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Editorial

Stanley J. Korsmeyer (1950–2005)

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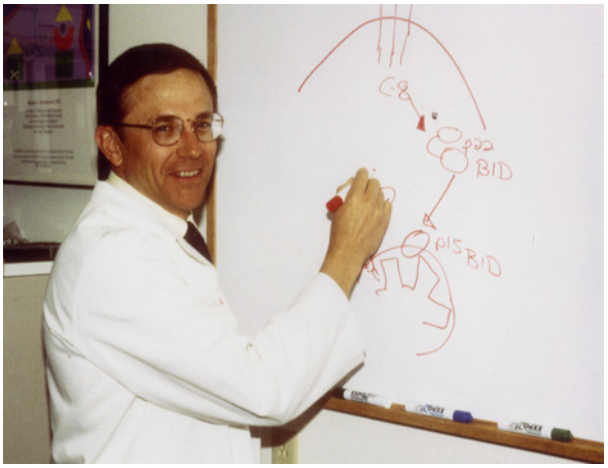

Stanley J. Korsmeyer (1950–2005)

This issue of the *Journal of Bioenergetics and Biomembranes* is dedicated to the memory of a great scientist, Stanley Joel Korsmeyer. Dr. Korsmeyer, a non-smoker, died prematurely on March 31, 2005, losing his battle with lung cancer. Mitochondrial researchers owe him an enormous debt, as his work contributed crucially from the restoration of mitochondria to center stage of biomedical research. Following his medical degree at the University of Illinois, Chicago, Stan moved to UCSF for his residency, where not only did he foster his interest in biomedical research, but also found the companion of a lifetime, his beloved wife Susan. From 1979 to 1986, he spent a postdoctoral training period at NIH with Thomas Waldmann. There, in collaboration with Philip Leder's group, he described the molecular details of one of the most frequent alterations of follicular lymphomas, the translocation between chromosomes 14 and 18. He found that this juxtaposed the promoter of the immunoglobulin light-chain gene with a previously undescribed gene, which was called *Bcl-2*. *Bcl-2* was not altered, but greatly overexpressed in follicular lymphomas. However, it was unclear how this led to neoplastic transformation. In 1986, he was recruited by Washington University Medical School in St. Louis, where he became a Howard Hughes Investigator. Stan started to investigate the mechanism by which *Bcl-2* favored transformation. He generated transgenic mice overexpressing *Bcl-2* in B lymphocytes and showed that these animals developed follicular hyperplasia because the B cells were resistant to death. These discoveries identified *Bcl-2* as the first member of a novel class of oncogenes that act by inhibiting programmed cell death or apoptosis, more than promoting cell proliferation. For the rest of his life, Stan investigated how *Bcl-2* and other members of its family interfere with and regulate apoptosis. In 1990, he and his co-worker Dave Hockenbery discovered that *Bcl-2* was a mitochondrial protein. This finding brought mitochondria back in the spotlight of biomedical research. Since then, Stan became more and more interested in the role of mitochondria in apoptosis. He and his laboratory colleagues, discovered not only the mechanism by which *Bcl-2* blocked apoptosis but also the fine details of how other members of the family that he discovered, like BID, BAD, and BAX contributed to recruit the organelle in the death program. He continued his outstanding research after moving to Harvard Medical School in 1998, serving as Director of the Program in Molecular Oncology of the Dana-Farber Cancer Institute, until his premature death. Stan's tremendous work was widely recognized by an incredible number of prestigious accolades, starting from his election to the National Academy of Sciences at the age of 45 years. One of the honors he was most proud of was the Barger Award for Excellence in Mentoring at Harvard. He was truly an extraordinary mentor, who always fostered the professional growth of his co-workers. We, who had the honour of sharing a piece of our life with him, have the intense feeling that he also pursued our personal growth, by teaching us science and life at the same time. His wife Susan and his sons Evan and Jason were clearly the most important people in his life. Notwithstanding the endless list of commitments and his crowded agenda, he was always able to find enough and quality time for them. We will always miss him as a scientist, a colleague, a mentor, and a friend.