

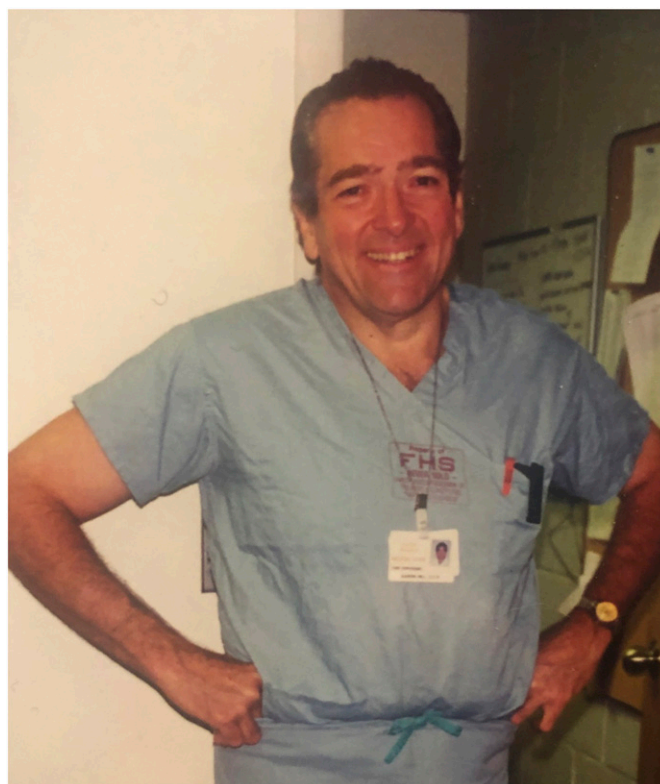
In Memoriam

Hail and Farewell

On December 30, 2019, Aaron Grant Hill, a leader whose contributions shaped the development of the field of cardiovascular perfusion, passed away surrounded by his family and friends after a long illness. Aaron was born in upstate New York on October 4, 1942. He attended Cornell University in Ithaca, New York, and the University of Rochester, majoring in chemical engineering. He went on to work as a chief chemist in the quality control laboratory at the Eastman Kodak Company. His career in the medical field began at the University of Rochester Medical Center in the Cardiology Research Laboratory and the Department of Biomedical Instrumentation, Myocardial Infarction Research Unit. From his earliest days, Aaron was known for his intellect, innovative spirit, and ability to overcome technical obstacles. He saw challenging problems as solvable ones. In 1973, he moved from the university research laboratories to the department of surgery where he became chief perfusionist under Dr. James DeWeese.

In 1977, he was recruited by Dr. Edward A. Lefrak to help start a new cardiac surgical program at the Fairfax Hospital in Falls Church, Virginia. Aaron was a consummate professional. He modeled and encouraged collaboration with all of the members of the cardiac surgical community. His network of friends spanned clinical professions, the biomedical equipment industry, and research domains. No task was too menial, and he always joined in to help in whatever needed to be done. His spirit of teamwork was infectious. The cardiac surgery program at Fairfax grew to become one of the largest on the East Coast and was known for its early adoption of outcomes research, quality improvement efforts, and innovative therapies. Notably, the Fairfax Hospital was the first in the Washington, D.C., and Northern Virginia metro region to offer both cardiac transplantation and left ventricular support devices to treat heart failure patients.

In the book *The Road to Character*, David Brook wrote that life is not like navigating through an open field—rather it is committing oneself to a few institutions embedded here on the ground before one was born and will persist after the individual is gone. In his view, it is accepting the gifts of those who preceded us and taking on the responsibilities of preserving and improving and then transmitting those



Aaron Grant Hill

improvements to the institution and leaving it better for the next generation. Aaron embodied this principle.

