Bascom Palmer Eye Institute® | University of Miami Health System

Images

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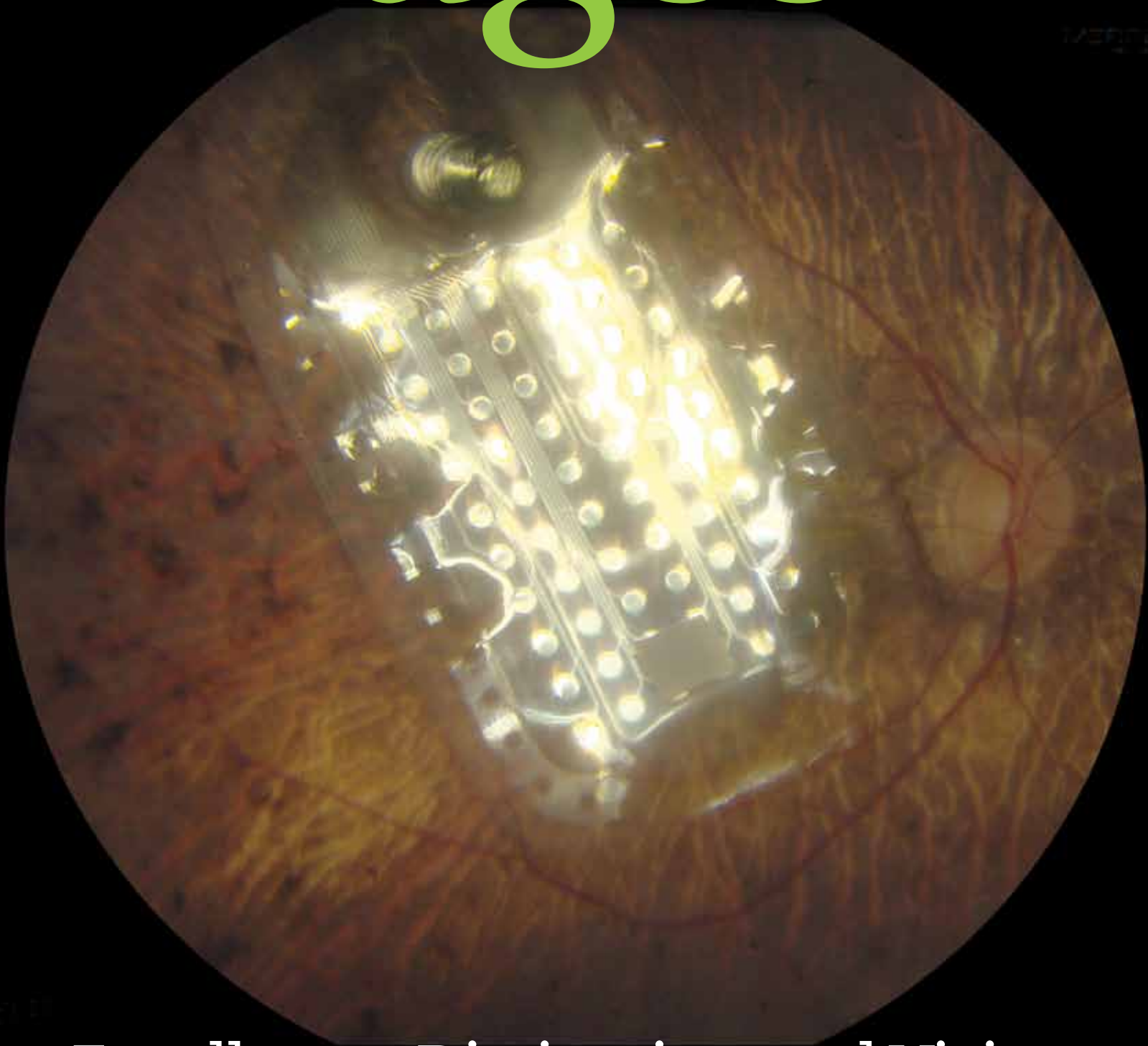

Excellence, Distinction and Vision

Crowning Achievement for 18 Bascom Palmer Doctors

Bascom Palmer Eye Institute®
UNIVERSITY OF MIAMI HEALTH SYSTEM

Sustaining Excellence, Distinction and Vision

"Bascom Palmer Eye Institute is committed to educate physicians, strengthen research partnerships and provide the finest possible clinical care. The patient's needs always come first."

