Chapter 1 : Femtosecond Laser Keratoplasty: Suture Removal and Impact on Astigmatism | IOVS | ARVO

Roger Francis Steinert, MD, one of America's most distinguished ophthalmologists and an internationally recognized authority on corneal and refractive surgery, has died. Dr. Steinert died.

Poster of Interest Award: Foundation Fighting Blindness is a leading philanthropic organization committed to the alleviation of suffering from blindness, particularly due to retinal degenerations. This week-long meeting was attended by over 6, ophthalmologists and allied health personnel. In addition to sharing the program, Dr. Steinert presented two scientific papers, was an instructor on Secretariat Award, American Academy of Ophthalmologythree courses, and moderated many of the key sessions. Steinert RF, and Hudson B. The helix-coil transition of DNA. J Chem Educ; Continuous measurement of O2 consumption and CO2 elimination during a wakeful hypometabolic state. J Human Stress; 1 1: Clinical trial comparing timolol ophthalmic solution to pilocarpine in open-angle glaucoma. Am J Ophthalmol; 86 1: Long-term experience with timolol ophthalmic solution in patients with open-angle glaucoma. Ophthalmology; 85 3: Small unilateral foveal hemorrhages in young adults. Am J Ophthalmol; 89 1: Timolol in the therapy of "Ocular Hypertension. Long-term drift and continued efficacy after multi-year timolol therapy. Arch Ophthalmol; 99 1: JB Lippincott, , pp Laser surgery of the lens. Ophthalmology ; 90 8: Plasma formation and shielding by three ophthalmic Neodyium-YAG lasers. Am J Ophthalmol Neodymium-YAG laser surgery on experimental vitreous membranes. Arch Ophthalmol; 6: Endothelial guttata and facility of aqueous outflow. Cornea; 31: Arch Ophthalmol; Long-term follow-up of Nd-YAG laser posterior capsulotomy. Neodymium-YAG laser therapy to the anterior hyaloid in aphakic malignant ciliovitreal block glaucoma. Am J Ophthalmol; 98 2: New applications of the Nd-YAG laser. Directions in ophthalmic laser development. Short-pulsed Nd-YAG laser microsurgery of the eye: Steinert RF et al. Vitreous changes after neodymium-YAG laser irradiation of the posterior lens capsule or mid-vitreous. Am J Ophthalmol; 98 3: Excimer laser surgery of the cornea and lens. Ophthalmol; 92 6: Cutting efficiency of single shot and burst-mode Nd-YAG lasers. Time-resolved studied of Nd-YAG laser induced breakdown: Invest Ophthalmol Vis Sci; 26 Prevention of intraocular pressure elevation following neodymium-YAG laser posterior capsulotomy. Arch Ophthalmol; 7: Intraocular pressure elevation following Nd: YAG laser posterior capsulotomy. Ophthalmol ; 92 5: YAG Laser trabeculopuncture in open-angle glaucoma. Ophthalmology; 92 7: YAG laser cutting of intraocular lens haptics. Vitreous changes following neodymium-YAG laser photodisruption. Arch Ophthalmol; 4: Corneal endothelial injury in rabbits following excimer laser ablation at and nm. Arch Ophthalmol; 9: Laser Interactions with the cornea. Survey of Ophthalmology July-August, ; 31 1: Focusing Accuracy of helium-neon aiming beams in Neodymium: Ophthalmic Laser Therapy, , 1: Surgical vitrectomy for pseudophakic malignant glaucoma. Am J Ophthalmol ; 6 Quantitative and ultrastructural studies of excimer laser ablation of the cornea at and nanometers. Lasers in Surgery and Medicine; Volume 7, Number 2, YAG lasers in cataract surgery. Int Ophthalmol Clinics; 27 3: Laser damage in injection-molded lenses. J Cataract Refract Surg; 13 1; Temporary tarsorrhaphy enhances reepithelialization after epikeratoplasty. Arch Ophthalmol; 1: Epithelial abnormalities and sterile ulceration of epikeratoplasty grafts. Ophthalmology; 95 2: Indications and treatment of keratoconus using epikeratophakia, Ophthalmology; Arch Ophthalmol; 4 Postoperative management of epikeratoplasty. J Cataract Refract Surg; 14 3: Int Ophthalmol Clinics; 28 2: Am J Ophthalmol; 4: Epikeratoplasty for adult and pediatric aphakia, myopia and keratoconus: YAG laser anterior vitreolysis for Irvine-Gass cystoid macular edema. J Cataract Refract Surg; 15 3: Excimer lasers in ophthalmology. J Cataract Ref Surg; Penetrating keratoplasty for pseudophakic bullous keratopathy edema associated with closed-loop anterior chamber intraocular lenses. Ophthalmology; 97 4: Visual results of suture-fixated posterior chamber lenses during penetrating keratoplasty. Lasers in Corneal Surgery. Ophthal Clin of North America; 2: Immunofluorescence study of corneal wound healing after excimer laser anterior keratectomy in the monkey eye. Arch Ophthalmol 9: Excimer laser phototherapeutic keratectomy for a corneal