He presented at hundreds of conferences across the United States, both large and small. He was a gifted speaker, debater, and moderator. He was known for his aplomb at the podium, good humor, and a remarkable ability to think on his feet. When Aaron approached the microphone to deliver a lecture or to a floor microphone to offer a comment to a presenter, everyone listened with anticipation. He was invariably complimentary to his colleagues, always managed to bring light to the discussion, and was also known for his dry sense of humor. Laughter often erupted from the audience as he shared interesting stories and self-deprecating jokes. He frequently contributed to national and international conferences his entire career, including AmSECT, the American Academy of Cardiovascular Perfusion, the Cardiothoracic Research and Education Foundation, the Perfusion Research and Education Foundation, the Society of Cardiovascular Anesthesiologists, the Mechanisms of Perfusion, the Dutch Society of Extracorporeal Circulation Technology in Maastricht, Hammersmith Perfusion Workshops in London, CECEC in Paris, the Scandinavian Society of Extracorporeal Technology, and the Australasian Society of Cardiovascular Perfusionists in Melbourne.

Aaron committed over five decades to leading committees and task forces for AmSECT, including the Continuing Education Committee and Standards of Practice Committee, and as associate editor of the *Journal of ExtraCorporeal Technology*. In 2012, AmSECT recognized him as one of the inaugural “Pioneers of Perfusion.” He was an early director and vice president of the American Board of Cardiovascular Perfusion (ABCP) (1976–1982) and was instrumental in the development of the accreditation of perfusion schools and certification of clinical perfusionists.

Aaron had international renown as an innovator and force for improving the safety of cardiopulmonary bypass through the improvement and implementation of new technologies and standards and guidelines for clinical practice. He was a charter member of the American Academy of Cardiovascular Perfusion and served as its president and meeting organizer in 1984. His scientific publications numbered more than 80, and he authored or co-authored nine book chapters.

Aaron highly valued friendships, and he held nothing back from his friends. A favorite quotation of his was from Ralph Waldo Emerson, “A friend may well be reckoned a masterpiece of nature.”

Following are some remembrances from some of his friends who knew him well.

Dr. Edward A. Lefrak:

Aaron Hill was the keystone of our cardiac surgery program at Inova Heart and Vascular Institute since its inception in 1977. He was the guy who consolidated the surgery team members and the reliable foundation upon whom everyone leaned and from whom all of us learned so much. Aaron rendered perfusion during open-heart surgery a non-issue, which is a remarkable accomplishment in such a complex field. His presence in the operating room enhanced the much sought after calm and security that enhances cardiac surgery safety. Aaron was a mentor whose influence in the field of cardiopulmonary perfusion was far-reaching, profound, and life-saving. I counted on Aaron. He always responded by being there in full force. He lives on via his teachings, mentorship, and spirit of giving one's all while never giving up. Aaron's smile and wonderful laugh will reflect through operating rooms around the world forever.

John M. Toomasian:

Aaron Hill lived his life with great gusto. If you knew Aaron, you could always recognize his presence by his distinctive clearing of throat and his iconic laugh. If you were fortunate to share a glass of wine with him, you knew how special enology was to him. Aaron lived a life with a glass more than half full.

William J. Horgan:

Aaron was truly one of the good guys. Those of us who worked with him on various committees and boards quickly learned just how well he was accepted by all the sometimes-bickering factions of our profession. Aaron moved within all of the groups because he was honest, always willing to work to help solve problems, and was just fun to be around.

Aaron was also a researcher and teacher; just ask those who worked with him or those who heard one of his presentations or read any of his papers. Aaron was the first chair of accreditation for our schools. For those of you who don't remember or never knew, the ABCP once granted accreditation to our schools. Aaron's team developed the Essentials and Guidelines, monitored the school's annual reports, and conducted site visits.

Aaron was fun, and just two examples of him having fun were flying to the ABCP meeting with Jerry Richmond on the Concorde and coming to an American Academy of Cardiovascular Perfusion formal dinner in a powder blue tux with tails and top hat.

