



Beyond the Image: In Memory and Legacy of Dr. Roberto Lang

Más allá de la imagen, memoria y legado del Dr. Roberto Lang

On June 10, 2025, Dr. Roberto Lang—an internationally renowned leader in the field of echocardiography—passed away after a short illness. His accomplishments and contributions have left a lasting mark on cardiac care worldwide. His death is an irreparable loss for his family, his numerous friends he made over the course of his 73 years, and the entire cardiology community, which regards him as a true master. He was always willing to support those in need, and his absence is deeply felt by all of us who had the privilege of knowing and respecting him.

Dr. Roberto Lang's contributions to science are immeasurable. He served as Director of the Noninvasive Cardiac Imaging Laboratories and as Professor of Medicine and Radiology at the University of Chicago. Throughout his extensive career, he published over 720 articles on cardiac imaging and physiology, authored more than 120 book chapters, and edited 12 books. He was also on the editorial boards of the world's leading cardiology journals.

Many of us shared unforgettable moments with him: we fondly recall his participation in Miguel Ángel García Fernández's congresses, particularly the *Echo Wars*, where he brought humor and fearlessness by donning the most unexpected costumes.

I must also mention the intimate interview during Martín Lombardero's course at La Rosa Negra in 2017, where he shared tales from his student days at the University of Buenos Aires and his sudden departure to Israel in 1977.

As president of the American Society of Echocardiography (ASE) in 2010, he played a key role in having Buenos Aires selected as the inaugural host city of the World Summit of Societies—an event that was a resounding success in 2011.

Over the last eight years, together with Dr. Salvador Spina, we had the opportunity to share with him the examination boards of the National Board

of Echocardiography (NBE) and the Sociedad Interamericana de Imágenes Cardiovasculares (SISIAC). He will be greatly missed.

He did not like to be called Bobby, Robbie, or Robert—he was Roberto, an Argentinian at heart, with a four-dimensional soul. He often ended his lectures in Latin America with a resounding “¡Viva Argentina!” (a phrase that reflected his deep love for his country).

Roberto Lang was a one-of-a-kind innovator and a trailblazer in the field of ultrasound. He introduced real-time 3D transesophageal echocardiography, a technique that delivers exceptionally high-quality images. In 2006, he conducted the world's first study using this technique, which revolutionized the evaluation of cardiac structures. His ongoing research in this field has changed the approach to echocardiography forever.

He was a visionary ahead of his time: his presentations on holographic imaging, virtual reality, and artificial intelligence not only predicted the future, but also helped to shape it.

Recognized around the world for his deep commitment to education, he participated in every course, congress, roundtable, symposium, and workshop to which he was invited. He never missed a single event—except for the births of his two grandchildren.

He lived in the same city, Chicago, for 40 years, where—together with his wife Lily, whom he met in Buenos Aires—he raised their children: Dr. Gabriel Lang, a gastroenterologist, and Daniella Lang, a psychologist.

He was not only an exceptional scientist but was even more remarkable for his humanity. He always found time to share his knowledge and passion for imaging in a way that showed a generosity rarely seen among great scientists.

In the professional realm, he left an immense legacy in the field of echocardiography. But on a personal

level, his impact was even greater. He was a man who inspired, loved, and guided his family, made others laugh and remained humble despite being recognized as one of the greatest figures in contemporary cardiology.

He was an exceptional person. Those of us who had the privilege of spending time with Roberto will miss his kindness, brilliant intellect, generosity, deep respect for others and humanistic view of medicine, which was never overshadowed by the advanced technology he mastered.

Throughout his life, he witnessed and participated in the entire evolution of echocardiography, from the early days of M-mode to automated 4D imaging, virtual reality, and the application of artificial intelligence to ultrasound. He was a passionate about the most sophisticated advancements in new technologies and AI in daily medical practice.

He often said that nothing would be the same after artificial intelligence arrived in medicine, and

that future generations of students would require a completely different kind of education. He predicted that those who failed to adopt AI in the coming years would be considered dinosaurs. Nevertheless, he never ceased to raise the ethical and moral issues surrounding its misuse.

We will remember him as a beacon that lit the way for everyone who came into contact with him. His absence leaves an enormous void; we have lost a brilliant scientist, a friend, a brother and an extraordinary human being, someone who was truly set apart from the rest.

Dear Roberto, may your smile continue to light our path, since we owe the best in us to you.

Roberto Lang has become a legend, and I am convinced that his legacy will live on forever in the thousands of hearts he touched.

Jorge Lowenstein^{MTSAC}