nodule. Refract Corneal Surgery 6 5: Update on laser corneal surgery. Astigmatism after small incision cataract surgery: A spectrum of bilateral squamous conjunctival tumors associated with human papillomavirus type Ophthalmology; 98 5: A comparative study of masking fluids for excimer laser phototherapeutic keratectomy. Archives of Ophthalmol 6: Discussion of McDonald MB et al: Central Photorefractive Keratectomy for Myopia:

Chapter 2 : Dr. Roger Steinert, MD â€" Orange, CA | Ophthalmology

Roger F. Steinert, MD is known for his research on cataract surgery and is a researcher for The Discovery Eye Foundation (a Los Angeles-based non-profit organization).

Ergonomics and positioning can make all the difference between surgical ease and clumsiness. Elbows should be tucked in against the torso in order to minimize the use of the larger muscles groups, which also helps to prevent tremors. Maintain your hands at approximately the same height level as your elbow placement. If you sit too high and your hands are positioned much lower than your elbow placement, this can inadvertently lead you to push down too much on the eye. The reverse situation, with your hands up higher than your elbows, can limit your range of motion and be awkward with instrument manipulation. This article contains other fine tips presented by Drs. Farid, Garg, Steinert, and Ward to help surgeons operate the microscope to its fullest potential. Pictured here is the ability of the illumination to highlight the pseudoexfoliation material on the anterior lens capsule. Steinert, MD, professor and chair of ophthalmology, University of California, Irvine, said young residents and fellows require adjustments to minimize accommodation on the scope at the beginning of the case, including adjustment of the oculars so that a video image is in focus. Sumit Sam Garg, MD, vice chair of clinical ophthalmology, and medical director, Gavin Herbert Eye Institute, University of California, Irvine, agreed that the starting point is for surgeons to ensure that their refractive error is dialed in. Garg suggested starting high and to "focus down" to avoid accommodating. For instance, Marjan Farid, MD, associate professor of ophthalmology, University of California, Irvine, moves the microscope as high as possible while still maintaining focusto ensure that she is not accommodating. Ward, MD, in private practice, Provo, Utah, likes to begin cases by zeroing the focus to ensure he is starting from a neutral position. He then adjusts the view by manually moving the scope into position until the view is as clear as possible while "looking through" the image to relax accommodation. She also minimizes the paraxial lights and increases the intensity on the central coaxial light while maintaining centration. Steinert emphasizes centeringinstead of tiltingthe microscope. Garg, a coaxial illumination sourcesuch as that used in the Lumera surgical microscope Carl Zeiss Meditec, Jena, Germany is key to obtaining the red reflex needed for good visualization during capsulorhexis creation. However, coaxial illumination is used by Dr. Garg primarily during the surgical stepsprior to hydrodissection. Forthe hydrodissection and remainderofthe casehe adds in some paraxial, or surround, illumination to illuminate the entire operative field. Ward said the use of the coaxial beamusually not much larger in diameter than the corneahelps direct his focus during capsulorhexis. Ward also has used the OPMI Lumera system, he previously used other, both newer and older, microscope systems. Garg uses x for the capsulorhexis and x forthe nuclear fragment removal. Although hegenerally does not use the depth of field function on the Lumera during phacoemulsificationdue to concerns that it cuts some of the light intensity and is not necessary giventhe optics of the microscope, that was a function he routinely utilized on microscopes previously. She has found that manufacturers of most newer scopes have built in excellent depth of field. Steinert warned that microscopes that have an increased depth of field utilize a smaller aperture, "which means that the surgeon receives less light and therefore must increase the light load on the retina. Ward generally avoids any particular magnification settings because of variation in the size of each eye and cornea. Steinert said the other major variable in adjusting a microscope to optimize the view during cataract surgery isthetilt ofthe oculars. Farid urged surgeons to rememberto use the x-y function in order to help maintain goodcentration. Slight patient head shifts can move the eye out of centration and lead surgeons to strain to obtain good visualization. Also, less is sometimes more, Dr. Garg noted that higher magnification reduces depth of focus. The decreased field size can lead to ocular fatigue and potential increase in operative time due to frequent adjustments. The physicians have no financial interests related to their comments.