Aaron was the first person to greet me when I rotated off the ABCP, telling me there was life after the board and more work to be done. Perfusion is very lucky that Aaron came into our profession.

Terry N. Crane:

I remember Aaron coming to the Texas Heart Institute for a visit in 1973, and I am sure Charlie Reed taught him a thing or two. He was another person you could add as a pioneer in perfusion. I always enjoyed his presentations at the medical meetings we attended and especially his laughter. I will continue to miss seeing him at the perfusion meetings, his laughter, his guidance on topics we discussed, but I will also miss his expertise in ordering a bottle of wine for dinner. Aaron and other perfusionists who have passed over the years will all have a place in my heart because they helped extend the quality of life for so many people.

Harry (Mac) L. McCarthy:

Aaron Hill set a high bar for the perfusion community. He ran a busy program and was at the forefront of perfusion research, recognition, scholarly education, and professional advancement for decades. He has spawned numerous lead perfusionists over the decades that have gone on to carry the torch in these aspects of

the profession. Some of them are authors of this tribute. None, however, can tell a story quite the way Aaron could.

I knew Aaron personally during his retirement from Inova Fairfax Hospital after he moved near Williamsburg, Virginia. Aaron always was available to consult with and in his animated way (usually involving his hands and his laugh) would illustrate his point. If help was needed with a publication, safety or quality issue, or staffing concerns, he was available. Aaron was rarely without a viewpoint, and he could always back up his opinion with multiple references and examples from his encyclopedic memory of cases he had heard of or seen in consultation.

His drive for excellence was evident in his interest in enology as he transitioned into retirement and acquired The Wine and Cheese Shop at Kingsmill outside the gates of the Anheuser Busch development near Williamsburg. Sandwiches, delicacies, flowers, and wine occupied his time. He achieved Master Sommelier-level expertise to support his wine buying and selling.

He and his wife, Carol, organized and sponsored an annual golf tournament benefitting a favorite charity for many years. This event was attended by long-time industry friends and colleagues from Fairfax, Norfolk, and Richmond, where he worked on a per diem basis to “keep his toe” in the perfusion world.

After the daily grind of retail (staffing, drivers, insurance, spoiled flowers, and perfusion-like hours) grew old, he and Carol sold their store. He then grew hyperthermic intraperitoneal chemotherapy for treatment of patients with mesothelioma into a thriving practice at three healthcare institutions in Tidewater and central Virginia, where there had been no previous programs devoted to this cancer therapy. In short, Aaron set an aspirational goal for all perfusionists.

Trudi B. Stafford:

“Confidence is going after Moby Dick in a rowboat and taking tartar sauce.” Zig Ziglar

It is my honor to share my thoughts on the life of Aaron Hill, a man with a booming voice, infectious laugh, expert knowledge of perfusion, and an unexplained aversion to wearing socks. My friendship and professional association with Aaron began in the late 1970s through his close friendship

with my boss, Charlie Reed. Both of these men were trailblazers in the field of perfusion and paved the way of professionalism for those of us who followed them to make a career at a time when open heart surgery was booming.

One of the special memories I have of Aaron occurred prior to my first podium presentation at an international perfusion conference. I was so anxious not only about making the presentation but especially about answering questions from the podium at the end of the presentation. Aaron was the moderator of that particular session and took a few minutes with me prior to the session to calm my nerves and help build my confidence. He assured me that I knew the topic of my presentation probably in more detail than most people in the audience. He also advised me to listen to the questions carefully and if I needed a few minutes to get my thoughts together to say the phrase, “That’s a good question” to buy myself a little time. Still unsure of myself, I approached the podium and made the presentation. At the end of the presentation, I saw several people approach the microphone to ask me a question. And then, he did it. As the moderator, Aaron had control over who asked the first question. Much to my relief, Aaron asked the first question, which was totally a “soft ball” one that I could easily answer. That act of kindness on his part was never forgotten as he instilled in me self-confidence in the time of need. There is no doubt that Aaron Hill instilled self-confidence in many people over his lifetime and throughout his professional career. Thank you, Aaron, for throwing tartar sauce into my rowboat.

