IN MEMORIAM



David E Haines, MD: the Renaissance man. Senior Editor of JICE

In Memoriam (September 1, 1954, to February 10, 2024)

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It is a privilege to write the memoriam for our friend, colleague, mentor, and sponsor David E. Haines. We all met him at different stages of our life. John met him as a medical student at University of Virginia, Mike worked with him initially as a fellow and then colleague at The University of Virginia, and I (Nishaki) met him as his partner at Corewell William Beaumont University Hospital. While he is well known for his outsized contributions to the field, we would like to share some personal insights of his day-to-day work and his life outside of work. He was truly a renaissance man possessing profound knowledge and proficiency in multiple areas which allowed him to live life to the fullest and have a salutary effect on those around him. Reminiscing David at his memorial: celebration of Life event resonates strongly with the song "My way" by Frank Sinatra. Not only was he a world-renowned researcher but also he was a master educator and a beloved physician with a high procedural volume in technically challenging areas.

1 Research and innovation

David taught us about the biophysics of ablation. Much of this work was done in the late evening hours after full days of clinical work. While his initial efforts were focused on radiofrequency ablation, he then went on to build our understanding of different modalities. His most recent focus

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was on the development of pulsed field ablation where he challenged existing paradigms and encouraged me to delve into the basic understanding of this mechanism (Nishaki). He was a strong proponent of understanding waveforms. As he often said, we are not monkeys handling the catheters. He was ever skeptical of technology that was promoted in broad strokes with little detail, demanding that we need to know how things work. His eyes would light up when discussing models that would provide a better understanding of lesion delivery. The work that perhaps reflects this best are the experiments defining RF lesion size and depth based upon electrode tip temperature and duration of lesion (1, Mike). My personal favorite is the paper where he reviewed the ultrastructural mechanism of destruction of RF and we worked on a similar understanding for PFA (2, Nishaki).

2 Master educator

At the University of Virginia, he served as both the General Cardiology and Electrophysiology Fellowship director for many years. Not only did he round on the general and electrophysiology fellow services, he also served as an educator for any of our colleagues who swung by his office. For a clinical question, it was never a "yes or no." It was a mini nugget of valuable clinical information which was generously doled out. We jovially referred to him as our local CME dispenser and it was no surprise that his office was heavily trafficked by trainees and colleagues alike. The fun he had while explaining the mechanisms and manifestations of disease inspired everyone from medical students to colleagues. One of our co-authors described the way David introduced him to electrophysiology as akin to being introduced to a new and challenging sport that one could spend a lifetime mastering. David mastered it; the rest of us are still working on our game.

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3 Physician

For the last 21 years at Corewell William Beaumont University Hospital, he had amassed a large and loyal patient population. In fact, it was hard for him to "graduate" his patients back to their cardiologists. Once they saw him, they would want to stay forever. Even after he moved to Michigan, it was not uncommon for patients to travel from Virginia in order to continue their care under him. He was often triple booked, and I vividly recall at a faculty meeting, he mentioned, "The later I am in clinic, the more time I spend with each patient." (Nishaki). It was no surprise that patients were willing to wait for hours to see their beloved clinician, because they knew he cared. In the EP lab, he was a very high volume proceduralist embracing the toughest cases. Whether it was a dry pericardial tap or a ligament of Marshall ablation, David was always up to guiding the rest of us with his sage advice. He would get paged out of clinic to help a colleague and he would show up in a moment's notice to offer his indispensable insights usually derived from careful examination of the electrograms and a thorough knowledge of anatomy. Trouble shooting equipment was his favorite challenge and I enjoyed watching how he would break down the different parts with his uncanny detective abilities drawing upon years of watching and helping the technology be built (Nishaki). This, in large measure, explains why we could rig up experiments in the basement with sundry pieces of equipment. In the midst of a complex problem, he would often summon inspiration for the team from Eminem with his all-time favorite "Lose yourself" jamming as the fellow got ready to hit the ablation pedal.

4 Life outside of work

David was blessed with his wonderful wife of 41 years, Gail Haines who was a well-known face in the EP circuit and member of Michigan's House of Representatives. They would often travel together at conferences and built lifelong friendships. He was very proud of his son William with whom he imparted his early love of skiing at 2.5 years of age. He would impersonate an Austrian accented makebelieve instructor "Lars" as he taught young Will how to conquer the slopes. In some ways, it was a blessing that he breathed his last while vacationing with Will on the ski slopes in Colorado. He spoke of his daughter-in-law Rebecca as his own daughter and was thrilled about his grandson's impending arrival around Easter 2024.

At home David was best described as a MacGyver. He would come to the office on Monday sporting new injuries. Whether it was rewiring his antique boat or fixing the roofs or the blinds, he took on every home project as "fun" over the weekend. Gail and he were avid gardeners and he taught me to maintain a garden diary to understand the different plants in the beautiful Michigan spring and summer (Nishaki). They lovingly tended to their vineyard and the annual freshly harvested grape stomping festival in the fall was a gala affair where the kids had a blast. They resided in a beautiful home with carefully curated artwork from their travels across the world and shared this with neighbors and the local community in support of various efforts. They lived on a lake where he would often take his boat out for a spin at 10 pm at the end of a long Michigan summer day or provide a day on the water to the graduating fellows where he would entertain them with his wake boarding tricks (Fig. 1). I would be remiss

Fig. 1 David enjoying wake boarding with the fellows (left) and brilliantly leading the electrophysiology division (right)



not to mention his culinary skills. He whipped up a dinner after a long day at the lab for my initial recruitment dinner after Mike discreetly shared my food preferences (Nishaki). Watching him multitask effortlessly in the kitchen was a delight—a real life gourmet experience in his own home. Gail and he opened their home and hearth for Easter, 4th of July, Thanksgiving, and Christmas. We were fortunate to be part of their adopted family and he intentionally entwined our lives as one which was typical of him.

David Haines journey was the embodiment of a live well lived. While we ardently wish we had more time with him, we are grateful for the memories he created, his impact on our lives and careers, and his landmark contributions to our field and the patients we serve.

To further his legacy, the family would like to honor David's incredible career by establishing the *David E*. *Haines Endowed Chair in Cardiac Electrophysiology* to support ongoing research and education in this field. Donations can be made by phone at 947.522.0100, or online at https:// foundation.beaumont.org/_{*} In the "Where do you want to direct your gift" drop-down, please select Other and write "For David E Haines Endowed Chair."

Declarations

Conflict of interest The authors declare no competing interests.

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