Chapter 3: Ophthalmology ()

Farid, Marjan; Steinert, Roger F Abstract Recent findings: The role of age, sex, ocular dominance, amount of monovision, and hyperopic versus myopic treatments is reviewed and reported.

These selective programs emphasize both clinical training and research. Fellows accepted into this service receive complete training in the evaluation and management of medical and surgical problems of the anterior segment. Teaching opportunities include working with our highly motivated ophthalmology residents. Each fellow is expected to initiate a research program or participate in ongoing ocular research efforts. The department emphasizes research in areas related to biomedical engineering, especially in the area of laser surgical techniques and therapies. The backgrounds and needs of our applicants vary, but there are many opportunities available so that each fellow can tailor an effective program of clinical and research projects to pursue. UC Irvine glaucoma fellows gain broad and in-depth experience in the evaluation and management of the multiple medical and surgical problems related to glaucoma. Teaching opportunities include working with the residents in the glaucoma specialty clinics. Glaucoma fellows, working in a referral practice, gain experience in all aspects of the disease, including pediatric cases. Surgical experience includes goniotomies, trabeculotomies and many combined procedures, including lens extraction and posterior segment intervention with our retinal service physicians. Interaction with other subspecialty areas such as neuro-ophthalmology, cornea and retina, is encouraged. Research is heavily emphasized for our glaucoma fellows. We have ongoing clinical studies in glaucoma drug treatment and surgery. Our basic science projects involve diagnostic techniques to asses nerve fiber layer and the optic disc. We have a strong track record in the use of various types of lasers to treat glaucoma. We also are studying the basic science of glaucoma implants and innovative new medical and surgical techniques. Assessments of novel approaches to glaucoma surgery for primary surgical procedures are underway. One day a week is set aside for ongoing research projects. A formal didactic curriculum and rich academic atmosphere supplement high volume clinical and surgical training. John Park and Dr. The fellow gains high volume, hands-on experiences at diverse teaching hospitals, facilities, and healthcare systems. UC Irvine Medical Center is a level-1 trauma center with the full gamut of facial trauma and other oculofacial and orbital disease. The VA Long Beach provides a high-volume source of functional disease. Kaiser Foundation is a large managed care system with a broad range of functional disease and some cosmetic oculoplastic surgery. At GHEI, the fellow sees a full spectrum of tertiary ophthalmic plastics as well as cosmetic surgery. The patient populations at the various sites make up a broad range of age, demographic and socioeconomic groups. All sites are approximately minutes drive time, except Kaiser that is approximately 40 minutes away from the other sites. The surgical volume is heavy with the fellow assigned to scheduled OR time of 4 of 5 weekdays. The typical weekly schedule is as follows: Primary fellow cases at all sites drive high levels of surgical competence. These are coupled to extensive assistant surgeon cases that provide an exceptionally balanced and diverse surgical experience. The following is the approximate case type distribution: Wet labs, including a cadaver course, are also part of the curriculum. The fellow has opportunities to conduct meaningful research. Basic science opportunities are available through the ophthalmology department that houses a full research division. Unique opportunities with device development are available given the abundant local ophthalmic device and tech industry in Orange County CA. Funding is available for research endeavors. The fellow also receives benefits, medical malpractice, with other administrative covered. Additionally, funds are available for meeting travel and research activities. Paid leave for vacation is also offered. The academic environment and research opportunities at UC Irvine foster innovation and teaching skills, as well as prepare the graduate to be an outstanding oculoplastic and orbital specialty surgeon. All are month programs. Fellows receive extensive clinical and surgical experience in treating vitreo-retinal diseases and they perform a large number of laser and surgical procedures in all areas of retinal disease. Clinical fellows also are expected to engage in research. Time is set aside for conducting experiments and writing

manuscripts, typically two or three half days each week. International fellows must have completed a retina fellowship in their home country. Retinal research fellows, working under the supervision of Drs. Kenney and Kuppermann, have a choice of areas in which to conduct their research. Current research fellows spend about 80 percent of their time engaged in research, about 10 percent seeing clinical patients and the remaining 10 percent observing vitreo-retinal surgery. To apply for an international fellowship, please e-mail your CV and subspecialty of interest to Department of Ophthalmology personnel analyst Elise Smith at elises1 uci. A medical degree from a U. Applications should be received by the department by the end of August

Chapter 4: Corneal surgery: theory, technique and tissue - JH Libraries

The ophthalmology world is mourning the passing of Roger F. Steinert, MD, a well-admired, well-loved, and multiple-awarded pioneer in cornea, refractive, and cataract surgery.

