When a young girl came out of eyelid ptosis repair surgery to treat her droopy left eyelid, she gained not only her peripheral vision, but also a newfound self-confidence. Outpatient surgery gave her symmetrical eyes that improved vision, and she no longer felt the need to wear her hair down to cover half of her face.

Jeremiah Tao, MD, Director of Oculofacial Plastic and Orbital Surgery at the Gavin Herbert Eye Institute, performed this highly technical procedure that will allow his young patient to lead a more normal life.

Oculofacial and orbital surgery, also known as ophthalmic plastic and reconstructive surgery, is an extremely specialized field that treats the delicate tissues surrounding the eyes. Dr. Tao and his colleagues help patients with deformities and abnormalities of the eyelids, tear drainage system and eye socket. Conditions include eyelid or orbital tumors, excessive tearing due to a blocked tear duct, eyelid malposition, orbital trauma, eye bulging from thyroid eye disease, eyelid bags, excess skin and facial wrinkles.

“We offer a wide spectrum of procedures—many that are in-office with minimal pain and downtime—at the Gavin Herbert Eye Institute,” says Dr. Tao, who is a fellow of the American Society of Ophthalmic Plastic and Reconstructive Surgery. “Many times, patients come in not realizing simple oculoplastic treatments exist for problems that have bothered them for a long time.”

Oculofacial conditions range from reconstructive to cosmetic. Whether patients are treated for a droopy eyelid obstructing their vision or want to get rid of bags and dark circles around the eyes, board-certified surgeons in this department are able to carefully consider both aesthetics and function of the eyes.

“We listen carefully to our patients to understand their goals,” says Dr. Tao. “After we identify the problem, we correlate our detailed examination findings with our experience and specialty training to formulate a treatment plan that also maintains or improves vision.”

The Gavin Herbert Eye Institute Oculofacial Plastic and Orbital Surgery division treats patients at UC Irvine Medical Center and Gottschalk Medical Plaza.

For more information about ophthalmic plastic and reconstructive treatment at the Gavin Herbert Eye Institute and to make an appointment, please call (949) 824-2020 (Irvine) or (714) 456-7183 (Orange), or visit www.eye.uci.edu/winter.
As we watch the walls and columns of the new eye institute building rise from the ground, I am reminded that without the commitment of our community, none of this would be possible. With $28.5 million pledged or donated, we are still working hard to achieve the total of $37 million needed by the spring 2013 completion date. This is truly an exciting time at the Gavin Herbert Eye Institute.

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.

As a pediatric ophthalmologist at the Gavin Herbert Eye Institute, Jennifer Simpson, MD, sees the effects of cerebral palsy (CP) on a child’s sight. Recently, a three-year-old child who was born premature came to her clinic because he had poor facial recognition and did not maintain eye contact, but had passed a normal eye exam. A diagnosis of autism was considered, but she suspected his vision was to blame. An MRI revealed brain changes consistent with CP, and Dr. Simpson could now correctly diagnose him with cortical vision impairment (CVI).

A disorder hidden from sight
CVI is currently the leading cause of bilateral visual impairment in children in the United States. The impairment is difficult to pinpoint because the vision loss occurs in the brain, so an eye exam often appears normal. Images from the eye are sent through electrical signals to the vision center in the brain, called the visual cortex, to be interpreted. CP, caused by lack of oxygen or blood supply to the brain at birth, affects both full-term and premature babies and manifests as disabilities in movement, speech and vision. As many as 60% of children with CP have some degree of CVI, and the brain fails to interpret what is seen by a child’s eyes due to damage to the visual cortex.

Along with poor face recognition and eye contact, children with CVI can have inefficient vision. When asked to look at an object, a half-second task for those with healthy vision, children with CVI can take 20 seconds or more. They may have a slow gaze, look in the opposite direction first or overlook the object all together. Vision can be better some days and worse on others, and both central and peripheral vision can be affected.

No established screening program exists to identify and refer children at risk of CVI. If referred to an eye care specialist, a child with CVI passing a normal eye exam can be misleading. “This is the challenge of cortical visual impairment. If you are not looking for it, you will often miss it,” says Dr. Simpson.

