To celebrate the completion of the Gavin Herbert Eye Institute building's structural frame, about 150 doctors, faculty and members of the community gathered at the site on July 24th, 2012, for a Topping Out ceremony.

A tradition that harkens back to the 8th century, topping out occurs when a frame is completed on a house or building. Usually made of wood, the finished frame would be “topped out” with a tree or leafy branch on the roof, which was often decorated with flags and streamers. More recently, topping out has been celebrated as the last beam is hoisted onto the roof of a new building, along with an evergreen tree that symbolizes growth and luck and with the country’s flag.

Thanks to $29.5 million raised in support out of the $37 million needed to complete the 70,000-square-foot building, construction has rapidly progressed since the April 7th, 2011, groundbreaking of the institute. At the Topping Out ceremony, UC Irvine Chancellor Michael Drake, MD, announced a generous $500,000 gift from Jim Mazzo, President of Abbott Medical Optics, and his wife Kelly. Chancellor Drake also highlighted the Gavin Herbert Eye Institute as the first clinical translational research center on the UCI campus, which will bring advancements in patient eye care and lead the way to interdisciplinary research for new treatments in other specialties as well.

The institute’s Chair of Ophthalmology, Roger Steinert, MD, along with Mazzo presented building namesake Gavin Herbert with an engraved piece of tile from the façade of the building in recognition of his significant contribution to furthering eye care. Said Dr. Steinert, “Gavin is a true visionary with an uncanny ability to see what is needed and move others along in support of that vision.”

The Gavin Herbert Eye Institute building has a concrete frame and a glass exterior, and was topped out with an American flag and a tree symbolic of its Orange County home—a palm tree. As the official topping out was announced by UCI campus architect Rebekah Gladson, cannons shot streamers into the air and a plane flew by with a banner announcing the milestone achieved toward completing the world-class eye center.

Read more on the Topping Out ceremony on page 5.
We are excited to report that the new Gavin Herbert Eye Institute building is currently on schedule to open its doors next summer. On July 24th, 2012, we marked the completion of the building’s structure with a Topping Out celebration. We are approaching our goal of $37 million, with $29.5 million raised to date. Your generous, continued support of the institute is helping to establish a world-class eye care center right here in Orange County.

Sincerely,

Roger Steinert, MD
Chair, Department of Ophthalmology

Please contact Janice Briggs, Senior Development Director, Health Advancement, at (949) 824-0091 for more information on how you can help.

Watch the building being constructed in real time with the EarthCam, which can be found on our website: www.eye.uci.edu/summer.

JAIME JESTER, PhD, researches corneal diseases at the institute.

Drawing from his extensive background in experimental pathology, which is the study of disease processes on a microscopic level, James Jester, PhD, researches new and safer ways to treat the cornea at the Gavin Herbert Eye Institute. An expert in corneal imaging, Dr. Jester’s research utilizes models of disease in the cornea that can dramatically affect sight and overall eye health.

Currently, Dr. Jester is collaborating with a fellow joint Professor of Ophthalmology and Biomedical Engineering at UC Irvine, Tibor Juhasz, PhD, to study the collagen structure of the cornea. While better known as a natural substance that keeps skin firm, collagen is a group of fibrous proteins that can also be found in cartilage, bones, blood vessels, tendons, ligaments, the gut and corneas. The long fibers of collagen in the cornea both define its shape and determine how light focuses in the eye.

Dr. Jester has discovered several different patterns in how the fibers of collagen are woven together in the cornea. For example, how tightly these fibers are linked together affects thickness and stiffness, similar to a knit sweater. Because these patterns also affect the shape of the cornea, they determine whether a person’s vision is normal, nearsighted, farsighted or if they have astigmatism. By studying the links between the fibers of collagen, Dr. Jester is researching how to alter the structure to solve vision problems like astigmatism through stiffening the collagen. “If you can weaken or strengthen specific tissues in the cornea, you may be able to modify the tissues—instead of surgically intervening—when a vision issue arises,” says Dr. Jester.