Fellows accepted into this service receive complete training in the evaluation and management of medical and surgical problems of the anterior segment. Each fellow works with three members of the cornea faculty: Teaching opportunities include working with our highly motivated ophthalmology residents. Each fellow is expected to initiate a research program or participate in ongoing ocular research efforts. The department emphasizes research in areas related to biomedical engineering, especially in the area of laser surgical techniques and therapies. The backgrounds and needs of our applicants vary, but there are many opportunities available so that each fellow can tailor an effective program of clinical and research projects to pursue. UC Irvine glaucoma fellows gain broad and in-depth experience in the evaluation and management of the multiple medical and surgical problems related to glaucoma. Teaching opportunities include working with the residents in the glaucoma specialty clinics. Glaucoma fellows, working in a referral practice, gain experience in all aspects of the disease, including pediatric cases. Surgical experience includes goniotomies, trabeculotomies and many combined procedures, including lens extraction and posterior segment intervention with our retinal service physicians. Interaction with other subspecialty areas such as neuro-ophthalmology, cornea and retina, is encouraged. Research is heavily emphasized for our glaucoma fellows. We have ongoing clinical studies in glaucoma drug treatment and surgery. Our basic science projects involve diagnostic techniques to asses nerve fiber layer and the optic disc. We have a strong track record in the use of various types of lasers to treat glaucoma. We also are studying the basic science of glaucoma implants and innovative new medical and surgical techniques. Assessments of novel approaches to glaucoma surgery for primary surgical procedures are underway. One day a week is set aside for ongoing research projects. A formal didactic curriculum and rich academic atmosphere supplement high volume clinical and surgical training. John Park and Dr. The fellow gains high volume, hands-on experiences at diverse teaching hospitals, facilities, and healthcare systems. UC Irvine Medical Center is a level-1 trauma center with the full gamut of facial trauma and other oculofacial and orbital disease. The VA Long Beach provides a high-volume source of functional disease. Kaiser Foundation is a large managed care system with a broad range of functional disease and some cosmetic oculoplastic surgery. At GHEI, the fellow sees a full spectrum of tertiary ophthalmic plastics as well as cosmetic surgery. The patient populations at the various sites make up a broad range of age, demographic and socioeconomic groups. All sites are approximately minutes drive time, except Kaiser that is approximately 40 minutes away from the other sites. The surgical volume is heavy with the fellow assigned to scheduled OR time of 4 of 5 weekdays. The typical weekly schedule is as follows: Primary fellow cases at all sites drive high levels of surgical competence. These are coupled to extensive assistant surgeon cases that provide an exceptionally balanced and diverse surgical experience. The following is the approximate case type distribution: Wet labs, including a cadaver course, are also part of the curriculum. The fellow has opportunities to conduct meaningful research. Basic science opportunities are available through the ophthalmology department that houses a full research division. Unique opportunities with device development are available given the abundant local ophthalmic device and tech industry in Orange County CA. Funding is available for research endeavors. The fellow also receives benefits, medical malpractice, with other administrative covered. Additionally, funds are available for meeting travel and research activities. Paid leave for vacation is also offered. The academic environment and research opportunities at UC Irvine foster innovation and teaching skills, as well as prepare the graduate to be an outstanding oculoplastic and orbital specialty surgeon. All are month programs. Clinical and surgical training is supervised by Dr. Stephanie Lu, and Dr. Fellows receive extensive clinical and surgical experience in treating vitreo-retinal diseases and they perform a large number of laser and surgical procedures in all areas of retinal disease. Clinical fellows also are expected to engage in

research. Time is set aside for conducting experiments and writing manuscripts, typically two or three half days each week. International fellows must have completed a retina fellowship in their home country. Retinal research fellows, working under the supervision of Drs. Kenney and Kuppermann, have choice of areas in which to conduct their research. Current research fellows spend about 80 percent of their time engaged in research, about 10 percent seeing clinical patients and about 10 percent observing vitreo-retinal surgery. To apply for an international fellowship, please e-mail your CV and subspecialty of interest to Department of Ophthalmology personnel coordinator Karen Tighe. Eligibility Requirements Fellowship applicants must have: Applications should be received by the department by the end of August.