RESEARCH BRINGS
CORTICAL VISION IMPAIRMENT TO LIGHT

Cathleen Collins and one of the many children with cerebral palsy she is committed to help.

FIRST THE FOUNDATION, AND NOW THE SUPPORT

As we watch the walls and columns of the new eye institute building rise from the ground, I am reminded that without the commitment of our community, none of this would be possible. With 828.5 million pledged or donated, we are still working hard to achieve the total of 837 million needed by the spring 2013 completion date. This is truly an exciting time at the Gavin Herbert Eye Institute.

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.
**Seeing the need**
As a mother of a child with multiple disabilities including CP, Cathleen Collins, CEO of United Cerebral Palsy of Orange County (UCP-OC), knows the challenges of accessing care and information for children with disabilities. Children with CP typically have many complex medical challenges requiring a variety of specialists. Therefore, UCP-OC has a pediatric medical advisory board from a broad range of disciplines to help create a less fragmented system of care and develop therapy programs and services for children with disabilities.

Her daughter’s referral to Dr. Simpson led Collins to invite Dr. Simpson to join UCP-OC’s medical board in 2010. This led to the start of a collaborative three-year pilot project focused on better ways to diagnose and potentially treat CVI involving UCP-OC and the Gavin Herbert Eye Institute.

“Dr. Simpson was an obvious choice to lead our efforts given her knowledge, expertise and reputation as a pediatric ophthalmologist in Orange County,” says Collins. “She has a strong commitment to children at risk for CP and addressing their complex medical needs. This project would also not have been possible without funding from Abbott Medical Optics and UC Irvine’s Institute for Clinical and Translational Science.”

**A fixed focus**
The project uses a screening tool developed by Christine Roman Lantzy, PhD. Doctors will ask parents a set of questions and make observations to determine the probability of a child having CVI. This tool could be an important way to screen for CVI in neonatal intensive care units (NICUs) and at primary care doctor’s visits to facilitate earlier referral to eye care specialists for a definitive diagnosis.

“There is still much to be learned about CVI and its treatment. With screening in place, we hope to establish better treatment options for CVI,” says Dr. Simpson. “Early diagnosis can lead to referrals for vision rehabilitation programs to maximize the vision children with CVI have, and possibly improve or reverse their vision damage in the future."

“The Gavin Herbert Eye Institute really fosters collaboration. It’s great to see that the partnership between companies, the university, the institute and foundations like United Cerebral Palsy really make a difference for children in need.”

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"The first step is to develop a screening process so cortical vision impairment can be correctly diagnosed at an earlier age. The key to rehabilitation of CVI is early detection."

— Jennifer Simpson, MD

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**FACULTY MEMBERS**

- George Baerveldt, MD
- Lbachir BenMohamed, PhD
- Swaraj Bose, MD
- Donald J. Brown, PhD
- Robert Wade Crow, MD
- Marjan Farid, MD
- Sumit (Sam) Garg, MD
- Ronald N. Gaster, MD
- James V. Jester, PhD
- Tibor Juhasz, PhD
- Maria Cristina Kenney, MD, PhD
- Henry Klassen, MD, PhD
- Baruch Kuppermann, MD, PhD
- Ron Kurtz, MD
- Robert W. Lingua, MD
- Linda S. Lippa, MD
- Stephanie Lu, MD
- Sameh Mosaed, MD

TO CONTACT FACULTY MEMBERS OR TO MAKE AN APPOINTMENT, CALL (949) 824-2020 (IRVINE) OR (714) 456-7183 (ORANGE)
What is LASIK surgery?
LASIK is a safe and effective surgical vision correction procedure that gives people quality vision without the need for glasses or contacts. The term LASIK is short for laser assisted in-situ keratomileusis and involves using precision laser technology to reshape the cornea. This advanced eye treatment offers a fast procedure, quick recovery and optimal visual results, making it a popular choice for millions of people around the world.

The American Refractive Surgery Council reports that over the past decade, 15.1 million LASIK procedures were performed in the United States alone.

