

Tuesday, April 12th, 2011

[Washington-Baltimore Mass Spectrometry Discussion Group](#)

Dr. Henry “Hank” Fales, 1927-2010

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It is with sadness that we report the passing of Dr. Henry “Hank” Fales of NIH, a co-founder of the Washington-Baltimore Mass Spectrometry Discussion Group, a former president of ASMS, a superior scientist, and a colleague and friend to all. Keeping with Hank’s wishes there was no funeral and those wishing to make a contribution in Hank’s memory are urged to support NIH in some way, but particularly the Children’s Inn at NIH, 7 West Drive, Bethesda, MD, 20814-1509.

The following was written by Hank’s colleague at NIH, Dr. Michael Gottesman.

“It is with great sorrow that I inform you that Hank Fales died on Thursday, October 28, at age 83.

A fixture at NHLBI for over 50 years, Hank was simply one of the best people in our intramural program. Like many at the NIH, I collaborated with Hank. He was unstinting in his dedication to the highest-quality science; he loved his work and the people he worked with; and he adopted all of his collaborators into his scientific family. This is a great scientific and personal loss for the NIH.

In keeping with his wishes, there will be no funeral.

Hank first arrived at the NIH in 1953 for a part-time position just “to kill a year at NIH while looking for a good job at Dupont,” he often would say. Clearly he never left. He soon transitioned to a research chemist position at the NHLBI Laboratory of Chemistry. In 1968 he was appointed chief of this laboratory and oversaw programs in a wide range of biophysical techniques.

In a research career spanning a half century, Hank introduced many biomedical research scientists to the technique of applying mass spectrometry to determine organic structure. His lab often was the stimulus for the construction and adaptation of new technologies in biomedical applications, including chemical ionization, plasma desorption, and electrospray ionization. He developed a diverse body of scientific discovery dealing with natural products, biochemistry, insect pheromones and protein structures; and this involved colleagues from most of the NIH institutes and many other government and academic laboratories.

Hank was a catalyst. He co-founded the Washington-area mass spectrometry discussion group, and through these meetings and presentations by area scientists, he convinced Marvin Vestal to build and install the first commercial chemical ionization ion source for the MS-902 mass spectrometer at NIH in 1968, leading to a series of paradigm-shifting papers on its application to compounds of biomedical interest.

Under Hank's direction, the Laboratory of Chemistry became a world-renown center for structural chemistry during the 1960s. Hank also helped to expand mass spectroscopy to the study of biological molecules by constantly expanding the molecular weight limits of the approach, and he popularized the use of chemical ionization that quickly found its way into laboratory practice. In the 1970s, using one of the first chemical ionization quadrupole mass spectrometers, Hank moved to the study of drugs in the blood and generated a reference library of mass spectra still in use today, located at NIST. In addition he made major contributions to novel spectroscopic methods to characterize many chemical compounds and to understanding various forms of cancer, hypercholesterolemia, renal organic osmolytes, and enzyme deficiencies such as Refsum's disease.

Hank's international reputation as an innovative scientist was recognized by his peers with his multiple elections to the American Society for Mass Spectrometry: as a member in 1976, a secretary in 1978, and as president from 1992 to 1994. He received the DHEW Superior Service Award in 1973 and 1986 and the Hillebrand Prize from the Chemical Society of Washington in 1977. He also was a prolific author, with over 350 publications and almost an equal number of scientific collaborations.

Hank was a very special person in his interactions with his many friends and colleagues at NIH and in the mass spectrometry community. In addition to having either trained numerous fellows or helped scientists use mass spectrometry, he was one of most easy-going, kind, genteel, and generous human beings that one could ever hope to meet. He tirelessly assisted many in re-orienting their careers and finding new opportunities at the NIH or in the greater scientific community. He was always willing to collaborate with anybody, a reflection of his scientific curiosity and ability to make a reliable direct physical measurement. He would take an interest in almost anyone's scientific projects at the expense of his own work. It would be no exaggeration to claim he was one of the most collaborative and loved investigators on the NIH campus for the last 50 years.

He is survived by his wife and three children. We will miss him greatly."

Michael Gottesman, M.D.
Deputy Director for Intramural Research, NIH

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