In Memoriam:

David J. Sugarbaker, MD

(1953 - 2018)

avid J. Sugarbaker, MD, a thoracic surgeon of international renown, died on 29 August 2018 at the age of 65. Dr. Sugarbaker was a pioneer in the treatment of malignant pleural mesothelioma (MPM) for nearly 30 years. Since 2014, he had been the Olga Keith Weiss Chair in Surgery, chief of the Division of General Thoracic Surgery in the Michael E. DeBakey Department of Surgery, director of the Baylor College of Medicine (BCM) Lung Institute at Baylor-St. Luke's Medical Center, and director of the BCM Mesothelioma Treatment Center, each of which he founded upon his arrival in Houston from Brigham and Women's Hospital (BWH).

David Sugarbaker was born in Jefferson City, Missouri, on 5 August 1953. He was the 8th of 10 children of Everett Sugarbaker, a surgical oncologist, and



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Geneva Ione Sugarbaker (née Van Dyke), a registered nurse. All 4 of Everett Sugarbaker's sons followed his path to Cornell University Medical School and surgical oncology. Having spent his early years helping his father in the operating room, Dr. Sugarbaker described him and his older brothers as excellent role models. Dr. Sugarbaker and his second oldest brother, Paul, followed parallel career routes to specialties in mesothelioma; Paul became a leader in peritoneal mesothelioma, and David became an expert in MPM.

David Sugarbaker completed his undergraduate education at Wheaton College in 1975. After graduating from Cornell University Medical School in 1979 at the top of his class, he completed his residency in surgery at BWH in Boston. During this time, he researched esophageal physiology at the Harvard-Thorndike Laboratory with Dr. Raj Goyal. This led to his initial interest in the esophagus and solidified his desire to pursue a career in thoracic surgery (some of the prominent thoracic surgeons at that time were esophageal surgeons). Dr. Sugarbaker completed a residency in cardiothoracic and cardiac surgery at Toronto General Hospital, as well as a residency in pediatric cardiac surgery at The Hospital for Sick Children in Toronto. Dr. John Mannick, chief of surgery at BWH, was a vital mentor to Dr. Sugarbaker throughout his education and career. It was Dr. Mannick who selected Dr. Sugarbaker for his general surgery residency position, who encouraged him to pursue additional training in Toronto, and who recruited him back to BWH after he completed training.²

When Dr. Sugarbaker returned to BWH as chief of the newly formed Division of Thoracic Surgery (the first dedicated general surgery division in the United States), he met a patient who had mesothelioma, a type of lung cancer in which malignant tumors grow along the mesothelial lining of the lungs, stomach, heart, and other organs. At that time, there was no accepted treatment, and nearly all patients died a few months after diagnosis.¹ Surgery was prohibitively risky, and most centers had

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abandoned it as a treatment option. Dr. Sugarbaker redesigned the operation, known as extrapleural pneumonectomy, and reported improved outcomes in 1992.³ In a seminal article, he identified the prognostic variables for long-term survival after this surgery.⁴

Dr. Sugarbaker dedicated 25 years to establishing the International Mesothelioma Program at BWH, earning the nickname "Mr. Mesothelioma" in the process. Because of his tireless efforts, the mortality rates after surgery for mesothelioma are now acceptable, similar to those associated with other major thoracic procedures. Dr. Sugarbaker's team also investigated the recurrent patterns of MPM and devised local and regional treatment to prevent it.

In 1992, Dr. Sugarbaker developed the first general thoracic surgical residency track in the U.S., and he eventually trained more than 80 residents. He served as the Richard E. Wilson Professor of Surgical Oncology at Harvard Medical School and, in 2012, won the Pioneer Award from the Mesothelioma Applied Research Foundation.

In 2014, Dr. Sugarbaker stepped down from his position at BWH to establish a mesothelioma center at BCM. He believed in the boundless optimism of the Texas Medical Center, and he felt privileged to have the opportunity to start a new center here. In his short time at BCM, he introduced new methods of targeting the disease, including hyperthermic intrathoracic chemotherapy, which is performed intraoperatively. He began to create a team and a seamless communication

tient. The team specializes in genomic evaluation of tumors, basic and translational research, and excellence in patient care.

Dr. Sugarbaker was the 94th president of the Ameri-

strategy to centralize the therapeutic goal for each pa-

can Association for Thoracic Surgery (AATS), and he served as Councilor, Treasurer, and President of the AATS Foundation. He was responsible for transforming the Foundation into an international philanthropic organization and was instrumental in establishing nu-

merous fellowship and research programs.

In a review of the key attributes of academic surgeons,⁵ Dr. Sugarbaker discussed the role of perseverance in the life of an academic surgeon, noting that it took years for his updated mesothelioma staging system to be widely adopted. He always emphasized the importance of focus and of eschewing modern distractions in achieving excellence in the field of surgery.⁶ He thought that 2 attributes made surgeons exceptional, and he described these as "the essence of excellence":

- 1) They have clarity of purpose—they know why they are in a certain position or place.
- 2) They can remain focused on that purpose and on each required step.

Dr. Sugarbaker exemplified the best of these attributes, and I was honored to work with him for the last 4 years in the Department of Surgery at BCM. Together, we served as program directors of the Texas Heart Institute/BCM Thoracic Surgery Residency program. In 2015 and 2017, we cohosted the 10th and 11th Current Trends in Aortic, Cardiac, and General Thoracic Surgery meetings in Houston. These meetings enabled the Michael E. DeBakey Department of Surgery to convene many international speakers to deliver seminars on aortic and structural heart surgery and on diseases of the lung and esophagus.

David Sugarbaker is survived by his wife, Linda, and his 6 children and 4 grandchildren. He was a pioneer and a leader in the treatment of mesothelioma. He leaves an enduring legacy through his discoveries and knowledge gained about the disease, the research and treatment centers that he established, and the numerous thoracic surgeons he trained and who are now leaders in the profession throughout the U.S. No one else in our lifetime had more impact on the field of thoracic surgery.

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