Is the LASIK procedure right for me?
LASIK surgery is available for people with myopia (nearsighted), hyperopia (farsighted) and astigmatism. While over 700,000 LASIK procedures are performed every year in the United States, there are some patients who are not suitable candidates for the procedure.

Those considering LASIK should have a thorough consultation that can last several hours. The consultation includes both a full eye exam, including dilation of the pupil to allow examination of the inside of the eye, and special tests. These tests include a computer analysis of the shape of the cornea, measurement of corneal thickness and very sophisticated optical measurements of the eye known as a wavefront analysis.

At the Gavin Herbert Eye Institute, the consultation will also include an educational computer information presentation and time with your surgeon to discuss the procedure.

What to expect during the procedure
At the Gavin Herbert Eye Institute, the ophthalmologist first uses an ultrafast pulsed laser, known as the femtosecond laser, to precisely shape a thin flap in the front of the cornea, which the surgeon then gently moves out of the way.

Next, the surgeon reshapes the corneal tissue underneath the flap using a second laser known as the excimer laser. Once the cornea is reshaped, the flap is then returned in place. The procedure itself can take as little as a total of 10 minutes for both eyes. Numbing eye drops are all that is required for comfort.

After your treatment
Typically, patients see improvement immediately after the laser treatment. By the next morning, major improvement has occurred, and your vision will continue to get sharper for several weeks.

Patients are given prescription eye drops to use for about one week and also comforting lubricating eye drops for several months. Typically, you will see your doctor the day after your surgery and then for further follow-up appointments depending on your specific treatment.

While the procedure is relatively quick and painless, there are risks associated with LASIK surgery, as with any surgical procedure. These risks will be evaluated and discussed at the time of the consultation.

Make an appointment today
To schedule an individual complimentary screening with a refractive surgeon, contact the Gavin Herbert Eye Institute Refractive Surgery Center at (949) 824-9970.

For dates and times of upcoming patient education seminars and complimentary screenings, or to learn more details about LASIK and other state-of-the-art ophthalmic services, visit our website at www.eye.uci.edu/winter.

LASIK involves using precision laser technology to reshape the cornea. This advanced eye treatment offers a fast procedure, quick recovery and optimal visual results, making it a popular choice for millions of people around the world.
LASIK GLOSSARY
OF TERMS

- **ASTIGMATISM**: An irregularity in the shape of the cornea or lens that prevents a sharply focused image on the retina, regardless of how near or far the object is located.

- **EXCIMER LASER**: A form of ultraviolet laser that precisely reshapes the cornea to correct optical distortions.

- **FEMTOSECOND LASER**: A laser that emits ultrafast pulses of light, allowing a precise creation of the corneal flap in LASIK.

- **HYPEROPIA**: Commonly called farsightedness because vision is least blurry at far distances and increases the closer the object is, such as during reading.

- **LASIK**: Laser eye surgery for correcting vision imperfections.

- **MYOPIA**: Commonly called nearsightedness, because when an object is close, it comes into focus, while distance is blurry.

HERE’S LOOKING AT YOU, KIDS

Sanah Amir Sohrab, DDS, seldom thinks about the vision problems he had most of his life.

Although he vividly recalls how blurry his world would become if even the smallest particle of dust were to stick to one of his contact lenses, Dr. Sohrab, a pediatric dentist, has not had to deal with the hassle of glasses or contacts since he underwent LASIK surgery at the steady hand of his ophthalmologist, Marjan Farid, MD, at the Gavin Herbert Eye Institute.

The quick and effective procedure, which involves reshaping of the cornea using laser technology, has had a tremendous impact on Dr. Sohrab’s life and career, and he speaks highly of his treatment with Dr. Farid.

“Having to wear contact lenses behind the special magnifying dental loupes was quite a challenge,” says Dr. Sohrab, who went through the surgery shortly after completing his specialty training at New York University. He dealt with the inconveniences from a young age, and many of them carried over into his professional life. “Dr. Farid is very caring, extremely precise and highly professional. Now, after LASIK, I’m able to practice comfortably.”

Like many, Dr. Sohrab walked into the surgery having heard a great deal about it from the media and from friends and family who had success with it. He contacted Dr. Farid, who has been a friend of the family for years, and was able to determine LASIK as a suitable solution for his vision problems.

