

A Tribute to a Beloved Friend and Colleague

Remembering Larry A. Donoso "LD"

o describe the late Larry A. Donoso, MD, PhD, MBA, JD, as an extraordinary, forward-thinking, caring human being would only begin to scratch the surface of all that the man was and the far-reaching impact he had on Wills Eye Hospital and the field of ophthalmology.

Lawrence Albert Donoso, best known as LD, passed away on October 9, 2022, at age 79. Friends and colleagues who were closest to him say his life—well lived—was extraordinary indeed, resulting in an indelible legacy locally and around the globe.

Born on January 11, 1943, to Cuban immigrant parents—his father was an electrical engineer, his mother

a nurse — he spent his early childhood in El Paso, Texas. He earned a degree in medicine and a PhD from the University of Utah in Salt Lake City. Throughout his life, he pursued various educational endeavors — obtaining multiple academic degrees and credentials, not to mention a plethora of awards and honors.

Dr. Donoso joined the Wills Eye Hospital faculty in 1978. In 1980, he was named the Thomas Duane Professor and Director of Research. In 1986, the Philadelphia Retina Endowment Fund (PREF), administered through the Retina Service, was the beneficiary of a \$1,000,000 gift from the Bower Trust. The purpose was to establish an endowed lab investigating the retinal pigment epithelium.

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-Carol L. Shields, MD



Carol L. Shields, MD, left, and Tamara Vrabec, MD, were both close friends and longtime colleagues with Larry.

This became known as the Henry and Corrine Bower Memorial Laboratory. Additional funds were donated through the trust to create a research clinical fellowship. Dr. Donoso was the director of the lab and his passion for discovery a relentless pursuit.

Dr. Donoso worked with an array of fellows over the years, many from other countries. "Some of the world's most influential ophthalmologists who worked with LD credit much of their success to him," said Wills Eye photographer Roger Barone, who shared a decades-long friendship with the physician. One example, Barone explained, is Harminder Dua, MD, credited for discovering "Dua's Layer" in the eye. Drs. Donoso and Dua established the Larry A. Donoso Eye Research Laboratory in the United Kingdom. Another fellow was Ming Wang, MD, PhD, Director of the Wang Vision Institute in Nashville, Tennessee. Dr. Wang is recognized worldwide for his groundbreaking work with laser vision surgery and cornea treatment. The physician's autobiography "From Darkness to Sight" chronicles his life journey after escaping the Chinese Cultural Revolution and includes multiple accounts about his mentor, LD, and his time at Wills Eye. The book has been adapted into a film "Sight," scheduled for release on Netflix later this year.

"Larry was an amazing human being who cared so much about people," said Carol L. Shields, MD, Director of the Ocular Oncology Service, who first met Dr. Donoso in 1984. "He had this incredible zest for life and many, many interests. You name it and Larry was interested in it. Larry was brilliant, a dedicated researcher, and ahead of his time. He was sincere, kind-hearted, very simple—you'd rarely find him in a formal suit—and a powerhouse of information. He was also a wonderful photographer, and a dear friend and colleague." Dr. Shields and her husband, Jerry Shields, MD, Director Emeritus of the Ocular Oncology Service, spent a lot of time with Dr. Donoso over the years—particularly in the 1980s and 1990s. Dr. Shields explained that Larry never married nor had any children, so his research, friendships, and diverse pursuits took center stage.



▲ Larry mentored an array of fellows, many from around the globe, for more than three decades.



▲ Larry A. Donoso

SCIENTIFIC IMPACT

Dr. Donoso's impact on the field of ophthalmology is nothing short of remarkable. "In the mid-1980s, Larry was working really hard to discover the retinoblastoma gene," said Dr. Shields. "There were only three centers worldwide pursuing this: Massachusetts Eye and Ear Infirmary, Children's Hospital of Los Angeles, and Wills Eye." Larry was so immersed in the task, Dr. Shields explained, he

would often sleep in his lab. All three centers ultimately discovered the gene, but it was Mass Eye and Ear that first published the research. Although Dr. Donoso wasn't first in that scientific feat, he pioneered others. In fact, throughout his career, he collaborated with scientists around the world and published over 200 scientific papers on vitreoretinal disease.



named after a dinosaur,

was created for a child-friendly eye chart.

Dr. Shields underscored that Larry also left his mark with in-depth research on the retinal S antigen—a gene that causes

uveitis (inflammation of the eye). He also worked tirelessly, together with Roger Barone, on a multi-tiered project to make eye doctor visits more kid-friendly. The two created an eye chart and named its signature character Oppy, after the Ophthalmosaurus (a dinosaur that roamed the earth millions of years ago). "He cared deeply about children and wanted to make them more comfortable during eye exams," said Dr. Shields.

Barone described Dr. Donoso as an amazing human being who was highly intelligent with a great sense of humor and an indefatigable work ethic. "He was extremely generous. Above all, he was fearless," said Barone.

COVER STORY



▲ Larry (right) with Jay Federman, MD, and Carol L. Shields, MD.

