

25 YEARS LASIK

translational research in Ophthalmology

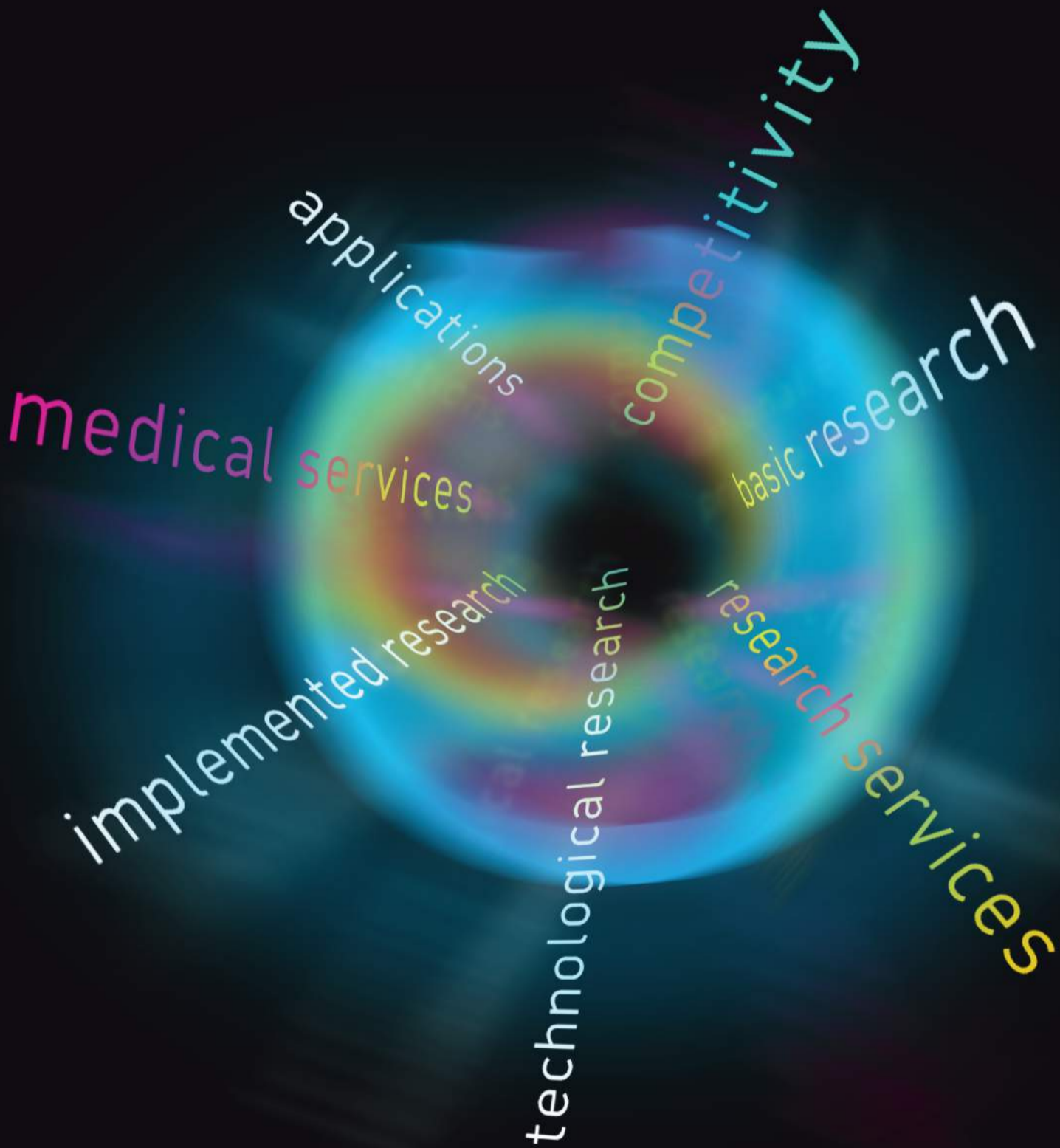


Vardinogiannion Eye Institute of Crete



University of Crete

IVO / VEIC



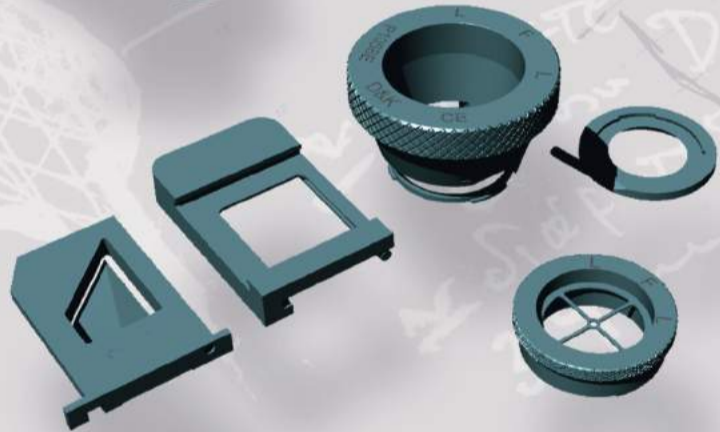
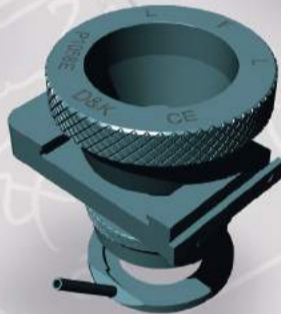
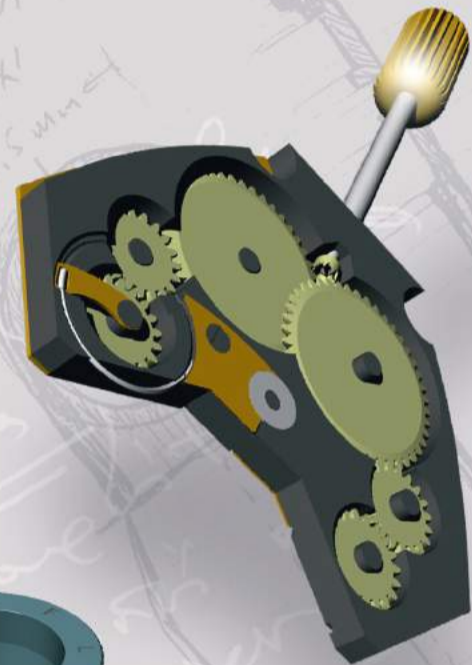
25 years research independence - translational research
at IVO-VEIC of the University of Crete

FROM THE INITIAL IDEA



Sketches-ideas of Prof. I. Pallikaris

