In Memoriam

Remembering David L. Epstein, MMM, MD, 1944–2014

On March 4, 2014, David Epstein, MD, was suddenly taken from us and we are left empty and saddened. David was a world-renowned glaucoma clinician-scientist who made seminal contributions to our profession in many key areas, including basic science research, research mentoring, the education and training of residents and fellows, administrative management, and health care policy at the university and national level.

As chairman of Duke’s ophthalmology department from 1992 to present, he oversaw a 7-fold expansion of the faculty to 72 current clinical and basic science members with a 6-fold budget increase over the past decade. The Duke Department of Ophthalmology was previously unranked in the US News and World Report prior to his arrival as chair, but has enjoyed a top 10 ranking over the past decade. David also distinguished himself for service at the national level as president of ARVO from 1992 to 1993 and trustee for Association of University Professors of Ophthalmology from 2007 to 2011, where he was serving as president at the time of his death.

David was remarkably successful as a research scientist. He was one of the first to demonstrate that early treatment of elevated eye pressure reduces the risk of developing glaucoma. Controversial at the time, this is common wisdom today. His research track record was remarkable in that he was continuously funded by the National Eye Institute for over 30 years. His research focus was study of the metabolism of the trabecular meshwork (TM). He did this despite his numerous administrative responsibilities. His initial research focus was to determine how normal aqueous humor outflow was regulated, how this was altered in glaucoma, and, thereby, to identify targets for therapeutic intervention. These studies led to the discovery of the role of rho kinases in the trabecular meshwork and the use of rho kinase inhibitors to treat glaucoma. Based on these discoveries, Aerie Pharmaceuticals was founded, which exemplified how academic inquiry can be successfully translated into companies that aspire to develop novel therapies for disease.

As impressive as these accomplishments are, David’s unique gift—and the one he most highly cherished—was teacher and academic guide over his four-decade long career. David felt that there was no greater role in life than that of the mentor, the person who inspires, cajoles, and encourages young and older minds to pursue their ideas. He was intimately involved in the academic lives of literally hundreds of people, from undergraduates to senior physicians and researchers. Those colleagues, students, and faculty who were fortunate to share his life will long remember a towering individual with intellectual passion, curiosity, good humor, and grace. He was extraordinarily proud of the students, residents, and fellows he trained at the Massachusetts Eye and Ear Infirmary and Duke University, which include: Doug Johnson, Rand Allingham, Choka Melamed, Joel Schuman, Paul Lee, Bob Allen, Mark Latina, Janey Wiggs, and others, including basic scientists like John Anderson, Kristine Erickson Lamy, Pedro Gonzalez, Terete Borras, Vasanth Rao, Paloma Liton, Mark Johnson, Ross Ethier, and Dan Stamper. David considered the training of the above students and fellows, in the best Socratic tradition, his greatest accomplishment.

As an educator, David consistently tried to translate the best in science to gain knowledge about disease mechanisms with the goal of novel therapy. He exemplified the legacy of Morton Grant to conduct laboratory-based research both in vitro and in living animals to try to understand pathogenic mechanisms of human open angle glaucoma, as well as the secondary glaucomas, including pigment dispersion syndrome, malignant glaucoma, and pseudoexfoliation syndrome. David was deeply committed to physiology as the cornerstone of pathophysiology and is a strong component of phenotype as the perfect partner to genotype in order to gain insights into disease mechanism. A brief list of his seminal scientific papers is available below.1-15 They will continue to contribute to our understanding of the relationship of the TM to glaucoma. However, no subject was nearer or dearer to his heart than the development of the clinician-scientist. Therefore, also included is a singular editorial16 published over two decades ago that has served as a career signpost for two of his most ardent admirers who are coauthors of this tribute.

The passing of one of our country’s most accomplished ophthalmologists, superb researcher, clinician-scientist, visionary leader, and mentor has both shocked and saddened us, but also left us with the realization of how much we have benefitted from his wisdom and guidance. It is most fitting that in 2013, he was honored with the Mildred Weisenfeld award from ARVO, as he was truly the embodiment of an individual who exemplifies “excellence in ophthalmology.” Yet no
In Memoriam

Martin Wax, MD, and Rand Allingham, MD

References