Keeping Watch

Recently, Dr. Jester presented research on corneal wound healing at the Association for Research in Vision and Ophthalmology (ARVO) 2012 Meeting. Using advanced imaging, Dr. Jester studied how the use of a medication called mitomycin C (MMC) affects the collagen structure of the cornea. MMC can be used before and after refractive and glaucoma surgery to prevent scar tissue from forming that could make vision appear hazy.

Since MMC stops scar tissue from forming, Dr. Jester investigated how long the effects of MMC last and if other cells in the eye can also be affected. His study found that when the corneal cells that have been treated with MMC try to divide, they aren’t able to become cells that will
heal the cornea. MMC does not allow the scar tissue to form because it affects the DNA of the corneal cells. The effects of MMC were found to be long lasting, and actually spread to further areas of the cornea other than where MMC was applied. “While we knew that mitomycin C kills some cells and stops proliferation and migration to prevent scar tissue, it was thought to only affect a defined area. However, all cells in the cornea are damaged. This means that much of the cornea may no longer heal itself after an injury if MMC is used.”

As Dr. Jester continues to study how various diseases impact the corneal structure and how it can be altered or safely healed, he is making way for new and improved treatments that will help enhance the vision of patients in Orange County and throughout the world.

“If you can weaken or strengthen specific tissues in the cornea, you may be able to modify the tissues—instead of surgically intervening—when a vision issue arises.”

—James Jester, PhD
In addition to world-class care, the Gavin Herbert Eye Institute offers an ophthalmology residency program that attracts some of the best and brightest applicants in the country. The institute also trains fellows in a variety of ophthalmic subspecialties. The fully accredited programs give trainees a wide range of clinical and surgical experiences as well as research opportunities that continue to push the ophthalmic field forward. Dividing their time among UC Irvine Medical Center, the VA Long Beach Healthcare System and Kaiser Foundation Hospital-Bellflower, clinical trainees get a well-rounded and varied experience. The Gavin Herbert Eye Institute is the hub of the training and is the premiere eye center of Orange County, the epicenter of the ophthalmology industry.

“It’s a highly academic environment,” says Jeremiah Tao, MD, who runs the resident program at the institute. “The training of residents and fellows fosters an environment of intellectual curiosity that stimulates trainees and faculty alike. Many clinical questions serve as the basis for laboratory and translational research.”

After completion of medical school, trainees complete a one-year internship and then enter the three-year residency program, which admits only 3 out of the 350 that apply each year. Many of the current trainees at Gavin Herbert Eye Institute earned PhD degrees, in addition to their MD, demonstrating talents and interests in research. Fellowships in a variety of subspecialties are offered to those who have successfully completed an ophthalmology residency and wish to further hone their skills in a particular discipline. These fellows add to the academic environment by bringing expertise and experiences from prior ophthalmology training or practice. Patients at the Gavin Herbert Eye Institute benefit from the presence of highly skilled trainees that learn from each other and the distinguished staff at UC Irvine.

Today, the clinical training program consists of nine residents and six fellows, and each year graduates some of the best new ophthalmologists in the world.

“The training of residents and fellows fosters an environment of intellectual curiosity that stimulates trainees and faculty alike.”

— Jeremiah Tao, MD
The Gavin Herbert Eye Institute Steering Committee were honored to take part in the ceremony (from left: Dan McWard, Clay Wilemon, Dr. Roger Steinert, Jim Mazzo, Gavin Herbert, Jack Schoellerman, Dr. Richard Kratz, Dr. Stuart Cumming, Dr. Scott Whitcup).

Two couples instrumental in helping to make this milestone possible (from left: Gavin and Ninetta Herbert, Kelly and Jim Mazzo).

Dr. Roger Steinert signs the commemorative glass that will hang in the completed Gavin Herbert Eye Institute building.

Thank you for helping us improve vision for people in Orange County, the nation and the world.

