Remembering Alan M. Laties, MD, 1931-2021

A lan Malev Laties, MD, the third *IOVS* Editor-in-Chief, died after a long illness on December 26, 2021, in North Fort Myers, Florida. He served as an Editorial Board member (1971–1977) and then as Editor-in-Chief of *IOVS* (1978– 1982). His tenure saw the expansion in depth and scope of the journal that accompanied the name change in 1977 from *Investigative Ophthalmology* to *Investigative Ophthalmology* & *Visual Science*. In a characteristic manner, Alan took the responsibilities of Editor-in-Chief seriously and wholeheartedly and ran the journal from a small fifth floor office space at Scheie Eye Institute with the able assistance of Betty Moorhead.

Alan had his feet firmly planted in two different but complementary fields. Anatomic studies of the retina were an early passion. With collaborator David Jacobowitz, he developed or adapted new histochemical methods to examine cholinergic and adrenergic innervation of the eye in various species. These required improved methods of freeze drying/freeze substitution to identify the fibers and neurotransmitters involved. Further anatomic studies with Paul Liebman required improved fixation and embedding methods to examine the orientation of photoreceptors in the nonhuman primate eye and showed that outer segment orientation angle changes as a function of the receptor position along a meridian from posterior pole to the periphery. This maximizes light absorption and results in higher sensitivity and improved angular resolution for light detection. In parallel, other studies with Paul Liebman identified cones in the living amphibian eye by taking advantage of the isopentane/freeze substitution technique and the knowledge that cone outer segment discs in amphibians and higher-order vertebrates were patent to the extracellular space. These seminal anatomic studies were recognized by the scientific community, and Alan received the Jonas Friedenwald Award for Research in Ophthalmology from ARVO in 1972.







His real passion and greatest impact, however, was in identifying and mentoring young scientists and clinician scientists and encouraging them to undertake a lifelong career focused on a poorly understood and characterized clinical entity called retinitis pigmentosa (RP). Alan's involvement with the Retinitis Pigmentosa Foundation, now the Foundation Fighting Blindness (FFB), began early, likely because of the recognition by the scientific community of his retina research.

I was fortunate to meet Alan in 1968, when he was an Assistant Professor of Ophthalmology at the University of Pennsylvania. I had just started the veterinary ophthalmology residency program at PENN, and we enrolled in what was then called the Scheie Basic Science Course in Ophthalmology, which was foundational in the training of medical and, in my case, veterinary ophthalmology residents. Thursday afternoons were spent in the clinic learning examination methods and seeing patients; Alan was my attending clinician. His notice of me was piqued when he found out my interest in dog-inherited retinal diseases and my plans to do a fellowship at The Wilmer Institute after my residency. Alan must have kept tabs on me from a distance as he called me within weeks of my return to PENN in 1973 and invited me to lunch to discuss RP and animal models. From that point, he was my closest friend, colleague, and mentor, providing me lab space when I had none and asking the dean at the veterinary school when it would be appropriate for me to be considered for tenure promotion as he, Alan, that is, was tired of waiting!

I am sure that Alan's zeal to study and then find a cure for RP drove him to identify the most promising programs and ophthalmology clinician-scientists, as well as promote the formation of academic centers that focused on RP and allied retinal diseases. These expanded the number of centers from one, The Berman-Gund Laboratory for the Study of Retinal Degenerations, to many RP centers distributed at major medical centers throughout North America and subsequently in England and Europe. Alan provided the strong scientific leadership and commitment to get the nascent Foundation off the ground. He organized the first Scientific

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Advisory Board and, together with board members, helped guide the research direction supported by the Foundation. His early goal was for Foundation-supported programs to identify the "few" major genes responsible for the four genetic forms of RP—autosomal dominant, autosomal recessive, X-linked, and simplex—with mutations in *Rhodopsin*, a gene responsible for the dominant form identified in 1989. Little did Alan, or the scientific community for that matter, suspect that the number of genes responsible for RP and other inherited retinal diseases would now number well over 300.

Once the genes were found, the Foundation's focus broadened to now cure the diseases. The first successful cure of a childhood blindness was reported in 2001, and now many retinal gene therapies are commercialized, in clinical trials or in the Investigational New Drug (IND) enabling path. This must have been very satisfying for Alan as, under his leadership, the Foundation was able to bring RP and allied retinal diseases to the forefront of ophthalmology, stimulate private and national/international governmental funding for research to grow, and actually see some inherited retinal diseases cured. His contributions to retinal research, as well as his dedication to mentoring current and future scientists, have been recognized by the Foundation Fighting Blindness naming its physicians' and physician-scientists' career development award the Alan Laties Career Development Program and honored him with the inaugural Llura Liggett Gund Lifetime Achievement Award.

Alan Laties will be missed by his many colleagues and friends, as well as the many scientists who saw in Alan an inspiring scientific leader who recognized the importance of retina research and had the foresight to see that an initial focus on curing RP would open the door to the treatment of many other ocular diseases. Alan is survived by his wife Deena Gu, a distinguished artist; daughter Jane Laties; sons Alex G. Laties and Nicholas P. Robinson; and a brother, David.

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