— **Edward W.D. Norton, M.D.**
Founding Chairman
Bascom Palmer Eye Institute

Bascom Palmer Eye Institute's worldwide leadership in research, education and clinical care would not be possible without the generous support of donors who share the Institute's passionate commitment to excellence in ophthalmology.

In that spirit, this special issue of *Images* highlights 18 faculty members who have been recognized for their remarkable accomplishments at Bascom Palmer. Nine of these physicians received this honor January 1, 2015, doubling the number of endowed chairs at the Institute.

As University of Miami President Donna E. Shalala said recently, "Endowed chairs are the highest honors we can award at a great research university. They offer many benefits to the recipients, the University and our students, who can learn from world-class professors year after year."

In saluting the donors who support endowed chairs and distinguished professorships, Miller School of Medicine Dean Pascal J. Goldschmidt, M.D., said, "These prestigious positions allow us to recruit and retain the best of the best. Their support is vital to ensuring sustainable academic excellence."

Since the founding of Bascom Palmer in 1962, the Institute's clinicians, educators and physician-scientists have focused on preventing blindness, improving eyesight and restoring lost vision whenever possible. They deliver care to patients of all ages, educate medical students and professionals, and propel research by making exciting discoveries that ophthalmologists throughout the world incorporate in their practices.

These 18 distinguished physicians and scientists are a clear indication of the unparalleled level of talent that can be found throughout Bascom Palmer. We thank the donors for their heartfelt support; their generosity is the foundation of Bascom Palmer's commitment to global leadership in eye care, vision research and ophthalmology education.

Bascom Palmer Eye Institute®

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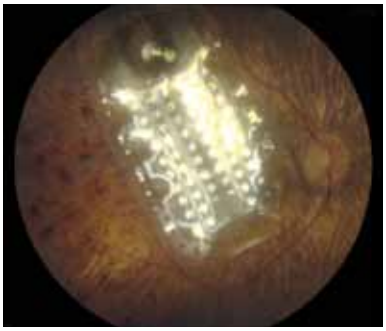


On the cover

A retinal implant from the Argus® II Retinal Prosthesis System, also known as the "bionic eye." It is intended to provide electrical stimulation of the retina to induce visual perception in individuals with severe vision loss or blindness from retinitis pigmentosa, a rare inherited degenerative eye disease.

Cover and back cover photographs by Brandon Sparling, senior ophthalmic photographer, Bascom Palmer's Estelle and George G. Rosenfield Imaging and Macula Center

Eduardo C. Alfonso, M.D.

Kathleen & Stanley J. Glaser Chair in Ophthalmology

"For more than 50 years, Bascom Palmer has been a forum through which key issues and challenges confronting ophthalmology have been debated, where new technology has been unveiled, and where ophthalmologists have come together to learn, discuss and teach the best care for patients. Bascom Palmer's tradition of excellence drives every aspect of its operation."

Bascom Palmer Eye Institute's chairman, **EDUARDO C. ALFONSO, M.D.**, proudly holds the endowed chair named in honor of Kathleen and Stanley J. Glaser that supports research and educational efforts by the department chairman. Stanley Glaser was the founding chairman of the Board of Governors of Bascom Palmer's Anne Bates Leach Eye Hospital, a position he held for 19 years. Alfonso was appointed interim chairman in 2007 and chairman in 2009, with the objective of propelling the internationally acclaimed institution to even greater heights by becoming the world leader in ophthalmology, education and vision research.

