**The GHEI Difference**

At the Gavin Herbert Eye Institute we strive to ensure the ultimate in patient satisfaction and safety. We offer only the most advanced technology in laser refractive surgery.

LASIK surgery is now safer than ever before with IntraLase femtosecond laser, the latest all-laser technology. Due to the exact precision of the IntraLase, you can now have a greater assurance of a safer procedure and an excellent result. IntraLase creates a corneal flap of exact diameter, depth, hinge location and architecture for your eye. In fact, more patients may now be candidates for laser vision correction due to this unique level of precision that was previously unavailable.

We perform a preoperative WaveScan measurement of the optics of your eye that is as individual as your fingerprint. A computer then creates a treatment pattern specific to you that maximizes the optical quality of the treatment. VISX S4 excimer laser then matches the treatment to your cornea using iris pattern recognition software. This custom-cornea technology is more expensive but delivers superior results.

Our surgeons are all fellowship trained academic professors at the University, providing the highest level of expertise. Furthermore, all pre-operative and post-operative exams are performed by your surgeon. This ensures continuity of your care and a personal relationship with your surgeon.

**Refractive Surgery**

All of our refractive surgeons at the Gavin Herbert Eye Institute are Board Certified by the American Board of Ophthalmology. Our relationship with you as a patient is focused on fulfilling the needs and priorities of your eye condition, applying state-of-the-art diagnostic and surgical procedures, and supplying experienced advice for achieving your best possible visual results.

For more information visit our website: [www.eye.uci.edu](http://www.eye.uci.edu)
What is a refractive error?

Any deviation from normal vision is called a refractive error.

- **Myopia** (nearsightedness) - The eye is longer than normal, so light is focused in front of the retina and distant objects appear blurred.

- **Hyperopia** (farsightedness) - The eye is shorter than normal, so light is focused behind the retina resulting in blurred vision at distance and near.

- **Astigmatism** (an oval or football irregularity of the shape of the cornea) - Light is focused at different points on the retina resulting in distorted vision.

- **Presbyopia** – difficulty in focusing on near objects requiring bifocals or reading glasses (occurring after age 40 due to stiffening of the lens.)

Refractive Surgery at The Gavin Herbert Eye Institute

What are my options?

**Vision Correction Surgery.**

Vision correction surgery is an elective procedure that alters the shape of the cornea or places a lens inside the eye to eliminate or dramatically reduce the need for eyeglasses or contact lenses.

- **LASIK (Laser in Situ Keratomileusis)**
  LASIK corrects nearsightedness, farsightedness and astigmatism by using an excimer laser to reshape the cornea. Because LASIK creates a corneal flap and reshapes the cornea under the flap, LASIK minimally disrupts the front surface of the cornea. For that reason, LASIK generally is less painful, has a quicker recovery period and shorter post-operative need for eye drops than other surgical procedures. LASIK is currently the most common vision correction surgery and may be the treatment of choice for patients desiring a more rapid visual recovery.

- **PRK [Photorefractive Keratectomy, also sometimes called "Advanced Surface Ablation" (ASA), LASEK, or epi-LASIK]**
  PRK corrects nearsightedness, farsightedness and astigmatism by using an excimer laser to reshape the cornea without first creating a flap. PRK uses the excimer laser to reshape the outer surface of the cornea. Because the outer corneal surface is disrupted, your vision is blurry for a few days, and your surgeon will use special eye drops and a soft contact lens that acts like a bandage to minimize discomfort. Your surgeon will evaluate and explain if you are a better candidate for LASIK or for PRK.

- **AK (Astigmatic Keratotomy)**
  AK corrects astigmatism by making microscopic incisions in the cornea to change the shape of the cornea.

- **Phakic Intraocular Lenses (P-IOLs)**
  These are tiny lenses that are inserted inside the eye to correct high levels of nearsightedness that are beyond the range of LASIK and PRK.

- **Refractive Lens Exchange (RLE)**
  In this type of surgery, your natural lens is removed and replaced with an artificial lens. Depending on your needs, the wide variety of implantable lenses give options for correcting virtually all ranges of nearsightedness, farsightedness, and astigmatism, as well as correction of presbyopia (the need for reading glasses).

- **INTACS**
  INTACS surgery implants tiny corneal rings in the cornea to reshape the cornea and reduce irregularities in the shape of the cornea. Most commonly, INTACS are used to treat a corneal distortion known as keratoconus. Your preoperative evaluation includes a sensitive test for keratoconus.

- **Near Vision CK (Conductive Keratoplasty)**
  For patients age 40 and older, Near Vision CK is designed for the temporary reduction of farsightedness (+1.25 to +3.25 diopters) and uses radio frequency instead of laser to reshape the cornea.

- **PTK (Phototherapeutic Keratectomy)**
  PTK uses an excimer laser to remove superficial opacities and irregularities of the cornea to improve vision or reduce symptoms of pain or discomfort due to an underlying eye condition.

What else should I know?

- **Monovision**
  Monovision is an option for patients age 40 and older who have difficulty reading due to the natural aging process (presbyopia). This is a technique in which one eye is corrected for distance vision while the other eye is corrected for near or intermediate vision. Monovision provides a viable option for active people who require both distance vision and near vision in their daily activities. Because monovision is a compromise, reading or distance glasses may still be needed for certain activities – such as fine print reading or night driving. Special testing is performed to see if monovision is right for you.

- **Dry Eyes**
  If you have dry eye problems, please inform your surgeon so that you may be started on treatment prior to your surgery. Laser refractive surgery may increase your dry eye symptoms for 3-6 months after surgery and you may need additional drop therapy to manage your symptoms.

For Appointments Call: 949-824-9970