UC Irvine
Gavin Herbert Eye Institute

(Continued from page 1)


Through your generous support, the Gavin Herbert Eye Institute will continue to develop new therapies and provide excellent patient care. There is a new opportunity to help build the institute’s state-of-the-art eye care facility.

As part of the Shine the Light Brick Campaign, you can purchase an engraved brick to commemorate your gift toward construction of the Gavin Herbert Eye Institute building. Bricks will be placed in the Coffee Shop Terrace of the new eye center. Bricks are a great way to cement your name in the building’s history or pay tribute to a loved one. For more information, please contact Ariel Korn, Assistant Director of Development, Health Advancement, at (949) 824-9021.

The Gavin Herbert Eye Institute Steering Committee were honored to take part in the ceremony (from left: Dan McWard, Clay Wilemon, Dr. Roger Steinert, Jim Mazzo, Gavin Herbert, Jack Schoellerman, Dr. Richard Kratz, Dr. Stuart Cumming, Dr. Scott Whitcup).

“...The training of residents and fellows fosters an environment of intellectual curiosity that stimulates trainees and faculty alike.”
Don Minckler, MD, MS, retired from the glaucoma service at the Gavin Herbert Eye Institute in August 2011 with plans to enjoy travel and recreation with his wife. He returned after two weeks of retirement to continue teaching eye pathology to ophthalmology residents at the institute.

As a Clinical Professor of Laboratory Medicine specializing in Ophthalmic Pathology, Dr. Minckler has spent over 40 years looking at the symptoms and causes of disease in the eye, including aging, cancer, trauma, infection and inflammation. He is also one of very few doctors in the country who are double board-certified in ophthalmology and anatomic pathology.

Having a father and an older brother who were both pathologists, Dr. Minckler became interested in the mechanisms of disease at a young age. “Eye pathology is extremely valuable, because the skills and information transfer to diagnosis, therapies and research. Being able to correlate clinical findings and tissue changes with disease through studying eye pathology is key in sorting out what is happening inside the eyes of living patients. If you break a leg, it’s obvious what is wrong when you see the deformity. Most medical conditions are much more subtle. Luckily, we are able to see, test and look at eyes in many different ways, so accuracy when diagnosing eye disease is very high.”

During weekly interactive conferences with the residents, Dr. Minckler presents a clinical-pathological correlation (CPC) using clinical and laboratory images and microscope slides. He presents a case, such as a child with signs and symptoms of a retinal tumor. Causes, treatments and differential diagnoses are discussed with resident participation. The actual diagnosis is revealed, which helps residents to associate symptoms with specific anatomic causes and various diseases. Having spent 30 years at USC-Doheny, an established eye care center in Los Angeles, Dr. Minckler is excited by the strong future of the Gavin Herbert Eye Institute.

“It’s been a huge privilege to be a part of the institute and its ongoing growth into a major eye care center. Orange County is a great place to work, and the new building will help the Gavin Herbert Eye Institute continue to provide quality clinical eye care and research at the highest levels.”

“Being able to correlate clinical findings and tissue changes through eye pathology is key in sorting out what is happening inside the eyes of living patients.”

— Don Minckler, MD, MS
large part of providing care for the visually impaired community is trying to see the world through their eyes. When Roger Steinert, MD, of the Gavin Herbert Eye Institute accepted an invitation to tour Braille Institute’s Orange County Center, he knew the residents and physicians could benefit from the services provided there as much as their patients would. Since 2010, residents at the Gavin Herbert Eye Institute have regularly attended seminars held at the Orange County Center, in which they aim to understand the challenges their patients experience on a daily basis. These seminars, which cover a variety of topics, are part of a long-standing collaboration between the Gavin Herbert Eye Institute and Braille Institute.

“There’s a deep emotional impact when patients are told they’re losing their sight,” says Gene Mathiowetz, Regional Director of Braille Institute Orange County. “This program shows residents and physicians that there are a wide variety of skills that we can teach people with low vision, to help them go on with their lives and regain their independence.”