Alfonso is known for his clinical expertise and research in eye diseases, corneal surgery, corneal transplantation and ocular microbiology. Physician, surgeon, professor and researcher, Alfonso is an internationally known expert on ocular infectious diseases and serves as medical director of Bascom Palmer's Ocular Microbiology Laboratory. In 2006, he documented an increase in the incidence of an aggressive form of fungal corneal infection that was related to soft contact lens use. His findings drew considerable media attention throughout the world and significantly reduced the number of new infections.

Alfonso's research interests include bacterial and fungal sensitivity and the development and clinical applications of keratoprosthesis, an artificial cornea which has significant potential for patients awaiting transplants in developing nations where donor tissue is often scarce.

A renowned medical academic leader, Alfonso is president of the Association of University Professors of Ophthalmology and president-elect of the Pan-American Association of Ophthalmology. He received the American Academy of Ophthalmology's Honor Award and Senior Achievement Award. He serves on the editorial board of U.S. and international ophthalmology journals, has written more than 200 articles for scientific publication, and has been a guest lecturer nationally and internationally.

Douglas R. Anderson, M.D.

Douglas R. Anderson Chair in Ophthalmology

The clinical and laboratory research by Bascom Palmer's **DOUGLAS R. ANDERSON, M.D.**, has made a significant contribution to glaucoma knowledge. The Douglas R. Anderson Chair in Ophthalmology was established in 1995 by patients and alumni to support glaucoma research.

Bascom Palmer's first glaucoma specialist, Anderson's research interest was to understand the mechanisms of glaucomatous damage to the optic nerve. Early work showed the blockage of rapid axonal transport by elevated intraocular pressure while subsequent work was aimed at understanding the control of blood flow in capillaries by pericytes. He studied the regulation of optic nerve blood flow non-invasively in human subjects, bringing laboratory insights to the realm of human physiology and disease.

In collaboration with Ralph E. Kirsch, M.D., Anderson characterized the clinical appearance of glaucomatous cupping, work that was recognized with a Gold Medal by the American Academy of Ophthalmology. Expert in evaluating optic discs, Anderson later became associate director for the Optic Disc Reading Center of the multi-center Collaborative Ocular Hypertension Treatment Study. He refined an understanding of the anatomic variations of optic nerve anatomy as revealed by optical coherence tomography and the anatomic changes of the optic disc in glaucoma.

He and Stephen M. Drance, M.D., initiated a multi-center, 15-year collaborative randomized clinical trial on normal tension glaucoma mainly to show the pathophysiologic importance of pressure in glaucomatous nerve damage and visual loss. For this work they received the International Glaucoma Review Special Recognition Award.

Anderson's keen observations contributed to the art and science of visual field testing in the clinical management of glaucoma. He is a founding member and past president of the American Glaucoma Society, former president of the Association for Research in Vision and Ophthalmology, and recipient of the Mildred Weisenfeld Award for outstanding ophthalmic research. His prestigious awards include the Georg von Bartisch Medal from Dresden University for his lifelong contributions in glaucoma research and the International Glaucoma Research Society's Hans Goldmann Medal. Additionally, Anderson has delivered named lectures worldwide including those established to honor glaucoma luminaries.

"When I arrived at Bascom Palmer in 1969, Dr. Norton told me that my job would be simply to become the best academic ophthalmologist of which I was capable. He explained that his job was to provide the best environment within which that could happen."

William W. Culbertson, M.D.

Lou Higgins Chair in Ophthalmology

"My professional goal is to provide the best clinical care to patients while working to develop treatments and technologies that will make a substantial difference in the management of eye disease."

A recognized pioneer in vision correction surgery and expert in corneal disease, **WILLIAM W. CULBERTSON, M.D.**, is the Lou Higgins Chair in Ophthalmology, established to support cornea research. Culbertson is recognized as one of the world's most skilled refractive and cataract surgeons, with exceptional experience and knowledge of the field.

With more than 35 years of experience in corneal diseases and surgery, Culbertson has seen the capabilities of extending the use of lasers grow dramatically. Decades ago he participated in the first nationally organized study of refractive surgery and today, with an innovative team of ophthalmologists, has co-developed a femtosecond cataract laser that may be among the most significant advancements in cataract surgery in the last 50 years.

