# Dr. Denton Cooley (1920-2016). In memory of

Kardiochirurgia i Torakochirurgia 2016; 13 (4): 400-401

Denton Arthur Cooley (August 22, 1920 – November 18, 2016) was an American heart surgeon famous for performing the first implantation of a total artificial heart. Cooley was also founder and surgeon in-chief of The Texas Heart Institute, chief of Cardiovascular Surgery at St. Luke's Episcopal Hospital, consultant in Cardiovascular Surgery at Texas Children's Hospital, and a clinical professor of Surgery at the University of Texas Health Science Center at Houston.

#### School and early career

Cooley was born in 1920 in Houston and graduated in 1941 from the University of Texas at Austin (UT), where he was a member of the Kappa Sigma fraternity and the Texas Cowboys, played on the basketball team, and majored in zoology. He became interested in surgery through several pre-medical classes he attended in college and began his medical education at the University of Texas Medical Branch in Galveston. He completed his medical degree and his surgical training at the Johns Hopkins School of Medicine in Baltimore, Maryland, where he also completed his internship. At Johns Hopkins, he worked with Dr. Alfred Blalock and assisted in the first "Blue Baby" procedure to correct an infant's congenital heart defect.

In 1946 Cooley was called to active duty with the Army Medical Corps. There, he served as chief of surgical services at the station hospital in Linz, Austria, and was discharged in 1948 with the rank of captain. He then returned to complete his residency at Johns Hopkins and remain as an instructor in surgery. In 1950 he went to London to work with Lord Brock.

### Major career events

In the 1950s Cooley returned to Houston to become associate professor of surgery at Baylor College of Medicine and to work at its affiliate institution, The Methodist Hospital. During the 1950s, Cooley began working with American cardiac surgeon, scientist, and medical educator Michael E. DeBakey. During that time he worked on developing a new



method of removing aortic aneurysms, the bulging weak spots that may develop in the wall of the artery.

In 1960, Cooley moved his practice to St. Luke's Episcopal Hospital while continuing to teach at Baylor. In 1962 he founded The Texas Heart Institute with private funds and, following a dispute with DeBakey, he resigned his position at Baylor in 1969.

His skill as a surgeon was demonstrated as he successfully performed bloodless open-heart surgery on numerous Jehovah's Witnesses patients beginning in the early 1960s.

He and his colleagues worked on developing new artificial heart valves from 1962 to 1967; during that period, mortality for heart valve transplants fell from 70% to 8%. In 1969, he became the first heart surgeon to implant an artificial heart, designed by Domingo Liotta, in a man, Haskell Karp, who lived for 65 hours. The next year, in 1970, "he performed the first implantation of an artificial heart in a human when no heart replacement was immediately available."

### **Honors and awards**

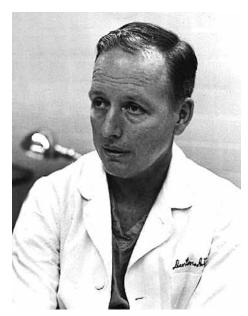
- Awarded the Presidential Medal of Freedom by Ronald Reagan in 1984, the nation's highest civilian award.
- The René Leriche Prize, the highest honor of the International Surgical Society.
- Awarded the National Medal of Technology by Bill Clinton in 1998.
- He was a member of the Serbian Academy of Sciences and Arts in the Department of Medical Sciences.
- In addition, Cooley authored or co-authored more than 1,400 scientific articles and 12 books.

(Source: Wikipedia)

# Dr. Denton Cooley, outstanding cardiac surgeon, scientist, academic teacher, mentor and director

I met this eminent cardiac surgeon in 1987 in Vienna during the EACTS Congress when as a young doctor I decided to approach the famous Dr. Denton Cooley, the worldwide icon of cardiac surgery at that time, who was sitting in a hotel garden at 6 am. He was sitting surrounded by the papers we were reading. I asked if I could take a minute of

his time. I wanted to get the autograph of such a prominent person. However, we managed to have an almost half-hour long conversation. I was astonished by his concern for the organization of the current activity of the clinic, including proper training of residents, and at what he said about the way of selecting the best so that the weaker



Dr. Denton Cooley, 1941 (Photo: Courtesy Of Texas Children's Hospital)

ones who have to leave would be convinced it was a good decision made at the right time.

He supported me a lot when he said that managing a hospital should come easier to a cardiac surgeon, because there is very little time outside the operating theater and therefore all decisions are determined and deeply analyzed during the night or between the operations and are usually very accurate because they result from hard work, experience and humility. He remembered our conversation and, to my surprise, a few months later I received an invitation to participate in the congress he organized with the Texas Heart Team in Bermuda. He treated this international meeting as a summary of the achievements of his entire team, including many students scattered across dozens of centers in the USA and around the world. I was surprised that the worldwide icon of cardiac surgery remembered about a meeting with a young, unknown at that time, Polish cardiac surgeon who, like many young people, had ambitions to develop, particularly in the field of heart transplantation and mechanical circulatory support.

In Hamilton City, Bermuda, among nearly 600 participants, I gave the lecture "The surgeon's role in the treatment of acute myocardial infarction", which was awarded. That allowed me to cover the costs of accommodation and the flight. I spent one day on sailing and another on exploring this island, extraordinary for me with its rich colonial and post-colonial past.

I returned to the country happy that what we were working for so hard in Zabrze under the guidance of Prof. Zbig-



Reconciles with former colleague DeBakey, 2007 (Photo: Courtesy Of Texas Children's Hospital)

niew Religa met with such a favorable reception from the worldwide cardiac surgery icon.

He appreciated Polish cardiac surgeons, some of whom like Prof. Jan Moll and Antoni Dziatkowiak he knew personally, and he met Prof. Religa years ago in Cambridge. He was also the mentor of Prof. Piotr Przybyłowski, who in the years 1996–1998 did a fellowship in the Texas Heart Institute. We all knew that people like him not only create a contemporary cardiovascular medicine, but, what is even more important, determine the future of our specialty. He will be remembered for that.

He was and will remain a very demanding, comprehensive, extremely hard working role model for a cardiac surgeon but also an academic researcher, teacher and tutor of the next generations of cardiac surgeons.

#### Prof. Marian Zembala, MD PhD FESC

Cardiac and transplant surgeon
Chairman of the Department of Cardiac, Vascular and
Endovascular Surgery and Transplantology, Medical University
of Silesia in Katowice
President Elect of the European Association for CardioThoracic Surgery (EACTS)

Editor in Chief of the "Polish Journal of Cardiovascular and Thoracic Surgery" (2004-2016)

## Prof. Piotr Przybyłowski, MD PhD

Cardiac and transplant surgeon
The first chair of General Surgery Department Jagiellonian
University, Medical School
President Elect of Polish Transplantation Society