

The Evolution of Eye Care



1869

Dr. Hermann Snellen, inventor of the eye chart, proposes using incisions across the steep meridian of the cornea to flatten it and treat astigmatism.

1936

Professor Tsutomu Sato of Japan observes flattening of the cornea after traumatic eye injury; in early 1950s, performs first Radial Keratotomy (RK) procedure.



1974

Dr. S.N. Fyodorov of Russia treats boy whose glasses broke, causing corneal lacerations and discovers the practical application of refractive surgery through Radial Keratotomy (RK).

1986

Dr. Luis Ruiz of Colombia develops manual microkeratome; automated microkeratome.



1990

Dr. John van Westenbrugge of Calgary performs first Photorefractive Keratectomy (PRK) surgery in Canada.

1995

FDA approves Excimer laser for PRK refractive surgery to correct nearsightedness, with or without astigmatism. LASIK approved in 1996/97.

1890s

Leendert Jan Lans began to systematically study and define the principles of keratotomy, establishing standard of refractive surgery.



1949

In Bogota, Colombia Dr. José Barraquer (working with Dr. Cesar Carriazo) develops a technique of opening a flap on the outer protective layer of the eye with a microkeratome and reshaping the cornea.

1978

Laser eye surgery (RK) introduced to the United States by Dr. Leo Bores



1985-88

Dr. Stephen Trokel of New York City patents Excimer laser (originally used in 1970s by IBM for etching silicon computer chips). Professor Theo Seiler of Germany performs first Excimer treatment on human eye. Dr. Marguerite McDonald performs the first PRK procedure in the United States.

1990/91

Dr. Ioannis Pallikaris and Dr. Lucio Buratto of Greece create basic concept of LASIK.



2002

Wavefront ("CustomVue") guided procedures approved by FDA; called greatest advancement in laser vision correction since Excimer laser.