Regaining that independence is mainly a matter of developing the daily living skills necessary for navigating life with vision loss. Residents in the program experience this by participating in a variety of training programs including cooking, home management and sensory awareness techniques, designed to restore self-confidence and enable people who are blind or visually impaired to do familiar tasks in a new way. For example, in one exercise led by an Orientation and Mobility Specialist, residents pair up for a tour of the facility, in which half of the team gets blindfolded and the other half serves as sighted guides. Residents also learn hands-on about the use of special lighting, magnification equipment and assistive technology devices that can help patients make the best use of their residual vision. While the residents learn first-hand what it’s like to cope with vision loss, those at Braille Institute also have much to gain from the collaboration.

“It’s a win-win situation,” says Mathiowetz. “The residents receive a wide range of training from us, and we, in turn, keep abreast of the emerging research in eye health. This collaborative approach allows us to learn from each other, so together we can help people with vision loss lead enriched and fulfilling lives.”

When the Gavin Herbert Eye Institute (GHEI) opens in the summer of 2013, no detail will be left to chance. Through close collaboration with Braille Institute Orange County, architects and designers have laid out plans to make each space in the brand new facility accessible and easy to navigate for those who are blind or visually impaired. This initiative, facilitated by Braille Institute’s Orange County Regional Director, Gene Mathiowetz, and Roger Steinert, MD, of the Gavin Herbert Eye Institute aims to provide a safe and comfortable environment for future patients.

“In addition to expert advice from staff members, including orientation and mobility specialists and a certified low vision therapist, the design guidelines we’re utilizing have resulted from our many years of experience serving thousands of visually impaired people at our center,” says Mathiowetz, who has been at Braille Institute for 21 years. “When you are developing space for people with visual impairments, it requires extra thought and consideration to create an environment that is functional, safe and comfortable.”

Designers of the new facility have taken into account the flow of the patient experience. There are well-marked entrances, a drop-off zone on ground level, auditory cues, a direct pathway to the lobby and thorough use of contrasting colors to ensure objects are more visible and do not blend into the background. Floorcovering patterns, furniture, and countertop and wall colors were all considered so that they would be easily identifiable to those with low vision. The guidelines also suggest minimizing glare whenever possible as well as noisy objects, such as hand dryers in the restroom, that interfere with other auditory cues used to navigate spaces.

“We believe the future of the people we serve at Braille Institute will be greatly enriched by our collaboration with the Gavin Herbert Eye Institute. Vision loss can present unique challenges, and the staff at GHEI has made a tremendous effort to design a facility that makes patient care and comfort its highest priorities,” says Mathiowetz.
Fresh off of the Gavin Herbert Eye Institute Topping Out ceremony, which celebrated the completion of the building’s framework, Jim Mazzo, President of Abbott Medical Optics, recalls a time when this world-class eye center was just a vision for him and in the minds of other ophthalmic industry leaders. He created its board of directors seven years ago and has since remained involved in bringing plans for Orange County’s only academic eye institute to fruition, pulling together resources, raising funds and rallying key industry leaders around this cause. He recalls how his role in business and his passion for ophthalmology inspired him to get involved.

“At the time, we saw that the fine ophthalmologists at UC Irvine practiced across campus in various spaces,” says Mazzo, who currently serves as the board’s chairman. “I created a board of directors to build this eye institute, and it was always my desire to have it be named the Gavin Herbert Eye Institute.”

With a career that spans over 30 years in the ophthalmic industry, Mazzo along with his peers felt that an eye institute in Orange County was essential because of the strong presence of leading ophthalmic companies here.

“We have a tremendous resource of ophthalmic companies in our own backyard,” said Mazzo. “The collaboration of the local companies and the ability to recruit top physicians are key benefits that this institution brings to patients.”

Having provided direction for the institute since its inception, Mazzo’s leadership experience on the board of directors has allowed him to work with business leaders both inside and outside of the ophthalmic industry and gain valuable perspective that he applies to everyday life and business.

“Serving this institute has been an honor,” remarks Mazzo. “To be able to see the progress on the building has been very impactful to me in both my personal and business life.”