Justin Resley:

From the day I first heard about Aaron Hill while a student at the Cleveland Clinic Foundation to the last time I spoke and laughed with him on the phone, Aaron was undoubtedly the most important person in my perfusion career. If I had to describe Aaron in a phrase, it would be, Aaron Hill would do anything for me including giving me the shirt off his back. Aaron always encouraged me and treated me with respect both in my professional career and my personal life.

In our many clinical discussions over the years in the perfusion office at Fairfax, perfusion safety was a common topic: how to continually improve our practice, our checklist, our protocols, and our tubing pack so that our contribution to the patient’s outcome would be a positive one. Many times the end result of our discussion would be: “Justin, I think that is a great idea, do some research and come up with a protocol we can implement,” and for that I can never thank him enough. He was always willing to

share knowledge and insight with me, be it from personal experience or from something he had heard other perfusionists were doing. As a chief, he was never afraid to let others on his staff take the reins and run with something, which is evident by the people that worked with him, like Bob Groom, Joe Marino, Ruben Munoz, and Dave Fitzgerald. Aaron always encouraged me to get involved in our profession as he was deeply invested in propelling the perfusionist's role in cardiac surgery. He always encouraged others to join him in that endeavor.

Aaron was bigger than life, was fun, and lived life to the fullest. Even if he was feeling down on a particular day, he would find a way to laugh about the situation. I can only remember a few times over all the years I knew Aaron when he was truly sad about something, and on those times it was not that he was sad for himself but concerned about what someone else was going through in their life. That is how I will always remember Aaron, full of life, love, and looking out for his fellow man. I will miss you Aaron.

Jeffrey B. Riley:

It was 1973. Aaron came to Ohio State University from New York on an educational tour to visit James Dearing in the Circulation Technology Program. I was a first-year perfusion student and recall Aaron as this bigger than life perfusionist animated and interacting with Jim, asking a thousand questions. I was inspired observing their banter.

Aaron remained bigger than life to me for the next/last four decades. Aaron's gregarious nature, his smile, his laugh, and his constant teasing were authentic. He somehow always used his persona as an educational tool. By observing Aaron at conferences, I learned the kinder more respectful method to ask questions after an oral scientific presentation. Aaron was an early adopter of perfusion devices and techniques, and he shared his adventures with the cardiac surgery community.

Aaron has gifted us with publications, presentations, and provocative panel discussions. I remember before PowerPoint Aaron was the master of 2 × 2 slide carousels—always being the last to load his slides before he presented—talking the whole time with whomever was close by. Aaron and I had the uncanny ability to borrow each other's slides as we went back and forth to meetings.

I am indebted to Aaron for his professional mentoring. Aaron with Mark Kurusz recruited and sponsored me to be a fellow in the American Academy of Cardiovascular

Perfusion—pushing the limits as usual to sponsor an Ohio State graduate. For me, Aaron served as a steady role model in leadership.

Ian R. Shearer:

Our perfusionist community has lost one of our pioneers and great leaders in the passing of Aaron Hill. Aaron's efforts elevated our profession in the early days with his mastery of perfusion, society building, and as a gifted speaker/moderator. Observing Aaron go head to head with anyone, disarming them with a quick wit and a broad knowledge base, was encouraging to many of us sitting quietly in the audience. Aaron was a role model of professionalism. He was fully engaged, informed, and involved. His laugh is unforgettable. Aaron always laughed with, never at, others. He challenged and was critical of flawed opinions/theories, never the person.

As a new chief perfusionist in the mid-1980s, I had the good fortune to meet and befriend Aaron, mostly at our regional and national conferences. In the era before the Internet and cell phones, I frequently consulted with Aaron on many diverse challenges that I faced. I remain eternally grateful for Aaron's sage advice and support.

