

Memorial Hall of Fame

Established in 1981, the Memorial Hall of Fame serves as a posthumous tribute to a creative and devoted physician, research scientist, or other individual who has been an active member of the AIUM and contributed to the field of ultrasound in medicine. Honorees are announced at the Annual Meeting.

David Sahn, MD, FAIUM



David Sahn, MD, FAIUM, was a clinician with a great interest in engineering and, as a result, was a pioneer in the fields of pediatric echocardiography and Doppler ultrasound. After graduating cum laude from the Yale School of Medicine in 1969, Dr Sahn became a research fellow in Pediatric Cardiology at the University of California, San Diego (UCSD) School of Medicine. It was there that Dr Sahn became one of the first to use high-frequency neonatal ultrasound and was the first in the United States to perform real-time 2D echocardiography with a linear array, which was produced by Nicolaas Bom. In addition, Stanley Goldberg, Hugh Allen, and Dr Sahn were also the first to use mechanical sector scanning for the diagnosis of congenital heart abnormalities and wrote the first textbook on the topic, *Pediatric and Adolescent Echocardiography: A*

Handbook. Dr Sahn also went on to build an ultrasound esophagoscope and perform the first transesophageal echocardiogram.

Dr Sahn spent 1974 through 1983 working for the University of Arizona, where he continued working with new technologies, particularly phased array ultrasound and Doppler ultrasound. He began by looking at fetal cardiovascular physiology by using pulsed Doppler ultrasound, leading him to be among the first to explore intraoperative echocardiography in congenital heart disease, perform epicardial high-frequency echocardiography on coronary arteries, and perform transesophageal echo on babies. Ultimately, he became among the first to implement quantitation of color flow information in reconstructive and real-time 3D imaging both in congenital heart disease postnatally and in fetal heart studies prenatally.

After returning to UCSD in 1983, Dr Sahn continued his studies by looking into Doppler velocimetry and working with others on the development of the first 7.5-MHz miniaturized phased array for high-resolution neonatal and intraoperative imaging.

In 1992, he moved on to Oregon Health & Science University in Portland, Oregon, where he studied cardiac flow mapping, preparticipation screening for competitive high school athletes, real-time digital speckle velocimetry, catheter-based ultrasound arrays, high-frequency phased arrays for intracardiac imaging, and more.

Throughout his career, Dr Sahn has also devoted his time to volunteer work. He first joined the AIUM in 1974 and has since served on the Board of Governors, been Secretary, become a Fellow, served as Chair of the Membership Committee, served on the Standards Committee and on the Bioeffects Committee, and served on the WFUMB/AIUM Safety Committee's review of biological effects and safety of echo contrast agents in diagnostic ultrasound.

In addition to his volunteer work for the AIUM, Dr Sahn was an Associate Editor for the *Journal of Clinical Ultrasound* (1984–1986) and the American Heart Association's journal *Circulation*, and was on the *Journal of Diagnostic Medical Sonographers* Editorial Board (1984–1992) as well.

Even with everything else he has done, in 1980, Dr Sahn also was a founding member of the American Society of Echocardiography (ASE), serving as President (1987–1988) and remaining active in committees and leadership roles. In addition, Dr Sahn was a member of the International Cardiac Doppler Society and served as their President (1995–1997) as well as was an active member of the Adult Congenital Heart Association (ACHA), even helping to establish an international symposium. His goal for the symposiums' attendees was to enjoy the great outdoors as much as the meeting's content and could frequently be found encouraging campfire sing-alongs as he played his guitar.

Dr Sahn was always involved with new technology, as a creator or to develop it further, and as a result, earned the International Steven Hoogendijk Award in Medical Engineering from the Batavian Society for Experimental Philosophy in 2001 and the Founder's Award from the Pediatric Council of the American Society of Echocardiography in 2003. In addition, as a result of his work as a reviewer in the NIH peer-review system, he earned the Marcy Speer Outstanding Reviewer Award from the Center for Scientific Review in 2008.

Through all of this, Dr Sahn continued working as a clinician and educator, mentoring many students, residents, and fellows. He was a legacy and will be missed for his kind, gentle soul, as well as his numerous contributions to medical imaging.