“Having spent much of my life constantly switching between glasses and contact lenses, it’s nice not having to worry about it anymore,” says Dr. Sohrab. “Because of LASIK, I can focus on taking care of my pediatric patients rather than dealing with the inconvenience of corrective lenses.”

Lasik surgery helped Dr. Sanah Amir Sohrab improve care for his pediatric patients.
Edward Kim, MD, has practiced ophthalmology in the South Orange County community for over 30 years. His son Brian Kim, MD, is a current ophthalmology resident at the Gavin Herbert Eye Institute. While both are eye doctors who specialize in the retina, neither had planned on creating a family legacy of treating and saving sight.

Blind chance to successful career
When completing his medical degree at UC San Francisco, Dr. Edward Kim was deciding on a specialty when he had an ophthalmology rotation with William Hoyt, MD, who had recently published a seminal neuro-ophthalmology textbook. While reading it, Dr. Kim happened to find an obscure error in its pages, which he mentioned to Dr. Hoyt. “That was the beginning of a student-mentor relationship that developed into a passion for ophthalmology,” says Dr. Kim.

After completing his residency and a retinal fellowship at Harvard Medical School’s Massachusetts Eye and Ear Infirmary, Dr. Edward Kim returned to the West Coast and started a practice with another Harvard-trained ophthalmologist. Harvard Eye Associates opened in 1975 and currently has seven doctors on staff and offices in Laguna Hills and San Clemente.

Dr. Edward Kim now specializes in lens implants and cataract surgery. He also serves as associate clinical professor at the Gavin Herbert Eye Institute, volunteering his time to teach and oversee residents as an attending physician. “As a part of the community, I feel an important obligation to donate my time and resources to future ophthalmologists. Under the strong leadership of Dr. Roger Steinert, the institute provides a rich environment for both learning and teaching."

Separate paths to one place
Although he planned to pursue a career in biomedical engineering after graduating from Columbia University, Dr. Brian Kim decided to go into cardiac medicine after working as a researcher on cardiac assist devices and tissue engineering to grow artificial organs. By chance, he completed an ophthalmology rotation during medical school at Penn State. “I fell in love with the technology and innovation that go into the treatment of challenging eye disorders,” says Dr. Brian Kim. “Ophthalmology was a perfect match for me.”

Since his father is an active member in the Orange County ophthalmology community, Dr. Brian Kim grew up with UC Irvine as a household name. When he was offered a residency at the Gavin Herbert Eye Institute, Dr. Kim was excited to come home after many years on the East Coast.

“As a part of the community, I feel an important obligation to donate my time and resources to future ophthalmologists.

Under the strong leadership of Dr. Roger Steinert, the institute provides a rich environment for both learning and teaching.”
— Edward Kim, MD
“It felt like I had an intimate relationship with UC Irvine without ever experiencing it for myself,” says Dr. Brian Kim. “I knew that the training was top notch, and the educators and attendings were world class. The professors have dedicated their careers to teaching and really reach out to the Orange County community. As I research and partner with true experts in the field, it’s an honor to be involved in the present and future treatments coming out of the Gavin Herbert Eye Institute.”

When recalling his first week of residency at the institute, Dr. Brian Kim remembers encountering his father as an attending physician. “In the clinic, a resident will complete a patient eye exam and form a clinical plan. The attending does a follow-up exam shortly after, making changes to the plan if necessary. I wasn’t really aware that my father was volunteering in this capacity at the institute, and it was a bit nerve-wracking to have him oversee me. I didn’t know how to address him—as ‘Dad’ or Dr. Kim—or how to introduce him to the patients, since we were both Dr. Kims!”

“While there have been a lot of emotions, it has been fun to work alongside my father,” says Dr. Brian Kim. “He is a wealth of knowledge and a great teacher. He’s been a large figure in my development as an ophthalmologist, and he takes an active role in finding out what I’m learning and researching new topics with me.”

“I am very proud, grateful and fortunate that my son has become an ophthalmologist and trained at the Gavin Herbert Eye Institute,” says Dr. Edward Kim. “We really delight in discussing difficult and unusual cases over dinner. I’ve enjoyed watching him develop and grow.”

