Stanley J. Korsmeyer (1950–2005)

When Stan Korsmeyer was in the eighth grade and looking forward to playing high school sports, he was told by the school coach that he would have to grow six inches before he would be allowed on any of the teams. Being determined but nonetheless pragmatic, Korsmeyer decided to focus his energies in an alternative direction — raising hogs. Raise hogs he did, and at age 14 Korsmeyer became the youngest person in the history of the Illinois State Fair to show the Grand Champion pair of Hampshire hogs. Two old-time Illinois farmers were heard discussing the competition. One asked, “Who showed the Grand Champions this year?” The other replied, “Just some kid.” It was not “just some kid”; it was Stan Korsmeyer, who even then dedicated himself to and excelled at whatever he did.

Korsmeyer was born on 8 June 1950, on a farm among the cornfields of southern Illinois, and he planned to be a veterinarian. However, as an undergraduate at the University of Illinois Urbana, he became interested in curing people instead of livestock. In 1976 he earned an MD at the University of Illinois in Chicago. A move to the University of California, San Francisco, allowed him to continue his medical training and to meet his wife-to-be Susan, an oncology nurse. This move also introduced Korsmeyer to sailing and fishing, two passions that continued throughout his life.

Korsmeyer’s next move was to the opposite coast (in part to continue his proximity to an ocean), to the National Cancer Institute in Bethesda, Maryland, where, as a fellow in molecular oncology, he trained with leading cancer researchers Thomas Waldmann and Philip Leder. Korsmeyer continued his career as an independent researcher at the NCI, and then as an investigator of the Howard Hughes Medical Institute, first at Washington University in St Louis and later at the Dana-Farber Cancer Institute and Harvard Medical School in Boston.

Korsmeyer opened new doors to the understanding and treatment of cancer. He discovered the oncogene Bcl-2, which when overexpressed can lead to follicular lymphoma. His studies provided evidence that Bcl-2 was the first member of a new category of cancer-causing genes — genes that work not by driving cells to proliferate, but rather by preventing them from dying via a process known as programmed cell death, or apoptosis.

Korsmeyer himself worked directly to develop new treatments for cancer based on his knowledge of apoptosis. Although he met frequently at scientific meetings, it was in the context of our serving as consultants to a start-up biotechnology company focused on apoptosis that I got to know Korsmeyer best. His science and advice were so critical to the development of a promising target for anticancer drugs. Korsmeyer himself had a farm boy’s work ethic, dedication, energy and modesty. He also had an unshakeable determination, as well as a great sense of humour, a joyous and immediately recognizable laugh, enormous personal warmth, an optimism about people, and an infectious and constantly upbeat approach to life. I never knew anyone who did not like him. He cared enormously about the young scientists who trained with him; he was a superb mentor and seeded the biomedical world with his scientific offspring. He received many well-deserved prizes and honours for his discoveries.

Stan Korsmeyer, a non-smoker, died on 31 March of lung cancer. His death is a tragic loss to science, medicine and humanity. He may never have grown the six inches demanded by his high-school coach, but he was nonetheless a giant — as a scientist, a mentor, a friend and a human being.

H. Robert Horvitz is an investigator of the Howard Hughes Medical Institute at the Department of Biology, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, USA.

E-mail: horvitz@mit.edu

news and views