TO THE **FINAL** DESIGN



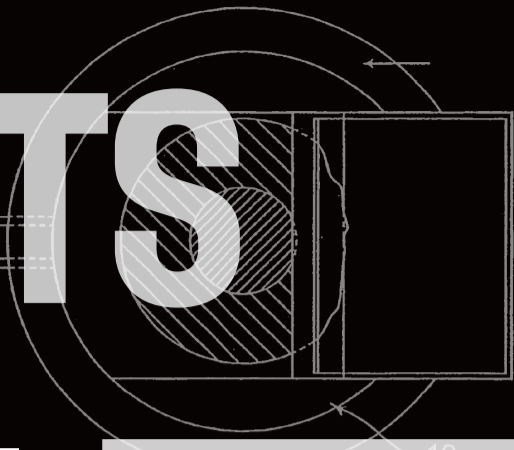
The final tools

PROVE THE CONCEPT ON TISSUE - ANIMAL STUDIES



Microscopic images of tissue animal studies

THE PATENTS



United States Patent
 (11) Patent Number: EP 1 119 284 B1
 (12) EUROPEAN PATENT SPECIFICATION
 (46) Date of publication and mention of the grant of the patent: 16.02.2011 Bulletin 2011/07
 (21) Application number: 99951829.3
 (51) Int. Cl.: A61B 2/163 (2006)