Chapter 5: UC Irvine - Faculty Profile System

Roger F. Steinert MD and Marjan Farid MD The American Board of Ophthalmology Certificate of Appreciation for outstanding contributions as an Examiner of the American Board of Ophthalmology American Society of Cataract and Refractive Surgery, ASCRS Symposium, San Diego, CA, March

Summary "This updated, full-color 4th edition features a greatly expanded surgical focus for a practical guide to corneal surgery. The expert guidance of internationally renowned editors provides you with authoritative and current coverage that takes you from an in-depth exploration of corneal function as related to corneal surgery through to the correction of refractive errors. This easy-to-use, state-of-the-art resource has been reorganized to focus strictly on surgery to provide you with more coverage of recent surgical advances. Introduction to Corneal Function and Surgery 1. Ocular Surface Maintenance 2. Leyngold and Roy S. Geroski and Henry F. Testing and Measuring Corneal Function 8. Donshik and William Ehlers 9. Corneal Structure and Function: Klyce and Tetsuro Oshika Wheeldon and Charles N. Yoon and Jay S. Ocular Surface Surgery and Reconstruction Ford and John W. Katz and Richard G. Nehls and Neal P. Lucas-Glass and Christopher J. Clamen, Waleed Mahran and Dimitri T. Ocular Surface Reconstruction Dunn and David G. Brightbill and Tracy L. Faktorovich and Bartly J. Corneal Protective Procedures Techniques in Corneal Transplantation Sect. Brass and Frederick S. Anterior Lamellar Keratoplasty Farjo and Michael D. Daya and Samer Hamada Sect. Combined Keratoplasty and Lens Removal: Thompson and Timothy B. Abbott and Maria D. Doherty and Jonathan H. Lens Replacement in Pseudophakic Bullous Keratopathy: Jakobs and Walter J. Brightbill and Edward L. Daya and Marcela Espinosa-Lagana Rosenfeld and Renee Solomon Dahlgren and Jay H. Djalilian, Nariman Nassiri, Janet A. Lee and Edward J. Coster and Keryn A. Chen and Mark A. Price and Francis W. Noguera and Ashley Behrens Evangelista, John Williams and Bradley D. Special Situations in Corneal Surgery Sect. Trauma and Anterior Segment Neoplasms Pfister and Daryl A. Brent and David M. Haller and Walter J. Nordlund and Robert Cionni Kara-Jose and Marian S. Liesegang and Daniel M. Keratoprostheses, Synthetic and Bioengineered Corneas Tu and Joel Sugar Waller and Claes H. Surgical correction of Refractive Errors Sect. Principles of Refractive Surgery Cooke and Charles N. Hardten and Daniel H. Rick Milne and Michael Gordon Verity and David J. Dawson, Fabrice Manns and Yunhee Lee Hardten and Scott G. Herz, Li Wang and Douglas D. Doane and Randolph T. Suh, Ashley Behrens and Peter J. Jackson and Stephen G. Farjo and Ayad A. Lawless and Christopher Hodge

Chapter 6 : Corneal Surgery : Frederick S. Brightbill :

Marjan Farid Roger F Steinert J Cataract Refract Surg May;35(5) Gavin Herbert Eye Institute, Department of Ophthalmology, University of California, Irvine, California, USA.

Chapter 7: Roger F. Steinert, MD - Discovery Eye Foundation

Marjan Farid, MD Vice Chair of Ophthalmic Faculty roger F. Steinert, MD Irving H. Leopold Professor and Corneal and Refractive Surgery at the Gavin Herbert.

Chapter 8: Fellowships | Gavin Herbert Eye Institute | School of Medicine | University of California, Irvine

CORNEAL SURGERY, 4 th EDITION Refractive Surgery Following Penetrating Marjan Farid, Roger F. Steinert Interpreting Corneal Topography, Tomography.

Chapter 9: Publications Authored by Roger F Steinert | PubFacts

Each fellow works with three members of the cornea faculty: department chairman Roger F. Steinert, M.D.; Marjan Farid, M.D.; Sumit (Sam) Garg, M.D., and Matthew Wade, M.D. Fellows run cornea clinics at UC Irvine Medical Center in Orange and at the Veterans Affairs Medical Center in Long Beach under faculty supervision. Teaching opportunities.