Like many others, I never stopped feeling somewhat in awe when waiting in line to chat with or having a meal with Aaron. I recall Aaron touching base with me a few years back to pick my brain regarding some consulting work he had. I remember how excited I was when we hung up ... wow, that was Aaron Hill who just called me! It's a thrill I will miss. Let's never forget Aaron's legacy to our profession.

Richard Chan:

After some broken bones and my return from my tour of duty in Southeast Asia in the Marines, I found perfusion in 1970, and about the same time, I found Aaron Hill. A salesman told me that I should call Aaron Hill in Rochester because he has the same intense interest in perfusion. I called and before I could tell him who I am, he cut in and said, 'You must be Richard, I lost your phone number!...' It was an enduring friendship bonded by our mutual love for perfusion. I finally got to meet him at a meeting after one-and-a-half years. It was then, I found out another mutual love that we had: wines! We also agreed that the science of wines is generic to learning perfusion science!

There is a façade (unintentional) to this friendly, gentle, and very engaging person. Behind this is a fierce competitive (for the right reasons) individual who always strived for

excellence, and the victory was always shared for the good of many. Romans made their victims slaves. Aaron made friends of his competitors.

In preparation for a kayak trip to follow blue whales in the Sea of Cortez 25 years ago, he made sure that we trained for four months every night. For two 50-plus years men, this was real dedication and discipline! There were two men to a kayak, and the rest of the tour group included 10 men from the Seattle Athletic Club in their prime (25- to 35-year-olds). On our first leg of the trip, paddling across the Sea of Cortez to our first stop at an island, we were dead last behind everyone! The professional guide had to check on us from time to time to make sure we were well!

Our skills started to improve with Aaron discussing strategy every night. He was not like a coach or a cheerleader but the subject of winning and being the first kayak covertly sneaked into the conversation while we were drinking wine by the fireplace (beauty of a true great leader/motivator). In the meantime, he made sure we socialized with everyone (our competitors).

Every day, we moved up one position in the row of kayaks. When we gained into second position on the fourth day, I was elated, and in the evening, I had conceded that we could not make the first position. The first position belonged to one of the young men at 25 years prime and had been able to run up a steep hill at full speed smoking a cigar! "We will make sure he smokes a lot of cigars on the last evening and drinks a lot of Tequila..." Aaron said!

When we crossed the Sea of Cortez the next day to our point of departure, we were a distant first! I felt there was a

motor behind me (Aaron was in the second position behind me). The 'Old-Timers' had won!

The beauty of that trip, reflected many times with Aaron, was not that we won but the incredible bonding with 10 other men in a short period of time was the real victory. They shared everything with us (a very large supply of wines!). The beauty of Aaron was his incredible persona and charisma that galvanized a group into a state of euphoria to make life more enjoyable/meaningful in whatever pursuit.

He had broken bones from his car-racing days (his born passion) and was told that he needed to move on to another line of work. He had learned to love perfusion as much or even more, and our perfusion world has been so enriched by his work and by his presence!

Fear of death follows fear of life. A man who lives his life fully is prepared to die any time.

As we close this tribute to the memory of a great man, many of us had the privilege of journeying with him for a time under his leadership. Many who worked in his department over the years went on to serve in leadership positions in our professional field. He was the consummate mentor, and he changed our lives.

Aaron is survived by his brother Art, his wife and soul mate Carol, daughters Bethanne and Kellie, six grandchildren, and one great grandchild. He is also survived by a host of good friends and colleagues, all of whom are much better for having known him. He influenced us and part of Aaron lives on in us. He is our friend and will continue to be our friend for all time.

Robert C. Groom, CCP, FPP
David Fitzgerald, DHA, MPH, CCP
Mark Kurusz, CCP (Emeritus)