October 11, 2021

Dr. Joseph R. Bertino, a pioneering oncologist whose groundbreaking work advanced the course of cancer research and medicine, died Monday, October 11th, in New Brunswick, New Jersey. He was 91. In a career spanning over 60 years, Dr. Bertino helped establish the foundations of modern cancer research, contributing to deeper understanding of cancer biology, drug metabolism, chemotherapy, and gene amplification. Dr Bertino was recognized by the American Association for Cancer Research in 2018 with a Lifetime Achievement Award for his significant fundamental contributions to cancer research and for his collective body of work. His early work led to the first combination of medications that resulted in the cure of patients with lymphoma. Dr. Bertino began his career at Yale in 1961, where he became Professor of Medicine and Pharmacology, and first Director of the Yale Cancer Center. In 1987 Bertino went on to Memorial Sloan Kettering in New
York, where he was Chairman, Molecular Pharmacology & Therapeutics Program. In 2002, former Yale colleague Bill Hait, recruited Bertino to the Robert Wood Johnson Medical School to help grow the nascent Cancer Institute of New Jersey, and Bertino relished the opportunity to recruit a new generation of scientists. There he held positions as associate director, chief scientific officer, and interim director. During a sabbatical year at Stanford in 1977, Bertino and colleagues Robert T. Schimke, Rod Kellems, and Frederick W. Alt made an important discovery when studying the cancer drug methotrexate. "We knew that when cancer cells became resistant, the proteins on the cell increased and there was more 'message' being delivered to the cells telling them to block the drug from attacking the cancer," Bertino recalled in a recent interview for the Cancer History Project. "Using laboratory models, we found that cells had the ability to multiply genes that were coded for the target for methotrexate, a protein called dihydrofolate reductase. This finding was eye-opening in that everyone had thought DNA was very stable." This observation of "gene amplification" paved the way for new research paths, and helped Dr. Bertino earn an international reputation for his role in finding treatments for leukemia and lymphoma. "He was a beloved mentor and friend to hundreds of physicians, pharmacologists, scientists and researchers, many of whom have themselves become leaders in the field," his colleagues at Rutgers Cancer Institute of New Jersey remarked. "He led by example, a kind and compassionate physician, outstanding teacher and a brilliant investigator. Joe created a 'translational' research environment long before it was in vogue, bringing together clinical oncologists and basic scientists to tackle key problems in the diagnosis and treatment of cancer."

Joseph Rocco Bertino was born in Port Chester, New York in 1930 to Joseph Bertino and Madeleine (Posillipo) who both emigrated from Italy before World War I. His father was a shoemaker while his mother worked as a factory seamstress. "Junior" Joe played sports like his older brothers Frank and Tom, and played the clarinet, but his mother affectionately called him the
bookworm. After his junior year at Cornell, he received a scholarship to attend medical school. While at Downstate College of Medicine, brother Frank’s young son became sick, and Dr. Bertino realized the boy had leukemia. At the time (1954-1955), the few available treatments were not able to save the child. That sad and frustrating experience inspired Dr. Bertino to study hematology and blood disorders, which became an early area of expertise. Dr. Bertino’s humility and generosity of spirit were legendary. He always found the time to attend a young researcher’s presentation, to read or edit a paper, many recall. "He loved to talk about science, he was energized by helping people," daughter Amy observed. He was most proud of the students and fellows he has trained who have gone on to make significant contributions to the mission of curing cancer. He authored over 400 scientific papers and was still working until his death. Many remember Dr. Bertino’s sense of humor. "He was always willing to play along with whatever little jokes and silliness his children and grandchildren had going on. He was just a kind, sweet dad to us. He worked tirelessly into most evenings with a stack of scientific papers by his side, but would always be there when we really needed him," recall his children. "We didn’t realize the impact his work had in medicine until we were older. He was egoless, always concerned for others first."

He is survived by his older brother Thomas of Malta, New York, and his four children and their families: Frederick Bertino of Boston, and children Niia, Tana, and Eric; Amy Marie Bertino of Lynn, MA, and son Max Gieg; Thomas of Melbourne, FL, and his children Kylee, Thomas Joseph, Talia, and Olivia; and Paul Bertino of Los Angeles, with children Stella and Piera. He was predeceased by his wife Mary Patricia in 2011, and brother Frank Bertino in 1997.

Relatives and friends are invited to calling hours on Sunday, Oct. 17th from 2-4 and 6-8 p.m. at the W. S. Clancy Memorial Funeral Home, 244 North Main St., Branford, CT. A Mass of Christian Burial and Celebration of Life on
Monday, Oct 18. Mass at 11 a.m. at St Joseph’s Church in New Haven, 129 Edwards St., New Haven, CT, Celebration of Life reception immediately following at New Haven Lawn Club 193 Whitney Ave., New Haven, CT. In lieu of flowers, donations to The Lymphoma Research Foundation, the Breast Cancer Research Foundation, or Habitat for Humanity would be appreciated. For directions and online memorial, see www.wsclancy.com.