

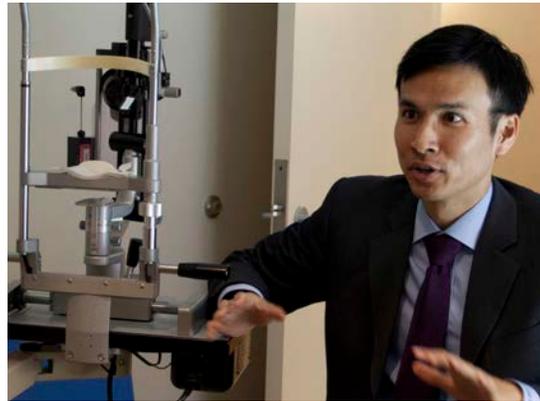
# TELE-OPHTHALMOLOGY

## AN INTELLIGENT PORTAL TO WELL-BEING

**S**hiley Eye Center physicians have begun an ambitious project to initiate and support the much needed transformation from reactive, hospital-centered capabilities to evidence based, patient-centered services through a Tele-Ophthalmology program. The program was initiated at the San Diego Veterans Affairs Hospital located on the UC San Diego campus. "Tele-Ophthalmology," explains Jeffrey Lee, M.D., Assistant Professor of Ophthalmology and Residency Program Director, "enables image based ophthalmological examinations to be performed remotely."

It is expected that patients throughout the country will have access to Shiley Eye Center clinicians and their expertise through the digital network for initial consultations and screenings. "Every subspecialty here at Shiley has a profound opportunity to reach the greater population," Dr. Lee continues.

The aging population and the prevalence of chronic diseases, especially several neurodegenerative diseases and those leading to vision loss (due to disease or age), are putting an ever increasing burden on the nation's healthcare system, as well as widening the gap between the number of healthcare professional caregivers and the quality of available medical care. Ophthalmological diagnosis relies heavily on visual imaging information. The ability to store, transmit, and query high quality digital data will



(above) Jeffrey Lee, M.D., Assistant Professor of Ophthalmology and Residency Program Director during an exam.

be an essential tool for ocular diagnosis and management. Currently, the Tele-Ophthalmology group has begun its pilot studies using high definition cameras for remote viewing and data transmission.

One critical issue that Dr. Lee and his team are beginning to tackle is the understanding that all relevant information pertaining to any individual, at any point of care, located anywhere in the world, at any time will need to be available to all the care team members. Recently, they used the newly placed Tele-Ophthalmology module to enable doctors to analyze, discuss and set up management of a Las Vegas patient's sinus tumor that was invading the orbit. As a result, the patient's care was expedited by several weeks and the patient was able to undergo surgery almost immediately because the necessary information was obtained through the virtual exam.

Dr. Lee states, "I believe that the advent of increasing access to data that can be sent over the network allows telemedicine to empower the patient to easily participate in his or her own care, and allows the individual an opportunity to obtain the finest care from the best physicians possible."

According to Robert N. Weinreb, M.D., Director and Chairman of the Shiley Eye Center, "tele-ophthalmology conserves resources and saves time. It is likely to deliver care more efficiently and most importantly improve patient care. This type of patient-centered approach will enable us to reach out directly into the home, workplace and community in a far more effective manner."