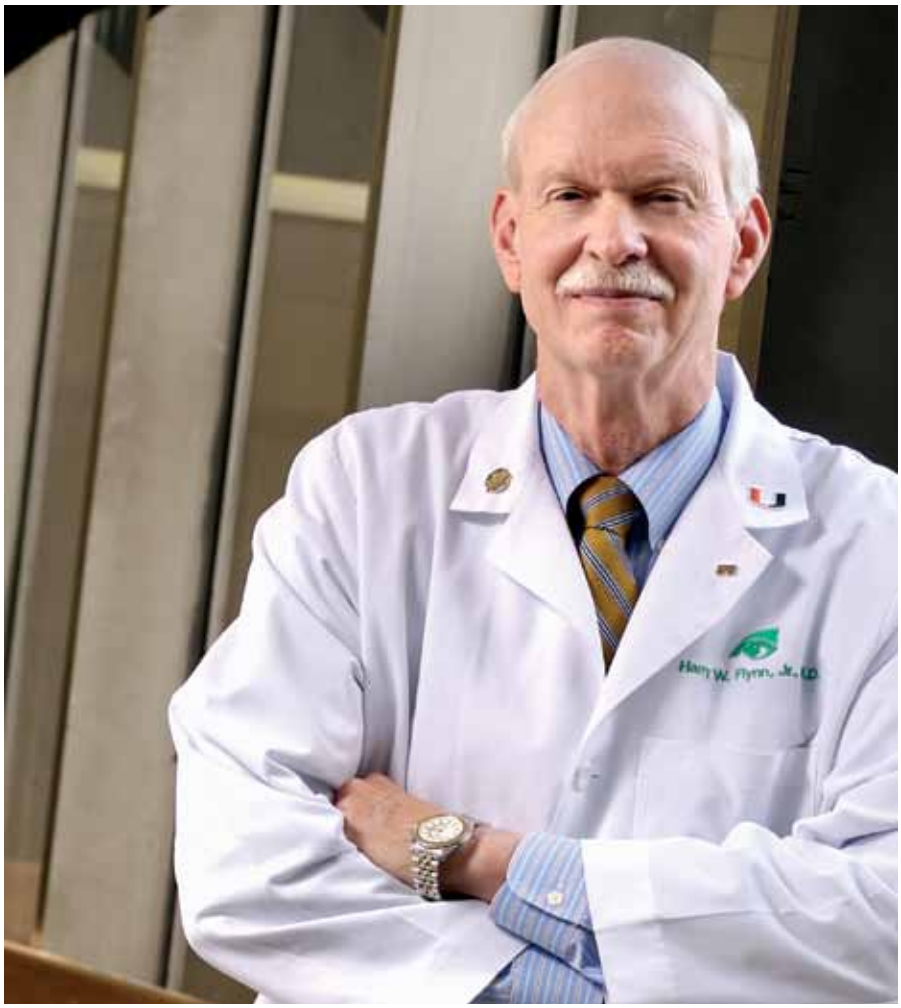
Culbertson first described floppy eyelid syndrome, a disorder of unknown origin manifested by a loose upper eyelid that everts with papillary conjunctivitis. He also identified the herpes class virus as a cause of acute retinal necrosis, a devastating infection of the retina. His accomplishments include the first truly successful posterior lamellar endothelial transplantation, demonstrating its potential therapeutic value in eyes with corneal endothelial dysfunction.

The American Academy of Ophthalmology presented Culbertson with the Senior Honor Award. He also received an honor award from the Swedish Ophthalmological Society. He has presented numerous named lectures around the world, including the Richard O'Connor Lecture at the Francis I. Proctor Foundation for Research in Ophthalmology, Lloyd Morgan Lecture in Ophthalmology at Toronto Hospital for Sick Children, and Jean Lacerte Lecture at Laval University.

Culbertson served as president of the American Uveitis Society and a member of the board of directors of the Cornea Society. He is director of the cornea and refractive surgery service at Bascom Palmer.

