Cancer Epidemiology, Biomarkers & Prevention

The History of a Name: The American Society for Preventive Oncology Renames Its Highest Honor the Joseph F. Fraumeni, Jr., Distinguished Achievement Award

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Joseph F. Fraumeni Jr.
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Since its inception more than 40 years ago, the American Society for Preventive Oncology (ASPO) has made its mission impactful cancer prevention research. Its topmost recognition, the ASPO Distinguished Achievement Award, is given annually to an outstanding scientist in the area of preventive oncology, cancer control, and/or cancer prevention. The first Distinguished Achievement Award was received in 1983 by Michael Shimkin for his work establishing the links between smoking and lung cancer. The most recent Distinguished Achievement Award was bestowed in 2016 on Alfred Neugut in part for his work on the risk and benefits of colon cancer screening (for a full list of Distinguished Achievement Award awardees, see the table that follows).

ASPO Distinguished Achievement Award Recipients (1983–present)

Michael Shimkin (1983)	Margaret Spitz (2000)
Ernst Wynder (1984)	I.B. Weinstein/Ellen Gritz (2001)
Sam Shapiro (1985)	Robert Hoover (2002)
William Haenszel (1986)	Leslie Bernstein (2003)
Lester Breslow (1987)	Dave Alberts (2004)
Nicholas Petrakis (1988)	Graham Colditz (2005)
Alfred Knudson (1989)	Frank Meyskens (2006)
Saxon Graham (1990)	Bernard Levin (2007)
Barbara Hulka (1991)	Malcolm C. Pike (2008)
David Schottenfeld (1992)	Mitchell H. Gail (2009)
Joseph F. Fraumeni Jr. (1993)	Paul F. Engstrom (2010)
Anthony Miller (1994)	Patricia A. Ganz (2011)
Pelayo Correa (1995)	Electra D. Paskett (2012)
Walter Willett (1996)	Polly Newcomb (2013)
Barbara Rimer (1997)	Robert T. Croyle (2014)
Peter Greenwald (1998)	Richard R. Love (2015)
J. Potter/W. Ki Hong (1999)	Alfred I. Neugut (2016)

This year, by unanimous vote of the Executive Committee, the ASPO Distinguished Achievement Award was renamed the ASPO Joseph F. Fraumeni, Jr., Distinguished Achievement Award in recognition of Dr. Fraumeni's visionary leadership in cancer prevention and control. Born in Boston in 1933, he received an AB from Harvard College, an MD from Duke University, and an MSc in epidemiology from the Harvard School of Public Health. He completed his medical residency at Johns Hopkins Hospital (Baltimore, MD) and Memorial Sloan-Kettering Cancer Center (New York, NY). He then joined the NCI at the NIH (Bethesda, MD) in 1962 as a commissioned officer of the U.S. Public Health Service, becoming the founding Director of the Division of Cancer Epidemiology and Genetics (DCEG) in 1995. He stepped down from this position in 2012 to become a senior investigator and advisor at the NCI.

Dr. Fraumeni has contributed critical findings to cancer etiology and prevention over the past 50 years. One of his early research accomplishments was the identification in 1969, with Frederick Pei Li, of four families with an increased susceptibility to multiple forms of cancer in children and young adults (1). Following these families and others for 20 years (2) led to the characterization of what became known as Li–Fraumeni syndrome, and the 1990 discovery of inherited mutations of the tumor suppressor gene, *p53*, as the underlying mechanism in most of these affected families (3). Through epidemiologic and interdisciplinary studies of high-risk populations, Dr. Fraumeni has contributed to a better understanding of cancer causation and prevention. In particular, as *p53* is commonly mutated in many human cancers, the discovery of this gene has continued to stimulate new avenues of mechanistic and translational research.

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In 1975, Dr. Fraumeni led the development of computer-generated atlases of U.S. cancer mortality at the county level (4). The distinctive geographic patterns for certain malignancies prompted a series of studies in the United States and in China that helped to identify several carcinogenic exposures and inform population-level approaches to cancer control. In recent years, Dr. Fraumeni has been involved in developing interdisciplinary research strategies and training programs in cancer epidemiology, statistics, genetics, and related areas. He has more than 900 scientific publications, including several books on the causes and prevention of cancer. Prominent among his publications is *Cancer Epidemiology and Prevention*, coedited with David Schottenfeld, the most prominent textbook in the field and soon in its fourth edition (5).

In addition, indeed central to his scientific legacy is the role Dr. Fraumeni has played in mentoring generations of young population health scientists. From high school students to DCEG faculty to visiting scholars from around the world, he has been thoughtful, generous, and wise. He has always recognized the central role of epidemiology in moving cancer science forward. The numerous awards for his research into the genetic and environmental determinants of cancer include the Abraham Lilienfeld Award from the American College of Epidemiology, the John Snow Award from the American Public Health Association, the James D. Bruce Award from the American College of Physicians, the Nathan Davis Award from the American Medical Association, the Charles S. Mott Prize (with F.P. Li) from the General Motors Cancer Research Foundation, the Medal of Honor from the International Agency for Research on Cancer and from the American Cancer Society, and a Lifetime Achievement Award from the American Association for Cancer Research. Dr. Fraumeni is an elected member of the National Academy of Sciences, the National Academy of Medicine, the Association of American Physicians, and the American Academy of Arts and Sciences. It is also eminently fitting that Dr. Fraumeni was also himself the recipient, nearly 25 years ago, of the ASPO Distinguished Achievement Award, an apt honor for this extraordinary scientific leader.

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References

1. Li FP, Fraumeni JF Jr. Soft-tissue sarcomas, breast cancer, and other neoplasms. A familial syndrome? Ann Intern Med 1969;71:747–52.
2. Li FP, Fraumeni JF Jr, Mulvihill JJ, Blattner WA, Dreyfus MG, Tucker MA, et al. A cancer family syndrome in twenty-four kindreds. Cancer Res 1988;48:5358–62.
3. Malkin D, Li FP, Strong LC, Fraumeni JF Jr, Nelson CE, Kim DH, et al. Germ line p53 mutations in a familial syndrome of breast cancer, sarcomas, and other neoplasms. Science 1990;250:1233–8.
4. Devesa S, Grauman D, Blot W, Pennello G, Hoover R, Fraumeni J. Atlas of cancer mortality in the United States, 1950–94. Am J Epidemiol 1999;149:S68–S.
5. Schottenfeld D, Fraumeni JF. Cancer epidemiology and prevention. 3rd ed. Oxford, United Kingdom: Oxford University Press; 2006.