

## **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.

### **Marvin C. Ziskin, MD, FAIUM**



Marvin C. Ziskin, MD, FAIUM, was a world-renowned biomedical scientist, teacher, and colleague, and he made it his life's work to ensure the safe and effective use of ultrasound in medicine.

He received his MD from the Temple University School of Medicine, completed an internship at West Jersey Hospital, and received his Masters of Science in Biomedical Engineering in Bioengineering from Drexel University before he started work as a research associate in diagnostic ultrasound at Hahnemann Medical College and Hospital. It was there that Dr Ziskin became a part of the team, with J. Stauffer Lehman, MD, and George Evans, MD, that conducted some of the earliest large-scale clinical research of ultrasound imaging, including echoencephalography, echocardiography, Doppler ultrasound, and abdominal applications.

After spending a year there, Dr Ziskin then served as a biomedical engineer and a captain in the US Air Force in the Aerospace Medical Research Laboratories at Wright-Patterson Air Force Base. Upon his discharge, Dr Ziskin became an adjunct professor at the Drexel Institute of Technology, the University of Vermont, and Weston Institute, as well as returned as an assistant professor to the Temple University School of Medicine, where he remained for the rest of his career, having become a Professor of Radiology and Medical Physics as well as Director of the Center for Biomedical Physics.

Soon after he started working there, Dr Ziskin developed a procedure for using Doppler ultrasound in the detection of stenosis of carotid arteries, and was the first to use ultrasound to detect the cavitation that occurs at catheter tips during rapid IV injections. Dr Ziskin was also the first to discover and give a name to comet tail artifacts.

As a reflection of his knowledge and expertise, in addition to his work at Temple, Dr Ziskin was also a consultant to the FDA, NIH, US Navy, World Health Organization (WHO), and Veterans Administration, among others. He was also an avid volunteer among organizations ensuring the safe use of ultrasound, including serving as president of the World Federation for Ultrasound in Medicine and Biology (WFUMB) and the American Institute in Ultrasound in Medicine (AIUM), Co-Chairman of the Institute of Electrical and Electronics Engineers (IEEE) International Committee for Electromagnetic Safety (ICES) TC95 SC4 (Group on Engineering in Medicine

and Biology), and he was on the Board of Directors of the Bioelectromagnetics Society and the National Council for Radiation Protection and Measurements (NCRP).

Dr Ziskin contributed far more to the AIUM than just serving as president, however. He was also an active member of 12 committees, including the Technical Standards Committee. As a member of the Technical Standards Committee, he developed a statistical method of expressing uncertainty in the measurement of the outputs of ultrasonic instruments and contributed to the AIUM's *Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment*. He also served on 6 AIUM subcommittees, including as Chairman of the AIUM Ultrasound Terminology Subcommittee, when he played an important role in developing the AIUM's *Recommended Ultrasound Terminology*. Dr Ziskin also served as chair of the Awards Task Force and the Presidential Advisory Task Force, and was a member of the AIUM/NEMA Task Force on Revision of "Measurement and Labeling of Acoustic Output of Diagnostic Ultrasound Devices".

In addition, Dr Ziskin was also an Associate Editor for the *Journal of Clinical Ultrasound* (the precursor of the *Journal of Ultrasound in Medicine (JUM)*) and the *JUM*, as well as was the editor of Reflections, the AIUM's official newsletter (a precursor to Sound Waves). Dr Ziskin shared his expertise with others as well, including serving on the editorial boards of *Clinics in Diagnostic Ultrasound*, *Ultrasound in Medicine and Biology*, and *Bioelectromagnetics*, and was an editor of 3 books: *Ultrasonic Exposimetry*, *New Techniques and Instrumentation in Ultrasonography*, and *Biological Effects of Ultrasound*.

Dr Ziskin, a pioneer in ultrasound acoustics, died on October 22, 2022. The AIUM is honored to have had the pleasure to call him a member and a leader.