Harry W. Flynn, Jr., M.D.

J. Donald M. Gass Chair in Ophthalmology



"I am humbled and honored to hold the J. Donald M. Gass Chair in Ophthalmology. Dr. Gass set a standard of excellence against which all other ophthalmologists are measured. We are all students of Don Gass."

HARRY W. FLYNN, JR., M.D., is the holder of the J. Donald M. Gass Chair in Ophthalmology. Established to support research in retinal and macular diseases, the chair is named in honor of J. Donald M. Gass, M.D., who was named one of the 10 most influential ophthalmologists of the 20th century. During his 30-year tenure at Bascom Palmer, Gass recognized several hundred previously unidentified eye diseases and published the first major book on retinal and macular diseases.

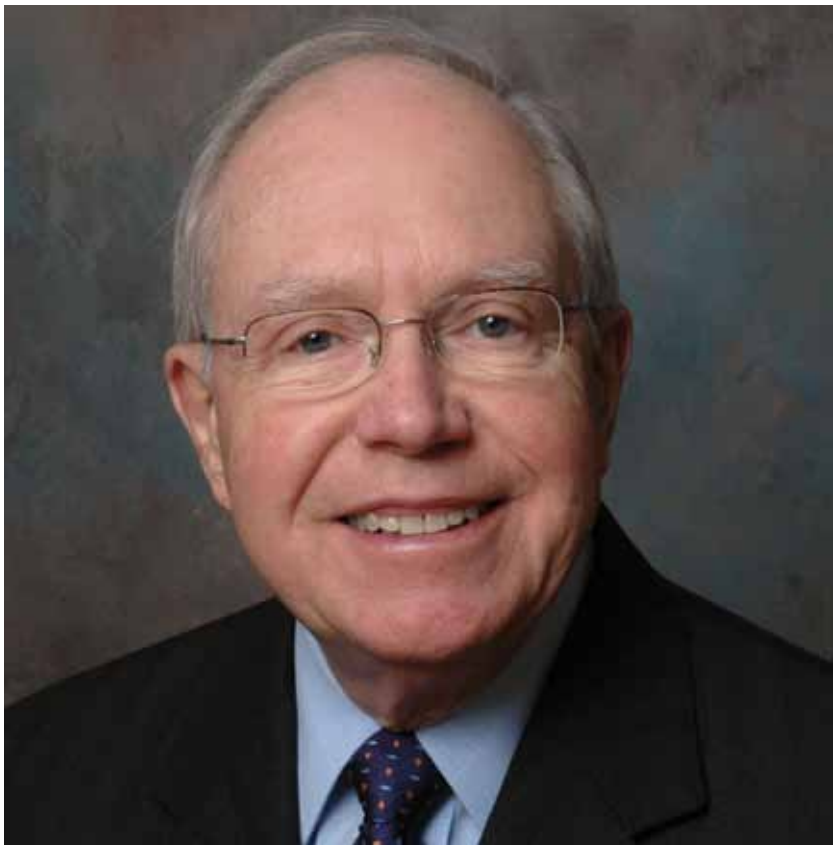
An internationally known retina specialist, Flynn is an expert in the field of diabetic retinopathy. He has special interests in vitreoretinal surgery, including retinal detachment surgery and complications of cataract surgery, endophthalmitis, retained lens fragments, dislocated intraocular lenses and suprachoroidal hemorrhage. He is particularly interested in infections that occur following cataract surgery.

A prolific author and superb educator, Flynn has published approximately 425 articles in peer-reviewed journals, 74 book chapters, and five edited or co-edited books, including "Diabetes and Ocular Diseases: Past, Current, and Future Therapies;" and "Vitreoretinal Disease: The Essentials." Flynn has served as president of the Vitreous Society, Miami Ophthalmological Society and Retina Society. He received the American Academy of Ophthalmology Life Achievement Honor Award and the Shaler Richardson, M.D. Service to Medicine Award from the Florida Society of Ophthalmology. He has delivered 24 named lectures around the world, including the prestigious Donald M. Gass Lecture at the Retina Society and received the Hermann Wacker Prize from Club Jules Gonin.