PHILANTHROPY

Dr. Donoso's generosity was evident on multiple levels, including an unwavering commitment to nurturing retina research at Wills Eye beyond his lifetime. He served as the Executive and Scientific Director of the PREF for more than three decades.

Jay Federman, MD, an internationally recognized retina specialist and former Director of Retina Research as well as Co-Director of the Retina Service, was a close friend of Dr. Donoso and a longtime PREF board member. He became Co-Director of the fund and worked with Dr. Donoso to create a research legacy that would thrive for future generations. The two also understood the importance of establishing a named chair at an academic institution.

"Larry was really passionate about securing major gifts from donors for retina research," recalled Dr. Federman, who retired in 2018 following a 50-year career at Wills Eye. "He was tireless in his fundraising efforts and really good at it."

In 2017, the physicians formally transferred the PREF to Wills Eye Hospital with specific directives. The endowment gift was close to \$4 million, and funds would be earmarked to conduct basic, translational, and clinical research related to retinal diseases. All research would be conducted within the Henry and Corrine Bower Memorial Laboratory. The lab director would be named the Larry A. Donoso Endowed Chair. "The goal of the chair was to attract innovative ideas and creative, brilliant minds," said Dr. Federman. The world-renowned clinician-scientist Jose S. Pulido, MD, MS, MPH, MBA, has occupied this prestigious chair since 2021.

"Dr. Pulido truly embodies all that Larry envisioned," said Julia A. Haller, MD, Ophthalmologist-in-Chief. "He's a brilliant surgeon-scientist and a one-of-a-kind visionary. His unique and forward-thinking research aspires to bring hope to patients with blinding eye diseases through new diagnostics and groundbreaking treatments. We are so fortunate that he has chosen Wills Eye Hospital." "Larry was really passionate about securing major gifts from donors for retina research. He was tireless in his fundraising efforts and really good at it."

–Jay Federman, MD



RETINA RESEARCH & FELLOWSHIP

According to Allen C. Ho, MD, Director of Retina Research and Co-Director of the Retina Service: "Dr. Donoso's scientific and personal interests are reflected in the treatment advancements for improving the lives of patients with retinal disease. Understanding the molecular and genetic basis of disease — as he explored with the retinal S antigen in uveitis — has propelled our field into the first in-human gene therapy in medicine. Our very own clinician-scientist, Dr. Haller, presented this groundbreaking therapy to the U.S. Food and Drug Administration."

Dr. Donoso lived to witness this major scientific achievement. "He was also aware of the international clinical trials that address more common retinal afflictions such as advanced age-related macular degeneration and diabetic retinopathy," continued Dr. Ho. "We at Wills Eye are leading an investigation of new treatments for these global diseases, made possible because of the work of researchers like Larry Donoso. And because of his commitment to philanthropy, we continue to attract the very best and brightest to our retina fellowship and retina research fellowship programs—generating ambassadors of his legacy around the world."

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PHOTOGRAPHY

It was Barone who introduced LD to the field of photojournalism, unaware of what would unfold. "After reviewing basic camera techniques and studying the use of photographs in magazines, he purchased a Nikon and several lenses," remembered Barone. "A new phase of his life began."

Dr. Donoso moved full steam ahead with this newly found passion. Soon after, he and Barone created a media company comprised of their images. Dr. Donoso also obtained press credentials from the City of Philadelphia.

His fervor for the art took him around the country and the world. Barone accompanied him on a number of adventures—some spur of the moment—to Utah, Alaska, California's Death Valley, and the Barker Ranch in the canyons of the Panamint Mountains, to name a few. "Larry photographed politicians, parades, the Iditarod (dog sled races) in Alaska, and President Obama honoring Villanova's NCAA championship team inside the White House," said Barone. "Within a couple of years, his photos on Flickr surpassed more than 1.5 million views."

Dr. Donoso's treasure trove of images spans a broad gamut, encompassing NASA and spacecrafts, American flags, dinosaur fossils, geese, animals, national parks, bridges, sunsets, the Delaware River, and his adopted City of Philadelphia. "His favorite images to shoot, without question, were herons," said Barone.

LAST MOMENTS

Dr. Shields recalled the final moments of her dear friend's life: "On that Sunday, I got word that Larry wasn't doing very well. So, I got in my car and drove to St. Joseph Manor at Holy Redeemer Hospital in Meadowbrook, Pennsylvania." Tamara R. Vrabec, MD, a vitreoretinal surgeon and former Wills Eye faculty member who now works at Geisinger Medical Center, was also at her friend's side. She traveled several hours from central Pennsylvania to be there. Dr. Vrabec's longtime association with Dr. Donoso actually dates back to 1989 when she was a Bower Lab fellow.

"We were his two favorite gals," said Dr. Shields. "Although he was unresponsive, we knew he could hear us. I took a piece of paper from the nurse's station and drew the shape of a heart. Inside it, I wrote 'We love you today and always. Much love, Carol and Tammy.' We taped the heart near his bed and left the hospital." About an hour later, Dr. Shields received the news that Larry had passed away. "We felt like he was waiting for us," she said. "I'm just so glad we were there with him. Larry was such a humble, special person; he touched so many lives." **JJ**

 Larry A. Donoso during one of many photo shoots.



