In Memorium

William C. Dewey, PhD

November 4, 1929– November 15, 2021

William C. Dewey died peacefully on November 15, 2021. He leaves a trail of stars behind, having touched literally thousands of lives. His spirit lives on in each and every one of us. He touched all of us with his enthusiasm, intelligence, and kindness. Bill was a loving husband and father, a productive scientist, a great teacher, a terrific mentor, and a kind and compassionate human being. We were fortunate to have him with us for these ninety-two years.

Bill Dewey was born in Omaha, Nebraska. His father, a physician in the Indian Service, dedicated a number of years of his life to providing medical care to Native American reservations in the northwest. This provided him the opportunity to live on those reservations as his father moved from one to another. Bill learned from his father and mother his commitment to a liberal and progressive philosophy. Bill always said he learned much about life from the Native American Peoples. Bill moved from school to school, and every time he would meet the principal who would say, “Well, you’ve done well up to now, but our school is tough.” So, Bill accepted the challenge and kept a straight-A average.

After high school Bill attended the University of Washington, graduating Magna Cum Laude and Phi Beta Kappa in Physics in 1951. He participated in the Naval ROTC at the University of Washington, and after graduation he joined the Navy during the Korean War serving on the aircraft carrier USS Philippine Sea where he was designated as the atomic, biological, and chemical warfare defense officer. He went to a 2-week school at Hunters Point and Treasure Island, where he was introduced to biological effects of ionizing radiation. This field piqued his interest and he thought perhaps he should pursue this area in graduate school.

In 1954 Bill entered graduate school at the University of Rochester under advisor William Bale. Bill worked on a project involving radioactively labelled fibrinogen antibodies trying to figure out how these antibodies could get to the tumor for therapeutic purposes: an early form of radioimmunotherapy. He received his PhD in 1958 in Radiation Biology. Bill then went to the University of Texas M. D. Anderson Hospital and Tumor Institute in Houston to supervise the radioactive isotope and nuclear medicine laboratory in the Department of Physics. Bill was a faculty member in the Dept. of Physics as an Assistant and then Associate Professor of Biophysics from 1959-1965.

At M. D. Anderson Bill began working with Warren Sinclair just before Dr. Sinclair left for the Argonne National Laboratory, and Bill joined the laboratories of Drs. Ronald Humphrey and Arthur Cole. This began his lifetime commitment to radiation-induced cytogenetic changes and cell cycle effects. This is also where his lifetime association with then graduate student Peter Corry began.

In 1965 Bill moved to Colorado State University in Fort Collins as a Professor of Radiation Biology in the Dept. of Radiology and Radiation Biology in the Veterinary School. Following another move in 1981 hel

became Professor of Radiation Biology in the Dept. of Radiation Oncology, University of California San Francisco, where he retired in 2004.

This was a period of extreme productivity in Dewey's life. He published 223 peer-reviewed papers according to PubMed. He had continuous NIH grant funding from 1960-2004 including a R01 research grant that ran continuously for 23 years and a T32 training grant that ran for 20 years. The areas of Bill's research included Radiation Biology, Hyperthermia, and Cancer Radiotherapy. His specific expertise included: Radiation and hyperthermia biology, including heat-induced radiosensitization; cell biology, including cell cycle effects on radiation and heat-induced cancer cell killing; mechanisms of action of ionizing radiation and hyperthermia in killing mammalian cells and interfering with cell cycle progression; radiobiology and cell biology with emphasis on applying basic concepts to radiation oncology; pulsed field gel electrophoresis for measuring DNA double strand breaks and their repair; apoptosis induced by radiation; and cell killing and apoptosis using computerized video time-lapse cinematography.

Bill's teaching and mentoring skills were renowned. He trained between approximately 50 graduate students and post-doctoral fellows, most of whom entered careers remembering the lessons that Dr. Dewey taught:

"What's the mechanism?", "What is the Question?", "What's the cell cycle response of treatment?", "Work hard, play hard", "Communication is critically important", "Publication of results is as important as performing the research", "Be honest and accurate in reporting your results and conclusions", and "You get some of your best ideas walking in the woods or skiing".

Bill had three outdoor passions: skiing, wind surfing and motorcycling. Marty Schneiderman and Bill frequently went out on their bikes together in the mountains around Fort Collins. Marty said that "Bill would file his fingernails going around curves on his bike!"

Bill's former trainees have vivid memories of his teaching. To quote a few of his former students:

"No single person has had a greater or more positive impact on my professional development than Dr. Dewey. I imagine that the same sentiments would be echoed by most of the other individuals he has trained."

"He always genuinely enjoyed helping students to reach their full potential, and his laboratory and office, over the years, proved to be effective environments for grooming budding scientists for their future independent research, teaching, and administrative endeavors."

"But most of all, the events, among the many other events in my memories of Dr. Dewey, show the love and care he put into science. Every part of his experiment was given great consideration and done meticulously. It was not just following the techniques straight from the book, but using his imagination and creativity to improve every step of the technique to see which way works best."

"I credit Dr. Dewey's undying and unselfish friendship and support as one of the main reasons that I was able to overcome adversity in my career to become a tenured faculty member in the biomedical research community."

"I only hope that I can live up to the outstanding standard he set for mentoring in my own career."

In 2004 Bill received the Award for “Excellence in Mentoring” from the Radiation Research Society. Shortly afterwards, the Society of Thermal Medicine named their biennial excellence in mentoring award the “William C. Dewey Award.”

Given Bill’s ingenious, innovative, and productive career, one would expect him to have received many awards. True to form he received many awards including the following highest awards for outstanding scientific achievement:

The Gold Medal from the American Society of Therapeutic Radiology and Oncology,
The Failla Award from the Radiation Research Society, and
The Eugene Robinson Award from the Society of Thermal Medicine.

Bill served as President of the Radiation Research Society and the Society of Thermal Medicine. He was also called upon to serve on many peer-review committees for the National Cancer Institute.

Bill took great pride in the success of his trainees. Some of his trainees went on to receive the same awards he did. Two of his trainees were the only Americans to receive the BSD-Pyrexar Award from the European Society for Hyperthermic Oncology for outstanding scientific contributions. And one of Bill’s trainees received the Sugahara Award from the International Congress of Hyperthermic Oncology.

After his retirement, Bill received great satisfaction from helping 5th graders with arithmetic at the Bahia Vista Elementary School in San Rafael. He volunteered 2 hours a day, three days a week for several years.

Bill Dewey was laid to rest at Fernwood Cemetery, Mill Valley, California on December 4, 2021. He was predeceased by his mother, father and

sister, and is survived by Helen Dewey and Gail Hurley; five children, seven grandchildren, and four great grandchildren.

A Celebration of Bill's life will be held for friends and colleagues in the Spring of 2022 (date and time to be determined). Donations in the memory of William C. Dewey can be sent to the Parkinson's Foundation, the Radiation Research Society, the Society of Thermal Medicine, or the Youth Education Program of the Shoshone-Bannock Tribes, P.O. Box 306, Fort Hall, ID 83203.

At Bill's internment service on the upper meadow of Fernwood Cemetery, a close friend remembered what Bill told her years before: "When I pass on, I hope to fly away like a bird." Soon after she spoke, a red-tailed hawk was seen soaring in the sky above the upper meadow.

Dennis Leeper