

William J. Fry Memorial Lecture Award

The William J. Fry Memorial Lecture Award was established by Joseph H. Holmes, MD, in 1969, and presented for the first time at the AIUM annual meeting in Winnipeg that year. William J. Fry, MS, was a physicist with a strong interest in ultrasound in biology and medicine, whose innovative research efforts advanced the field of diagnostic ultrasound. One of Professor Fry's most notable contributions was the successful design of an ultrasonic system used to pinpoint lesions in the brain without damaging adjacent tissues. This ultrasonic system was later used to treat various brain pathologies, and in particular, Parkinson's disease. His impassioned interest in ultrasound led him to become president of the AIUM from 1966 until his death in 1968. The following year, the William J. Fry Memorial Lecture Award, recognizing a current or retired AIUM member who has significantly contributed, in his or her particular field, to the scientific progress of medical diagnostic ultrasound, was established in his honor.

Christy K. Holland, PhD, FAIUM



Christy K. Holland, PhD, stands as a pioneering figure in the field of medical ultrasound, with a career marked by groundbreaking research, innovative technology development, and dedicated education efforts. Her contributions have not only advanced the capabilities of ultrasound imaging but have also significantly impacted the diagnosis and treatment of various medical conditions.

Dr Holland's journey into the realm of ultrasound began with a passion for both engineering and medicine. She pursued her undergraduate studies in biomedical engineering, laying the foundation for her future endeavors. Fascinated by the potential of ultrasound technology to revolutionize healthcare, she continued her academic journey, earning her PhD in Biomedical Engineering with a focus on ultrasound imaging.

Throughout her career, Dr Holland has been deeply involved in both academic research and industrial innovation. She has conducted extensive research in ultrasound imaging techniques, with a particular emphasis on developing novel methodologies for improved image resolution, contrast, and tissue characterization. Her work has led to significant advancements in the field, enabling clinicians to obtain clearer and more detailed images for accurate diagnosis and treatment planning.

One of Dr Holland's notable achievements is her pioneering work in the development of advanced ultrasound contrast agents. By engineering microbubbles with specific acoustic properties, she has enhanced the sensitivity and specificity of ultrasound imaging, particularly in the detection of vascular abnormalities and tumors. Her contributions in this area have paved

the way for more precise diagnostic procedures and targeted therapies, ultimately improving patient outcomes.

In addition to her research endeavors, Dr Holland is deeply committed to education and mentorship in the field of medical ultrasound. She has played a key role in training the next generation of scientists and clinicians, sharing her expertise through lectures, workshops, and academic collaborations. Her dedication to teaching and mentorship has empowered countless individuals to pursue careers in biomedical engineering and ultrasound technology, fostering innovation and excellence in the field.

Dr Holland's impact extends beyond the confines of the laboratory and classroom. She is actively involved in professional organizations and initiatives aimed at advancing the field of medical ultrasound on a global scale. Through her leadership roles and advocacy efforts, she has helped shape policies, standards, and best practices in ultrasound imaging, ensuring the highest quality of care for patients around the world.

Dr Holland's contributions to the American Institute of Ultrasound in Medicine (AIUM) have been vast, serving on the Board of Governors and on committees for bioeffects, ultrasound practice, educational resources, finance, technical standards, and bioeffects consensus conference planning. But she didn't stop there, she has also served on subcommittees for regulatory review, output standards, and why sonograms should be performed, as well as on the Contrast Ultrasound Task Force.

Throughout her illustrious career, Dr Christy K. Holland has exemplified the spirit of innovation, excellence, and dedication in the field of medical ultrasound. Her pioneering research, technological advancements, and commitment to education have left an indelible mark on the field, shaping the way we diagnose and treat a wide range of medical conditions. As she continues to push the boundaries of science and technology, Dr. Holland's legacy will undoubtedly inspire future generations of researchers and clinicians to strive for new heights in medical imaging and healthcare innovation.

The AIUM is proud to award this exceptional individual, Dr Christy K. Holland, with the William J. Fry Memorial Lecture Award in recognition of her great accomplishments in and contributions to the fields of biomedical engineering and biomedical ultrasound.