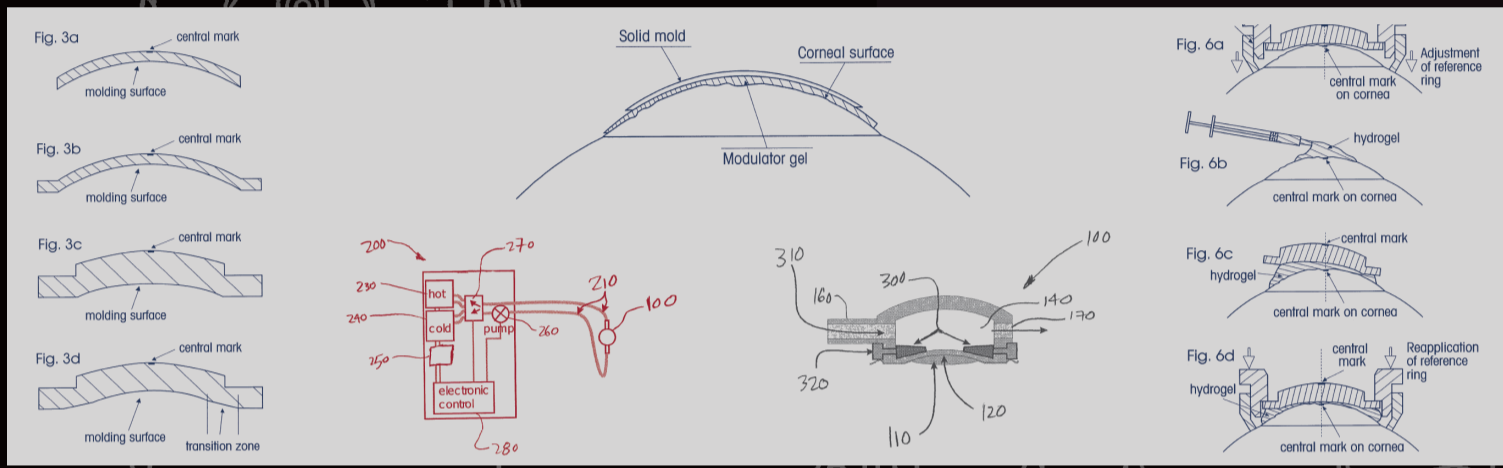
United States Patent
 (11) Patent Number: 5,699,810
 (12) Date of Patent: Dec. 23, 1997
 (54) METHOD FOR REMOVING CONTACT LENS
 (57) Abstract: A method for removing a contact lens from a cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent
 (11) Patent Number: 5,722,427
 (12) Date of Patent: Mar. 3, 1998
 (54) METHOD OF REFRACTIVE SURGERY
 (57) Abstract: A method of refractive surgery for correcting refractive errors of the eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent
 (11) Patent Number: 5,740,803
 (12) Date of Patent: Apr. 21, 1998
 (54) LOCATING THE CENTER OF THE ENTRANCE PUPIL OF AN EYE AFTER PUPIL DILATION
 (57) Abstract: A method for locating the center of the entrance pupil of an eye after pupil dilation. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent
 (11) Patent No.: US 6,009,345 B1
 (12) Date of Patent: Jun. 25, 2002
 (54) METHOD AND DEVICE FOR MEASURING REFRACTIVE INDEX OF THE EYE FOR VISION CORRECTION
 (57) Abstract: A method and device for measuring the refractive index of the eye for vision correction. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent
 (11) Patent No.: US 6,880,438 B3
 (12) Date of Patent: Jul. 4, 2004
 (54) HYDROGEL LENS
 (57) Abstract: A hydrogel lens for correcting refractive errors of the eye. The lens includes a modulator gel and a contact lens. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.



United States Patent
 (11) Patent No.: US 7,064,953 B2
 (12) Date of Patent: Feb. 24, 2006
 (54) DEVICE FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A device for removing a contact lens from the cornea of an eye. The device includes a modulator gel and a contact lens. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

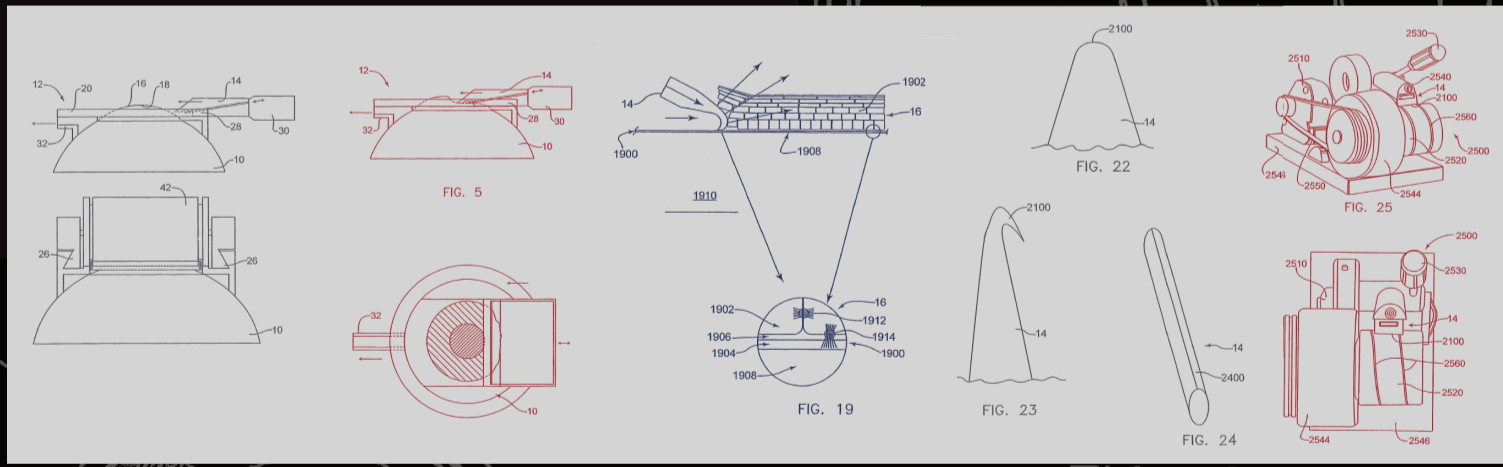
United States Patent
 (11) Patent No.: US 7,303,281 B2
 (12) Date of Patent: Dec. 4, 2007
 (54) METHOD AND DEVICE FOR DETERMINING REFRACTIVE INDEX OF THE EYE FOR VISION CORRECTION
 (57) Abstract: A method and device for determining the refractive index of the eye for vision correction. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Pub. No.: US 2002/003240 A1
 (12) Pub. Date: Feb. 20, 2002
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Pub. No.: US 2002/005296 A1
 (12) Pub. Date: Mar. 7, 2002
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Pub. No.: US 2003/0018348 A1
 (12) Pub. Date: Jan. 23, 2003
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Pub. No.: US 2004/0218142 A1
 (12) Pub. Date: Nov. 4, 2004
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.



