



# Francis Daniels Moore



The sturdiest oak in American surgery has fallen. We have lost our trustiest compass. Dr. Francis D. Moore helped to advance the discipline of surgery beyond technique by adding physics, physiology, nutrition, and metabolism into surgical thinking. He was born in Evanston, Illinois, and graduated from the North Shore Country Day School, subsequently going on to Harvard College. While at Harvard, his talent for leadership began to show, as he was president of both the Harvard Lampoon and the Hasty Pudding Society. He graduated with the A.B. degree, cum laude in anthropology. Going on to the Harvard Medical School, he received the M.D. degree, again cum laude. Internship and residency at Massachusetts General Hospital followed, along with a special experience as a postgraduate National Research Council fellow in isotope physics and its applications (under Joseph C. Aub at the Collis P. Huntington Memorial Hospital). He served briefly as the assistant to Dr. Leland McKittrick upon finishing his residency, and had additional duties at MGH, including direct responsibility for managing the daily affairs of the surgical house staff.

His lifelong interest and many contributions to the metabolic care of surgical patients may have been sparked while he was a Chief Surgical Resident, when he was centrally involved at MGH with caring for casualties from the 1942 Coconut Grove nightclub fire. In this large group of patients, he had a major firsthand experience of the body's complex reactions to severe burns. Later, during the Korean War, he engaged in the study of potassium intoxication in wounded soldiers, a condition resulting from transfusions with outdated blood. These experiences helped to lead his interest toward metabolic derangements associated with surgical operations and trauma.

This interest also led to his use of the newly introduced technology of radioisotope studies using markers that would localize in abscesses. He then adapted these techniques to evaluations of body composition employing isotopic dilution. Total body water was measured with deuterium. Total exchangeable sodium and potassium were also determined. These findings were validated by analysis in animals prior to their

initial applications to man. His seminal research on body composition in humans extending over two decades was monumental. His books, *Metabolic Response to Surgery* with M. Ball, and *Metabolic Care of the Surgical Patient*, survive as unique resources for current intensive care units and burn centers worldwide. He also published a summary of this work in *The Body Cell Mass and its Supporting Environment*. He later recorded his views in another important area in *Clinical Studies of Carcinoma of the Breast*. This illustrated the continuing breadth of his many interests.

He became a long-term consultant regarding the care of the severely wounded for the Surgeon General of the United States Army and a long-term consultant to the National Institutes of Health, as well as a consultant to the National Aeronautics and Space Administration. He also served on the Board of Regents of the Uniformed Services University of the Health Sciences from 1976 to 1983.

His impact on the Harvard Medical School was enormous, for he was a larger than life figure: charismatic, dynamic, and an inspiring lecturer and teacher. One of his former residents writes, “He was the most powerful teacher I have ever known or observed because of his clear thinking and remarkable showmanship. When he was teaching, he was truly on stage communicating with each person. He made complex subjects seem simple. The resulting impact on students and residents went far beyond mere teaching. He conveyed a marvelous ethical sense with a true commitment to meticulous care of the patient.”

Francis Moore’s influence still encourages all those who knew him to do their absolute best for patients, treating each patient with the utmost kindness and respect. As a faculty member, he was a dominant force: outspoken, articulate, and persuasive. He cared deeply about academic excellence, combining extraordinary intellect with fairness. He assumed center stage in discussion and action. He was a driving influence of the Surgical Executive Committee. He always did his homework and understood the issues. He became an early supporter of the Harvard Community Health Plan and a founder and the first Chairman of the Board of the Massachusetts Health Data Consortium. His active interest continued throughout his retirement, and he continued to provide crisp overviews of surgical subjects to his successors.

He was deeply worried that currently evolving health care systems were harming academic centers. He was concerned that the market-driven delivery of surgical care was eroding the core values of research, teaching, clinical care, and patient interactions. Even in his mid-80s, he brought passion to these arguments.

Franny personified the surgical scientist, but we should not forget his valuable contributions in the areas of surgical manpower, economic and public policy issues of health care delivery, and ethical issues in medicine and surgical education. His talents made him one of very few individuals who steered American academic surgery for the second half of the twentieth century.

In his autobiography *A Miracle and a Privilege*, Franny reflects back sixty years to his first-year medical student days in anatomy. He nostalgically recalls that anatomy professor Bobby Green “...taught us not to say ‘I am a body, I have a soul’, but rather ‘I am a soul, I live in a body.’ ” He continues, “This places human anatomy where it belongs, as a structure and serves as a dwelling place...injury and disease can so destroy that warm dwelling place that it is no longer habitable and the dweller--energy, mind and soul--had best be permitted to depart.”

When he felt his own body was no longer habitable, he decided to end his life. Death by his own hand did not come as a surprise to many of his friends. He had not been well and was having increasing difficulty following the orders of his physicians. He had never been a good follower—since he could not be in control, he chose to end his life. We were immensely sad, but reluctantly accepted what we understood to be his wishes.

We recall those wondrous fifty years when we worked and planned together at the Brigham and HMS Laboratory for Surgical Research. When Franny came to the Brigham in 1948, Dr. George W. Thorn had already started a renal transplant program. Recognizing its impact, Franny encouraged the surgical staff to join in. After the first kidney transplant, he pioneered liver transplantation both in laboratory animals and in humans, developing procedures still being performed today. Under his stewardship, the surgical department became a leader in organ transplantation. Early on, he established anaesthesia as a division within the Department of Surgery at the Brigham. He was a key player in establishing the New England Organ Bank and was involved in Harvard's committee on the definition of death based on irreversible loss of brain function.

Above all, he was a towering intellect, a man for all seasons; an actor, a writer, and a musician. He was a gifted orator, which allowed him to command the center of attention in almost every setting. He once defined surgery as “organized optimism” and research as “organized play for grownups.”

It is impossible to characterize Francis D. Moore fully. He was electric. He lit up everyone he contacted: musicians, lawyers, writers, physicians, and surgeons. His restless curiosity enlivened all.

His long-term marriage to Laura Benton Bartlett ended with her tragic death in an automobile accident. He subsequently married Katharyn Watson Saltonstall on May 13, 1990. He is survived by five children, seventeen grandchildren, and four great-grandchildren.

Respectfully submitted,

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