

Tom Spray story, Part 2

(As published in The Oak Ridger's Historically Speaking column the week of January 21, 2019)

Benita Albert continues her story on Tom Spray, our Dr. Paul Spray's son and an Oak Ridge Schools graduate. You will find he has done some truly amazing things in the medical field. Enjoy learning the rest of the story from Benita.

Tom Spray's medical career spans five decades from 1973 through 2018.

His choice to accept the Duke University medical program was a surprise for his Haverford classmates who generally preferred northern university programs.

However, Tom learned that Duke's surgical program ranked at the top of medical schools in the early 1970s and that it was a place where Tom said, "Heart surgery was just taking off. I became intrigued with general surgeries, heart surgery, and then thoracic surgery. Today you're either a lung, adult heart, congenital heart, or a thoracic surgeon." Tom did all of the above.

After five years of medical studies including early admission to a surgical internship, Tom served his two-year physician's military draft obligation as a commissioned Naval officer at the National Institute of Health. In this Washington DC assignment he performed heart, lung, and blood research in the pathology branch.

Upon his return to Duke in 1977, Tom's assignments advanced from senior resident in general and thoracic surgery to research fellow, chief resident, and finally a teaching scholar in cardiac surgery. He exited Duke's surgical residency program in 1983.

His first appointment was with Washington University at the newly constructed St. Louis Children's Hospital. It was Tom's task to initiate a pediatric cardiothoracic surgical program where previously such surgeries were performed in adult hospitals.

Tom's leadership resulted in building the first pediatric lung transplant program in the world. As of 1986, Tom was performing heart transplants on both adults and children.

In 1994, Tom moved to the Children's Hospital of Philadelphia as the Chief of the Division of Cardiothoracic Surgery, and he was appointed the Executive Director of The Cardiac Center in 1999. While continuing surgical practice, Tom has mentored innumerable surgeons and has traveled worldwide to consult and speak, presenting more than 150 invited lectures.

His resume includes 293 original publications and seven texts. One of his 2017 publications, "Comparison of 3D Echocardiogram-Derived 3D Printed Valve Models to Molded Models for Simulated Repair of Pediatric Atrioventricular Valves" surely represents one of many exciting advancements this pioneer of children's heart surgery has experienced over his notable career.

I will conclude this amazing story with Tom's answers to a series of questions I posed:

Do you have advice for students considering entering the medical field? Tom answered this specific to the field of surgery, saying that he, "considers surgery to be very direct, you end up fixing things technically interesting and gratifying. In pediatric surgery you save a whole life, not just the end of life." He is encouraged by the thousands of children operated on who are given the chance for a full life.

You have seen tremendous change in your specialty area over your career, what are one or two striking developments you have observed? He expressed difficulty with being specific saying instead that gradual progress over time has advanced heart surgery while also saying there is still much more to do. Tom said, "One particular childhood illness, cystic fibrosis, has benefited greatly from lung transplantation developments."

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What are your aspirations for the future of medical science generally and also in your field of specialization? "The specialty of congenital heart surgery has improved over time, now more children are living longer, and we must keep dealing with future health issues that may come up."

I also mentioned to Tom that another Oak Ridge High School alumnus, Bill Nowlin, is one of the principal design engineers on the DaVinci Surgical Robot. He enthusiastically replied that one of his surgical interns has started performing robotic heart surgeries on adults at East Carolina University. As for pediatric heart surgery, Tom considers the small and delicate child's heart as inaccessible for the current robotic instruments.

Tom Spray is a medical hero, a man who now leaves a legacy of significant advancements in cardiothoracic surgery, a large cadre of doctors whom he has trained, and thousands of adults and children whose heart and lung health has greatly benefited from his innovations and expertise.

Now, in his well-deserved retirement effective July 1, 2018, may Tom find time to write so much more of his incredible life story than this article can relate.

Thanks to Tom's father, Dr. Paul Spray, for the inspiring example provided to his son, for his practice in orthopedic surgery in Oak Ridge, and for his world-view of the importance of volunteer medical missions in travels to more than fifteen needy sites around the world. The impact on humanity of these two great men, Dr. Paul and Dr. Tom, is immeasurable.

What inspiring examples their brilliant minds, skilled hands, and dedicated service has meant in the field of medicine.

Readers, thanks to Benita, we have been given insight into a very special person, Dr. Tom Spray, and a glimpse into the influence of his father, Dr. Paul Spray. Countless patients have been served by these two wonderful men. Their dedication to the medical profession has been enormous. We can be proud of Oak Ridgers such as these two men.

There are more such stories to be published as Benita Albert continues to pursue them. Oak Ridge has produced many amazing and accomplished individuals. How awesome it is to see their stories captured as part of the history of Oak Ridge!



Dr. Tom Spray as he was usually found during his work

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Dr. Tom Spray in action as he performed an operation