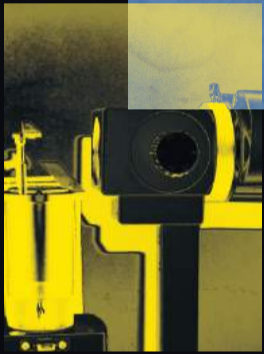
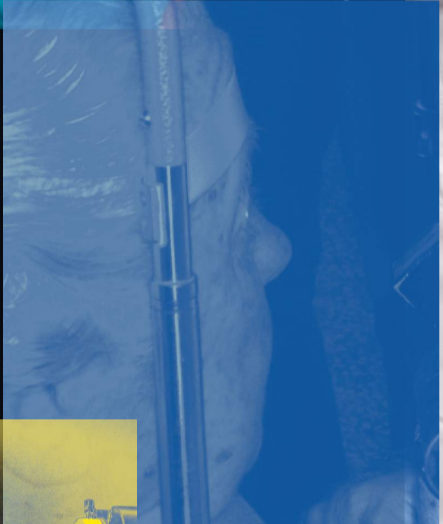
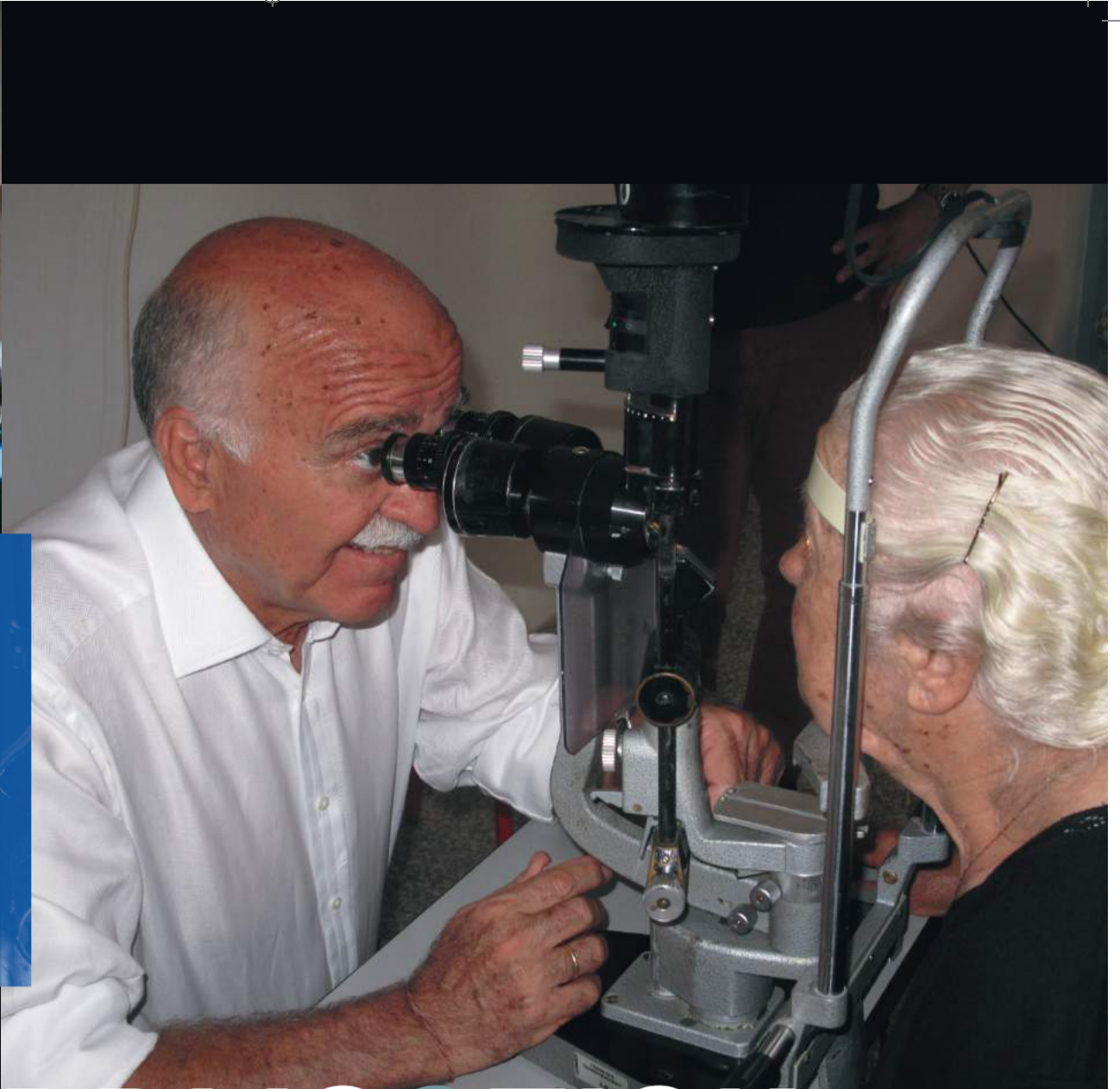
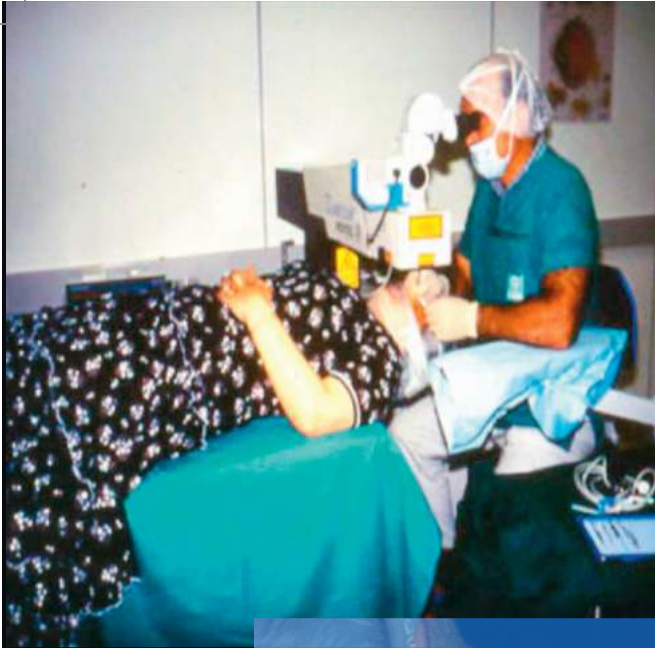
United States Patent Application Publication
 (11) Patent Application Publication: US 2005/007723 A1
 (12) Pub. No.: US 2005/007723 A1
 (13) Pub. Date: Mar. 17, 2005
 (54) DETERMINING CLINICAL REFRACTION OF EYE
 (57) Abstract: A method for determining the clinical refraction of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Patent Application Publication: US 2005/0228496 A1
 (12) Pub. No.: US 2005/0228496 A1
 (13) Pub. Date: Dec. 29, 2005
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Patent Application Publication: US 2006/009452 A1
 (12) Pub. No.: US 2006/009452 A1
 (13) Pub. Date: Apr. 20, 2006
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Patent Application Publication: US 2013/0060235 A1
 (12) Pub. No.: US 2013/0060235 A1
 (13) Pub. Date: Mar. 7, 2013
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.

United States Patent Application Publication
 (11) Patent Application Publication: US 2013/0304206 A1
 (12) Pub. No.: US 2013/0304206 A1
 (13) Pub. Date: Nov. 14, 2013
 (54) METHOD FOR REMOVING CONTACT LENS FROM THE CORNEA OF AN EYE
 (57) Abstract: A method for removing a contact lens from the cornea of an eye. The method includes the steps of: (a) providing a modulator gel; (b) applying the modulator gel to the cornea; (c) adjusting the refractive index of the modulator gel; and (d) removing the contact lens from the cornea.



THE APPLICATION AND CLINICAL SERVICES



Clinical services

INTERNATIONAL TRAINING CENTER THE MINI FELLOWSHIPS



THE AEGEAN SEMINARS

