Silvia G. Priori to Receive ACC Valentin Fuster Award for Innovation in Science

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Dra. Priori to be recognized for contributions to cardiology during ACC's Annual Scientific Session in Chicago

Dra. Silvia G. Priori has been awarded the 2025 Valentin Fuster Award for Innovation in Science by the American College of Cardiology in honor of their remarkable contributions to the cardiovascular profession. Dr. Priori will be recognized for these achievements along with all 2025 Distinguished Award winners during Convocation at the American College of Cardiology's Annual Scientific Session

(ACC.25) taking place March 29 – 31, 2025, in Chicago.

“I am honored to recognize Silvia G., Priori, MD, PhD, with the Valentin Fuster Award for Innovation in Science,” said ACC President Cathleen Biga, MSN, FACC. “Dr. Priori has demonstrated exceptional work that will further the ACC’s mission to transform cardiovascular care and improve heart health for all.”

The Valentin Fuster Award for Innovation in Science recognizes an ACC member who has made significant contributions to cardiovascular medicine as a champion of scientific research, an innovator in the delivery of science through novel mechanisms and an international voice on the importance of embracing scientific inquiry to improve the care of cardiovascular patients and promote heart health.

Prof. Silvia G. Priori has dedicated her career to unraveling the mechanisms underlying cardiac arrhythmias in rare diseases, combining genetic, molecular, pathophysiological, and clinical research. In 1997, she founded the Clinic for Inherited Arrhythmogenic Disorders, one of the first centers worldwide dedicated to the genetics of sudden cardiac death. Today, this center is internationally recognized as a referral hub for patients with congenital arrhythmogenic diseases, including Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT), Long QT Syndrome, Short QT Syndrome, Brugada Syndrome, and various forms of cardiomyopathy.

Prof. Priori and her team have built an extensive epidemiological registry, enabling large-scale data analysis projects that have shaped our understanding of the natural history, risk stratification, and therapeutic response in these diseases. Notably, her research led to the first genotype-based risk stratification system for Long QT Syndrome and a clinical risk stratification model for Brugada Syndrome, which are now widely used in medical practice. Additionally, her team established the world’s largest cohort of CPVT patients, significantly advancing knowledge in the field.

Alongside her clinical work, she leads two cutting-edge basic and translational research laboratories at CNIC (Spain) and IRCCS Maugeri (Italy). These labs have been instrumental in identifying novel genetic causes of inherited arrhythmias, such as (1) RyR2 mutations as the first gene responsible for the most frequent autosomal dominant variant of CPVT; (2) gain of function mutations of the KCNJ2 gene as the cause of short QT syndrome; (3) cardiac calcium channel mutations (CACNA1C) as the cause of Timothy syndrome. During her research, she and her team also developed transgenic knock-in animal models that faithfully replicate human disease, providing essential platforms for research and therapy development worldwide. These include the first transgenic mouse model of CPVT and the first transgenic swine model of Timothy Syndrome, both of which have been pivotal in advancing our understanding of these disorders.

In 2010, Prof. Priori launched a Gene Therapy Unit, which, in 2012, developed and patented a gene therapy approach for recessive CPVT. This groundbreaking therapy has received Orphan Drug Designation from the EMA and FDA approval for a First-in-Human clinical trial.

Recognizing her efforts, Prof Priori has been awarded many prestigious prizes, including the Gold Medal of the European Society of Cardiology for the outstanding contributions of her discoveries in the field of inherited arrhythmias and gene therapy (2023). Furthermore, in 2024 she became a member of the “Accademia Nazionale dei Lincei” (Rome, Italy), one of the most prestigious European institutions, whose members included Galileo Galilei and, in modern times, Nobel Prize winners. According to Research.com, Prof Priori ranks among the 100 top female scientists in the world in 2024 (https://research.com/scientists-rankings/best-female-scientists).

This year, 21 Distinguished Awards will be presented at ACC.25, recognizing cardiovascular professionals who have made outstanding contributions to the field. Recipients are nominated by their peers and then selected by the American College of Cardiology Awards Committee.

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