Peters Foundation sets sights on Advanced Ocular Imaging Program at Eye Institute

Oct. 25, 2012 College News - The R.D. and Linda Peters Foundation has long supported innovation at the Medical College of Wisconsin Eye Institute. Its latest gift of $50,000 is no exception, helping develop and expand technologies that unlock entirely new opportunities to conduct vision research and improve patient care.

The Eye Institute’s growing investment in its Advanced Ocular Imaging Program has been catalyzed by private philanthropy, and its team of talented scientists is meeting one of the fundamental challenges in preventing vision loss: early diagnosing through noninvasive methods.

“Philanthropic support such as that from the R.D. and Linda Peters Foundation is essential for initiating the most creative and adventurous projects in medical research,” said Alfredo Dubra, PhD, Assistant Professor of Ophthalmology. “I am a strong believer that private support is pivotal for the U.S. to remain at the forefront of medical research.”

In the last five years, the Medical College has recruited Dr. Dubra and Joseph Carroll, PhD, Associate Professor of Ophthalmology, to spearhead progress in the Advanced Ocular Imaging Program. Together, they have constructed two, custom, state-of-the-art adaptive optics devices capable of taking high-resolution images of the eye. This technology enables them to look for signs of vision disorders in individuals before they experience clinical symptoms, e.g., noticeable vision loss. Dr. Dubra is building two more adaptive optics systems, providing the Advanced Ocular Imaging Program with unparalleled imaging resources.

Dr. Carroll and Dr. Dubra both use adaptive optics for early detection, monitoring and understanding of eye disease. Dr. Carroll researches diseases that affect the photoreceptor cells, like age-related macular degeneration, retinitis pigmentosa and achromatopsia. With the same technology, Dr. Dubra examines diseases that impact the optic nerve, such as glaucoma, multiple sclerosis and Parkinson’s disease. They were recently co-authors on a published paper showing the first images ever taken of the tiny rod photoreceptors of the retina.

“Adaptive optics and related advanced imaging hold so much promise: The technology is noninvasive, it’s translational in nature, and it could mean halting diseases before the onset of symptoms,” said Joseph E. Kerschner, MD, Dean of the Medical School and Executive Vice President. “We are truly proud to have such strong philanthropic partners like the Peters Foundation helping bring this program to the forefront.”

Based in Brillion, Wis., the R.D. and Linda Peters Foundation has had a relationship with the Medical College for more than three decades. The Foundation has contributed more than $2.5 million to the Eye Institute, which includes the establishment of named vision science laboratories and an endowed chair in ophthalmology.

“The Peters Foundation has worked with the Medical College for a long time, and we’ve worked with Joe Carroll, who has made a number of presentations to our board on the progress of this project, and we always come away with a really positive feeling about the research going on at the Eye Institute,” said Richard Hugo, Secretary/Treasurer of the Peters Foundation. “It’s really exciting, and we have been very happy to be a part of this work throughout the years.”

Just last year, the Foundation helped fund a collaborative project between the Medical College and Marshfield Clinic investigating age-related macular degeneration. The goal is to develop a predictive tool to identify individuals at high risk
for the disease. The next steps in the project include using advanced ocular imaging to search for pre-clinical signs of macular degeneration. Patient enrollment is already underway.

“The Advanced Ocular Imaging Program has grown substantially over the past few years, and this amazing program simply would not exist without the support of the R.D. and Linda Peters Foundation,” Dr. Carroll said. “Their unwavering support of the Eye Institute over the past 35 years will ensure that programs like this will continue to thrive for decades to come.”