As Dr. Brian Kim finishes his residency and heads to Bascom Palmer Eye Institute in Florida next summer to complete a retinal fellowship, he hopes to return to Orange County and work with his father.

“I would like to join Harvard Eye Associates—if he lets me,” Dr. Brian Kim says with a smile. “To work in private practice and also give back to the program at the Gavin Herbert Eye Institute that has invested so much in me would be ideal.”

This year, for the first time, Foundation Fighting Blindness (FFB) is partnering with the Gavin Herbert Eye Institute (GHEI) on a joint event to focus on cutting-edge research and progressive clinical trials that light the way to discovering treatment, prevention and cures for blinding eye diseases. The Shine the Light Visionary Awards Gala will honor Tibor Juhasz, PhD, Professor of Ophthalmology and Biomedical Engineering at the Gavin Herbert Eye Institute; Stephen J. Ryan, MD, President of the Doheny Eye Institute; and Richard Kratz, MD, DSc, UC Irvine Clinical Professor of Ophthalmology, board member of Beckman Laser Institute and member of the Ophthalmology Steering Committee, for their outstanding contributions and commitment to the visually impaired community here in Orange County and globally.

For the past five years, the Foundation Fighting Blindness Orange County event focused on bringing awareness to blindness and vision loss through its Dining in the Dark dinner. Participants dined in complete darkness to experience the world through the eyes of those affected with vision loss. Now, with advances in preventing and restoring vision, FFB and GHEI are shining the light on progress and future hope for eliminating the most dreaded of all physical impairments.

Supporters of this memorable event will also have access to the exclusive 5th Annual Foundation Fighting Blindness/Gavin Herbert Eye Institute Ophthalmic Innovation Symposium, in which world-renowned experts in academia, industry and healthcare investing will present the latest findings in eye care treatment and technologies.

“My cochairs James Mazzo, President of Abbott Medical Optics, and Roger F. Steinert, MD, Chair, UCI Department of Ophthalmology, are honored to continue the tradition of commitment to sight-saving therapy research set by the Foundation Fighting Blindness,” says William J. Link, PhD, Managing Director of Versant Ventures. “It promises to be an unforgettable and momentous evening for our community and the millions of people and their families affected by profound vision loss.”

For more information and to register online for the Shine the Light Visionary Awards Gala on Thursday, March 22, 2012, visit www.FightBlindness.org/ShineTheLight.
ric L. Nelson, PhD, has a long history of friendship with Gavin Herbert, which started with a chance encounter in 1959. Dr. Nelson was an assistant professor of bacteriology at UCLA. Herbert’s small startup Allergan needed to set up research labs to develop new antibacterial drugs and treatments. When Herbert visited UCLA asking for a bacterial expert, the head of the bacteriology department was on sabbatical—and he was introduced to Dr. Nelson. A couple years later, Herbert asked Dr. Nelson to join Allergan as Vice President, Research.

Their partnership produced many successes for Allergan, including eye solutions for allergies, infections, glaucoma and contact lenses, and being the first company to receive FDA approval for an antiviral drug called Herplex. It also spawned the spin-off research company Nelson Research, which focused on designing molecules that could be used for new medications. The first public business to be located on the UC Irvine campus, Nelson Research constructed a building that houses Nelson Auditorium which has been used as a student lecture hall for the past 27 years.

Dr. Nelson, a UCI Medal recipient and trustee of the UCI Foundation since 1992, has remained involved on campus. He and his wife Lila established the Eric L. and Lila D. Nelson Endowed Chair in Neuropharmacology in 1988 and donate to multiple UCI entities, including the medical school and the Gavin Herbert Eye Institute. “It feels natural to support the institute,” he says. “The ability to see is very important, so you want access to the best treatments as quickly as possible. Orange County will now have a local eye care center that will be among the top facilities in the world.

“I look forward to what’s coming out of the Gavin Herbert Eye Institute. The doctors I worked with as students are now leaders in the field. The quality of their research and care are as good as you can get.”

PARTNER IN VISION

Eric L. Nelson, PhD