division of Nuclear Medicine, succeeding Dr. Newell.

Throughout his career at Stanford, Joe exhibited skills at the highest level in the three areas by which academic physicians are judged: research, patient care and teaching. To these may be added a fourth area, successful administration.

In the research arena, he was an internationally recognized authority on the pathogenesis and treatment of many thyroid disorders. His first research on the thyroid was published in 1951 and, since then, he pursued an extremely successful and focused program over nearly forty years. One of the highlights of this work was the isolation and identification of the long-acting thyroid stimulator (LATS), now recognized to be the cause of Graves hyperthyroidism, the most common cause of hyperthyroidism in the United States. He was the first to demonstrate that this abnormal material in the blood of patients with Graves disease had the structure of an antibody, showing for first time that an antibody could stimulate rather than inhibit function. Patients with Graves disease suffer from an eye problem which can be devastating and lead to severe visual difficulties and blindness. In 1973, in collaboration with his colleagues in the Division of Radiation Therapy, he demonstrated that radiation treatment of the extraocular muscles using a linear accelerator could successfully arrest and even reverse this disease. Patients were referred to Joe from all over the world for consideration of this treatment. In October of 1989 the results

of treatment of 311 patients were presented at an international meeting in San Francisco. Patients with Graves disease may also suffer from a very troublesome skin disorder (dermopathy), and Joe again showed how this could be successfully treated by local application of high potency corticosteroids.

Joe and his colleagues also developed techniques for the measurement of thyroid hormones, thyroid antigens and thyroid antibodies. These methods were new, or better, or more sensitive than those available. His techniques for measurement of antithyroglobulin and antimicrosomal antibodies are universally accepted as the most sensitive currently available, though they were introduced twenty years ago. He also demonstrated that it was possible to detect complexes of thyroid antigen and thyroid antibodies in the circulation of patients with immunological thyroid diseases. His early work on long-acting thyroid stimulator led naturally to a series of studies to improve the sensitivity of the assay and determine the receptor site on the thyroid cell. His work on measurement of unbound or free thyroid hormones and thyroid-stimulating hormone in serum led to exquisitely accurate determinations of thyroid function in patients with hyperthyroidism, hypothyroidism and euthyroidism. Measurement of thyroglobulin by his technique has been shown to be of the greatest importance in determining recurrence of thyroid cancer as are his methods for the measurement of antibodies in the diagnosis of immunological thyroid disorders.

The above body of research would have set Joe well apart from his colleagues but he was responsible for many other important advances in internal medicine and nuclear medicine. He can be considered as a father of nuclear cardiology. He introduced techniques which set the scene for this widely used methodology of non-invasive cardiac testing. A series of elegantly illustrated papers in the late 1960s and early 1970s showed the wide applicability of nuclear cardiology in demonstrating cardiac valve defects, intracardiac shunts, and the blood supply to the heart muscle via the coronary arteries. Another area of his research was the evaluation of radioactive tracers in cancer and abscess detection. He also pioneered the use of artificial lipid vesicles as carriers of diagnostic and therapeutic radionuclides to target sites. He published a total of 164 scientific papers and chapters.

Joe was greatly interested in medical education and he was the perfect example of an excellent teacher. His teaching skills ranged from one-on-one at the bedside, through teaching to small groups, to formal lectures. He was responsible for developing many new courses at Stanford including Introduction to Clinical Medicine, a novel way of teaching medical students the skills of interviewing patients. He was involved in design of the flexible curriculum at Stanford which allowed medical students to do research and to focus on topics of particular interest to them. A generation of clinical scientists attests to the overwhelming success of that policy. In the late 1960s and 1970s, Joe conducted a weekly seminar with his residents and fellows. The topic was selected by the trainees and could cover any aspect of medicine, art, science, finance, etc. The only prerequisite was that the topic had to be given to him twenty-four hours before the seminar. This illustrates his breadth of learning. In recognition for his teaching he received the Kaiser Award in 1975. Joe expected a lot of himself and of his trainees. In 1975, in response to the relaxed attitudes of medical students and residents in terms of their dress and demeanor, he published a report entitled "On White Coats and Other Matters." This article resulted in an enormous response from clinicians who had recognized the same problems but had failed to speak out. Fifteen years later it is still widely remembered.

Joe was the epitome of a doctor's doctor. He was a gentle, skilled, caring physician. It was a joy to watch him interview patients. He had the uncanny ability of getting to the crux of the clinical problem, and his patients came to recognize him as one who could be entrusted to personally take responsibility for all aspects of their well-being. Very frequently, he was the court of last appeal and just as frequently, the appeal was successful. Many of his patients wept openly when they heard of his death; many commented that he was the best physician they had ever encountered. Joe had a way of talking, no matter how severe the subject, with a smile.

Any individual could be content by achieving what Joe had done as a physician, teacher or as a researcher. But his activities did not stop there. He played an important role in Medical School and University committees. He was a member of the Committee of Five (executive committee) of the Medical School Senate. He served on the Admissions Committee, the Curriculum Committee, and recently chaired the Committee for Land and Building Development for the University. Outside of the University, he was a Vice President of the Society of Nuclear Medicine, held many offices of the American Thyroid Association, and was founding member of the American Board of Nuclear Medicine, serving as Vice-Chairman of the Board in 1978. That same year he was awarded the Distinguished Alumnus Award by his alma mater, Penn State, and received the Distinguished Scientist Award from the Western Regional Society of Nuclear Medicine. In 1986 he was awarded the MacFarlane Professorship at the University of Glasgow in Scotland and elected an Honorary Fellow of the Royal College of Physicians and Surgeons in Glasgow.

Outside of science and medicine, Joe was an established and an accomplished artist. As with his science, his art was notably creative and spanned multiple media. He had enjoyed twelve one-person exhibits of his work, and in 1978 there was a twenty-year retrospective exhibition. His art work included oil paintings, bronze and wood sculpture, and monotypes. Recently he brought together his science and art with his successful entry into computer art. Many of his art works are in private collections throughout the world.

To those who knew him well, he was a warm, loyal friend. He and his wife Reggie were splendid and gracious hosts in their elegant home, and those of his prior trainees who attended their last party on the evening of his retirement will treasure the happy, relaxed evening which sadly was to be so close to his death. He had a wry sense of humor and was an excellent raconteur. He was modest, and detested pomp.

He is survived by his wife, two sons and four grandsons. His sudden death is a terrible loss to them since he was a devoted family man, who planned in his retirement to spend more time with his grandsons, whom he had already introduced to the worlds of art and science. Joe strove for excellence in everything he did, and by doing so, made those around him strive for the same values. He will be missed greatly by his family, his colleagues, his patients, and in the field of nuclear medicine.

I. Ross McDougall, Chair
Malcolm Bagshaw
Henry Jones