## Editorial

# In Memoriam: Charles "Chuck" Edward Mullins, MD

Frank F. Ing, MD<sup>1</sup>; Sandie Mullins Moger<sup>2</sup>

<sup>1</sup>Division of Pediatric Cardiology, Department of Pediatrics, UC Davis Children's Hospital, Sacramento, California <sup>2</sup>Daughter of Dr Mullins, Houston, Texas

## 

n behalf of all his students and trainees, it is with extreme sadness that we announce the passing of Dr Charles Edward "Chuck" Mullins. His daughter, Sandie, informed us that he had died peacefully on November 17, 2024.

Commonly referred to as the "father of modern pediatric interventional cardiology," Dr Mullins was the recipient of numerous awards, including the Lifetime Achievement Award from the Pediatric Interventional Cardiology Symposium, the Gifted Teacher Award from the American College of Cardiology, the Lifetime Achievement Award from the Society for Cardiovascular Angiography and Interventions, and the Founder's Award from the American Academy of Pediatrics.

Dr Mullins helped found a fellowship training program in pediatric interventional cardiology at Texas Children's Hospital (TCH) in the late 1980s. Over his 5 decades of work, he trained more than 150 fellows while contributing to the advancement of medicine and spending countless life-saving hours in what is now known as The Charles E. Mullins Cardiac Catheterization Laboratories at TCH. Dr Mullins also trained international colleagues at more than 100 medical centers in 23 coun-



Charles "Chuck" Edwards Mullins, MD

tries, providing hands-on instruction in diagnostic and therapeutic cardiac catheterization procedures.

Charles Mullins was born on January 15, 1932, and raised in northwest Washington, DC, where he attended public schools. Throughout his childhood, he talked of nothing else but becoming a doctor. He realized that dream when he graduated cum laude with a degree in chemistry from Princeton University in 1954, and then with honors from George Washington University School of Medicine in 1958.

Arlene Francis Southerland and Chuck Mullins were married on June 19, 1954. They soon became an inseparable team, being amazing dancers and, because of Dr Mullins's professional advancements, world travelers.

After graduating from George Washington University, Dr Mullins received his next 5 years of formal medical training in the US Army, completing an internship, pediatric and cardiology residencies, and a cardiology research fellowship at Walter Reed General Hospital in Washington, DC. This training resulted in his being the first and only pediatric cardiologist in the US Army. His transfer to the Second General Hospital in Landstuhl, West Germany, made Dr Mullins the only US military pediatric cardiologist available to all US and Canadian armed forces in Europe and the Middle East.

Four years later, Dr Mullins returned to Walter Reed Hospital, became a lieutenant colonel and assistant chief of cardiology, and remained there for less than 2 years before he was drawn to the Houston medical community in

Citation: Ing FF, Mullins Moger S. In memoriam: Charles "Chuck" Edward Mullins, MD. Tex Heart Inst J. 2025;52(1):e258568. doi:10.14503/THIJ-25-8568

Corresponding author: Frank F. Ing, MD, FACC, MSCAI, UC Davis Health, 2516 Stockton Blvd, Sacramento, CA 95817 (ffing@ucda-vis.edu)

1969. The Division of Pediatric Cardiology at TCH and the Baylor College of Medicine became his professional home until his retirement in 2006.

Dr Mullins contributed greatly to the academic discipline of cardiology with many novel techniques and devices. He championed the continued development and teaching of these techniques and devices at TCH, where he was the principal investigator in 6 investigational protocols for new devices in the treatment of congenital heart defects. One of Dr Mullins's most substantial contributions to the field was the development of the Mullins sheath, a specialized medical device used to cross the atrial septum to the left heart. It has broad applications in interventional cardiology, including facilitating device delivery, providing vascular access for various catheters, and supporting structural left heart interventions such as transcatheter mitral valve repair. In the late 1980s, Dr Mullins became the first physician to place stents to treat pulmonary artery stenosis in children. This new procedure resulted in an explosion of new stent procedures for all kinds of vascular stenoses in patients with congenital heart disease. In July 2023, in honor of Dr Mullins, a stent was rebranded by Cordis as the "Palmaz Mullins" stent and received US Food and Drug Administration approval for use in pulmonary arteries in pediatric patients.

Much of the experience Dr Mullins gained during his more than 40 years in medicine lives on in more than 200 peer-reviewed articles, numerous book chapters, and an atlas—a "picture book"—of 167 diagrams of congenital heart lesions. Affectionately known as the "Mullins diagrams," these images are used worldwide to teach patients and staff alike about the unique cardiac anatomy found in congenital heart disease. In 2006, after retirement, Dr Mullins published a single-author 944-page book, *Cardiac Catheterization in Congenital Heart Disease: Pediatric and Adult*, in which he described cardiac catheterization techniques in patients with congenital heart disease. These 2 books have become the gold standard for all students of pediatric interventional cardiology.

Despite Dr Mullins's academic achievements and international fame, he was a man of humility and simple pleasures. Forever in his cowboy boots, he also loved dirt bikes and beer—his famous "3 Bs." If someone asked Chuck what his greatest achievement was, he would not discuss his inventions and novel techniques but rather would point at his students and trainees. He had a way of connecting with them and took pride in

### Abbreviation

TCH, Texas Children's Hospital

their achievements. It was not uncommon to see him surrounded by admirers and former trainees at the conferences where he spoke.

Chuck is survived by his wife of 70 years, Arlene; sons Charles Jr and Robert (wife, Julie); daughter Sandie (husband, Charles Moger); 4 grandchildren: Kristine Riggs (husband, Adam), Kelly Fluty (husband, Adam), Kyle Meyers (wife, Amy), and Grant Meyers (wife, Lizzy); 3 step-grandchildren (John, Kate, and Stella Moger); and 5 great-grandchildren.

We will greatly miss Dr Mullins, but his legacy will remain. He will not be forgotten.

## **Article Information**

#### Published: 7 April 2025

**Open Access:** © 2025 The Authors. Published by The Texas Heart Institute<sup>®</sup>. This is an Open Access article under the terms of the Creative Commons Attribution-NonCommercial License (CC BY-NC, https://creativecommons.org/licenses/by-nc/4.0/), which permits use and distribution in any medium, provided the original work is properly cited, and the use is noncommercial.

Author Contributions: Dr Frank Ing and Sandie Mullins Moger wrote this manuscript together.

Conflict of Interest Disclosure: None.

Funding/Support: None.

Acknowledgments: Stephen N. Palmer, PhD, ELS, of the Department of Scientific Publications at The Texas Heart Institute, contributed to editing the manuscript.