

MEMORIAL RESOLUTION

JEFFERSON M. CRISMON (1908 – 1987)

Jefferson Martineau Crismon, Professor Emeritus of Physiology, and former Chairman of that department, died November 3, 1987, in Boulder, Colorado.

He was born in Philadelphia, the son of a physician, Kenneth Crismon, and his wife, Alley Martineau Crismon. The family moved to Salt Lake City and then Los Angeles, where Jeff attended public schools. He received the AB degree from Stanford in 1931 and the MD in 1938. He is survived by his wife of fifty years, Catherine Stanton Crismon (AB Stanford 1933; MD, 1939) a daughter Patricia Crismon Mizrahi (Stanford AB, 1963), and two granddaughters, all of Boulder, Colorado.

While a medical student, he served as Teaching Assistant and Research Assistant in the Departments of Physiology and Pharmacology at Stanford and began research on the cardiovascular system. This served as the basis for much of the research that he continued throughout his professional career. He was appointed Instructor in Physiology at Stanford in 1938 and then progressed through the academic ranks to Professor of Physiology in 1951. He was Executive Head of the Department of Physiology from 1951 to 1963.

In 1940-41 both Jeff and his wife carried out research in the Department of Pediatrics at Yale on the distribution of electrolytes in mammalian tissues. This was then a relatively unknown field, and one in which Daniel Darrow and his colleagues at Yale were leaders. Upon returning to Stanford, Jeff continued this line of research and mastered the tedious and demanding gravimetric methods for the analysis of sodium and potassium. A few years later he acquired one of the earliest models of flame photometer which greatly simplified the analysis of these elements. He contributed to the analytical methodology for sodium and potassium in tissues using this instrument.

With the beginning of the war, Jeff initiated research supported by the Office of Scientific Research and Development on the pathophysiology of cold injury (frostbite). The results were reported in a long and authoritative series of articles published in the Journal of Clinical Investigation. During this period he served as consultant to the Air Materiel Command, U.S. Air Force, to the Office of Naval Research, and to the Surgeon General of the Army. He was a member of the Josiah Macy, Jr., Conference on Cold Injury from 1951 to 1958.

After the war Jeff began an investigation of the physiological effects of profound hyperthermia in mammals. Before this it was generally believed that non-hibernating mammals, including man, could not survive at body temperature more than a few degrees below 96F. He and his associates showed that anesthetized rats survived at temperatures approaching freezing. They elucidated the changes occurring in the function of the heart and blood vessels at these low temperatures. These experiments, and those on the pathophysiology of cold injury focused his attention on the small blood vessels (the microcirculation) and he spent most of his subsequent career investigating this important subject.

In 1957-58 Jeff held a Guggenheim Fellowship for research at the Human Physiology Division of the Medical Research Council in London. He was Associate Editor of the Annual Review of Physiology for several years and was a member of the editorial board of the journals Circulation Research and Circulation.

Throughout his career Jeff carried a major share of the load of teaching physiology to medical students. He was largely responsible for the introduction of a great deal more clinical physiology into the medical physiology course than had existed earlier. In part, this was accomplished through his own lectures and in part through his encouragement of clinicians to participate in the teaching. He will be remembered by generations of students for his carefully crafted, detailed analysis of the physiology processes underlying topics of medical importance. His twelve years as departmental chairman coincided with the period of planning and final move of the School of Medicine from San Francisco to the main campus. He devoted many hours to planning this move, only to retire before the Department of Physiology could be provided with adequate physical facilities and a vigorous faculty.

Jeff was an ardent fly fisherman throughout his life. He was a skilled craftsman and he and his wife built a small cabin in Trinity County and spent many months of each year there after retirement.

They maintained their home in Palo Alto until a few years ago when they moved to Colorado to be near their daughter and her family.

Frederick A. Fuhrman, Chair
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