


Laser Vision  
Correction and  
Refractive Eye  
Surgery:

**Achieve Your  
Best Possible  
Vision**



New York  
Eye and Ear  
Infirmary of  
**Mount  
Sinai**

*Center for  
Refractive Solutions*



## Welcome to the Center for Refractive Solutions at New York Eye and Ear Infirmary of Mount Sinai

**The Center for Refractive Solutions (CRS)** at New York Eye and Ear Infirmary of Mount Sinai (NYEE) offers the most advanced vision correction and cataract surgery services to optimize visual function and reduce dependence on eyeglasses and contact lenses. Our board certified ophthalmologists are leaders in the field and employ the latest technology to improve vision in people who are nearsighted, farsighted, or have astigmatism.

Patients seeking to enhance their vision will benefit from customized treatment plans and will receive the highest standards of care. Our team is here to help navigate the process, answer questions, and make the journey to better vision as smooth as possible.

## **New York Eye and Ear Infirmary of Mount Sinai: Outstanding Patient Care and Extensive Experience**

NYEE is a national leader in the diagnosis and state-of-the-art treatment of common and complex eye diseases. Staffed by a multispecialty team with expertise in glaucoma, retina, cornea, neuro-ophthalmology, and oculoplastics, and supported by the latest diagnostic technology and surgical techniques, NYEE offers the highest level of expertise and superior surgical outcomes.

NYEE is a premier training institution with the largest ophthalmology residency program in the country, dedicated to educating future eye care physicians. Our physicians, nurses, and staff are committed to providing personalized, high-quality medical care to every patient who walks through our doors.

To make an appointment, call

**212-979-4118.**

For more information, visit

**[nyee.edu/CRS](http://nyee.edu/CRS).**

## **LASIK and Other Types of Refractive Services:**

Refractive surgery refers to a family of surgical procedures designed to produce better eye focus with less dependence on eyeglasses or contact lenses for nearsighted (myopia), farsighted (hyperopia), and astigmatic individuals. This field is growing and is one of the most exciting and intensively studied in modern ophthalmology, offering patients the realistic prospect of safe and effective options for the correction of refractive error.

We offer a variety of refractive procedures.

These procedures work in one of three ways—they reshape the cornea using laser energy, implant an artificial lens to supplement the eye's natural lens, or remove the eye's natural lens and replace it with an artificial lens. Each of these options involves a brief procedure under mild sedation with rapid recovery of vision within a few days.

The following are the most common types of refractive surgery that can reduce or eliminate dependence on eyeglasses or contact lenses:



## **LASIK** (Laser-Assisted In Situ Keratomileusis)

In LASIK surgery, a femtosecond laser is used to create a thin flap in the superficial cornea, beneath which the substance of the cornea is reshaped using an excimer laser in a precise and controlled fashion to change its focusing power.

We offer custom LASIK treatments based on the unique visual characteristics of your eye. This involves measuring the eye from front to back using wavefront technology to create a three-dimensional (3D) image of the eye. The information contained in the wavefront-map provides a guide that

allows for a customized laser treatment that can offer superior results.

This 3D mapping using the wavefront aberrometer device is extremely detailed, producing more personalization than conventional LASIK, which is based only on the eyes refractive error. It allows the surgeon to reshape the cornea based on a patient's unique anatomy, bringing patients closer to 20/20 vision or better.

For most LASIK patients, visual outcome is excellent, and the results are nearly immediate.

## **PRK (Photorefractive Keratectomy)**

Like LASIK, photorefractive keratectomy (PRK) uses an excimer laser to reshape the cornea, thereby adjusting its focusing power. Unlike LASIK, no superficial corneal flap is created, and the laser is performed after removing only the surface cells of the cornea. PRK can treat both nearsightedness (myopia) and farsightedness (hyperopia) with or without astigmatism (blurry or distorted vision), and is available with the same Custom Wavefront technology as our LASIK platform. If you are not a good candidate for LASIK, the PRK procedure may be an option.



### **EVO Implantable Collamer® Lens (ICL)**

One of the newest non-laser refractive surgical options to correct refractive error is the EVO ICL, an Implantable Collamer® Lens. The EVO ICL sits on top of the natural lens. Patients don't have to worry about having tissue removed from the cornea or having the natural lens removed. It also makes the EVO ICL easier to recover from.

A lens is implanted in the eye between your iris and your natural lens to correct nearsightedness and astigmatism. Since receiving FDA approval, the EVO ICL has helped millions of patients improve their vision.

The implanted lens can be easily removed should cataract surgery become necessary in the future.

### **Refractive Lens Exchange (RLE)**

Refractive lens exchange is a permanent implant that replaces your eye's natural lens with an intraocular lens (IOL) to correct refractive errors and improve your vision. Much like a contact lens, the IOL contains a vision prescription that is customized to your eyes. As a result, you may not need to wear glasses at all, or you may need glasses for certain tasks.

Please visit [nyee.edu/CRS](https://nyee.edu/CRS) for comprehensive information about LASIK and refractive eye surgery options as well as informative videos.

**Center for Refractive Solutions  
at New York Eye and Ear Infirmary  
of Mount Sinai**

310 East 14th Street  
Suite 219, South Building  
New York, NY 10003  
[nyee.edu/CRS](http://nyee.edu/CRS)

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**Our Physicians:**

**Kira Manuis, MD**

*Director, Center for Refractive Solutions and  
Co-Director, Cataract Surgery Services  
New York Eye and Ear Infirmary of Mount Sinai  
Associate Professor, Ophthalmology  
Icahn School of Medicine at Mount Sinai*

**Sumayya Ahmad, MD**

*Associate Professor, Ophthalmology  
Icahn School of Medicine at Mount Sinai*

**Yandong (Yanna) Bian, MD**

*Assistant Professor, Ophthalmology  
Icahn School of Medicine at Mount Sinai*

**Masako Chen, MD**

*Director, Comprehensive Ophthalmology  
New York Eye and Ear Infirmary of Mount Sinai  
Assistant Professor, Ophthalmology  
Icahn School of Medicine at Mount Sinai*

**Anita Gupta, MD**

*Director, Cornea Service and  
Vice Chair, Professional Development  
Department of Ophthalmology  
New York Eye and Ear Infirmary of Mount Sinai  
Associate Professor, Ophthalmology  
Icahn School of Medicine at Mount Sinai*

**Angie E. Wen, MD**

*Director, Keratorefractive Surgery Division  
Director, Cornea Fellowship  
New York Eye and Ear Infirmary of Mount Sinai  
Associate Professor, Ophthalmology  
Icahn School of Medicine at Mount Sinai*



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