In 2014, the Retina Society recognized Flynn as Guest of Honor for outstanding leadership and advancement of knowledge in the field of retina, mentorship of generations of retinal physicians and surgeons, and his consummate integrity. Flynn considers this honor to be the greatest of his professional career.

Richard K. Forster, M.D.

Richard K. Forster Chair in Ophthalmology



Bascom Palmer Eye Institute has built an enviable international reputation on the caliber and achievements of its exceptional faculty and alumni. **RICHARD K. FORSTER, M.D.**, exemplifies both. The eponymous chair was established in honor of Forster in 1993, by several multi-national enterprises dedicated to international health and education, to support research in corneal and external diseases.

Forster joined the faculty of Bascom Palmer in 1969 and has enjoyed a remarkable 45-year career at the Institute, including serving as interim chair and medical director from 1999-2001. Prior to his tenure as chair he served as medical director of King Khaled Eye Specialist Hospital in Riyadh, Saudi Arabia. His clinical expertise is the development and refinement of the management of endophthalmitis with intraocular culture techniques, the implementation of intraocular antibiotics, and therapeutic vitrectomy. His clinical research concentrates on penetrating keratoplasty techniques for reducing astigmatism, myopia and anisometropia.

Forster is an 11-year recipient of National Institutes of Health grants on studies of fungal keratitis and endophthalmitis. He developed a microbiological and histopathological experimental model of post-operative endophthalmitis, and management with intraocular antibiotics and vitrectomy. He has published 40 book chapters and 112 referred or juried articles. An excellent clinician and educator, Forster has developed a practice that provides a high level of personalized medical and surgical patient care. He is continually involved with the education of residents and fellows and pursues clinical research with his colleagues.

A member of the American Ophthalmological Society, Forster has received many significant awards including the Castroviejo Medal presented in 1995 by the Cornea Society to the most outstanding individual in the field of cornea and anterior segment of the eye, and was recognized as the Guest of Honor at the American Academy of Ophthalmology in 2011. He presented the Phillips Thygeson Lecture on the correlation of microbiology and pathology in experimental endophthalmitis as a prelude to focused therapy, and the Edward W. D. Norton Lecture. Forster was named Bascom Palmer's Professor of the Year in 2002, and received the Residents' Professor of the Year Award in 2011. In 2012, he received the Claes H. Dohlman, M.D. Award for excellence in teaching and education from the Cornea Society.

"I can only touch and provide care for a finite number of patients in my career, but if I can participate in the education and training of residents, fellows, students, and the community – both nationally and internationally – the number of patients who can benefit from care will increase exponentially."

J. William Harbour, M.D.

Mark J. Daily Chair in Ophthalmology

With nearly two decades separating their training at Bascom Palmer Eye Institute, renowned ophthalmologists Mark J. Daily, M.D., and **J. WILLIAM HARBOUR, M.D.**, had not met before their shared vision for pioneering research and patient care brought them together at a ceremony at which Harbour was presented with the Mark J. Daily Chair in Ophthalmology that supports retinal research.

A retinal surgeon and ocular oncologist, Harbour's genetic discoveries have transformed the diagnosis and treatment of. uveal melanoma, retinoblastoma, ocular lymphoma and other intraocular tumors. He pioneered the use of gene expression profiling in uveal melanoma, and was the first to report the use of next-generation genomic sequencing techniques in this cancer. Harbour's work resulted in the discovery of the first and only metastasis suppressor gene (BAP1) to be identified in uveal melanoma. This has led to new treatments and discovery of the BAP1 familial cancer syndrome that is characterized by a risk of uveal and cutaneous melanoma, mesothelioma and other cancers. He developed the first and only molecular prognostic test for ocular melanoma that is now the gold standard in the field. Harbour also discovered that the retinoblastoma eye cancer gene RB1 is involved in common cancers, such as lung cancer, and described how the (RB1) protein is regulated.

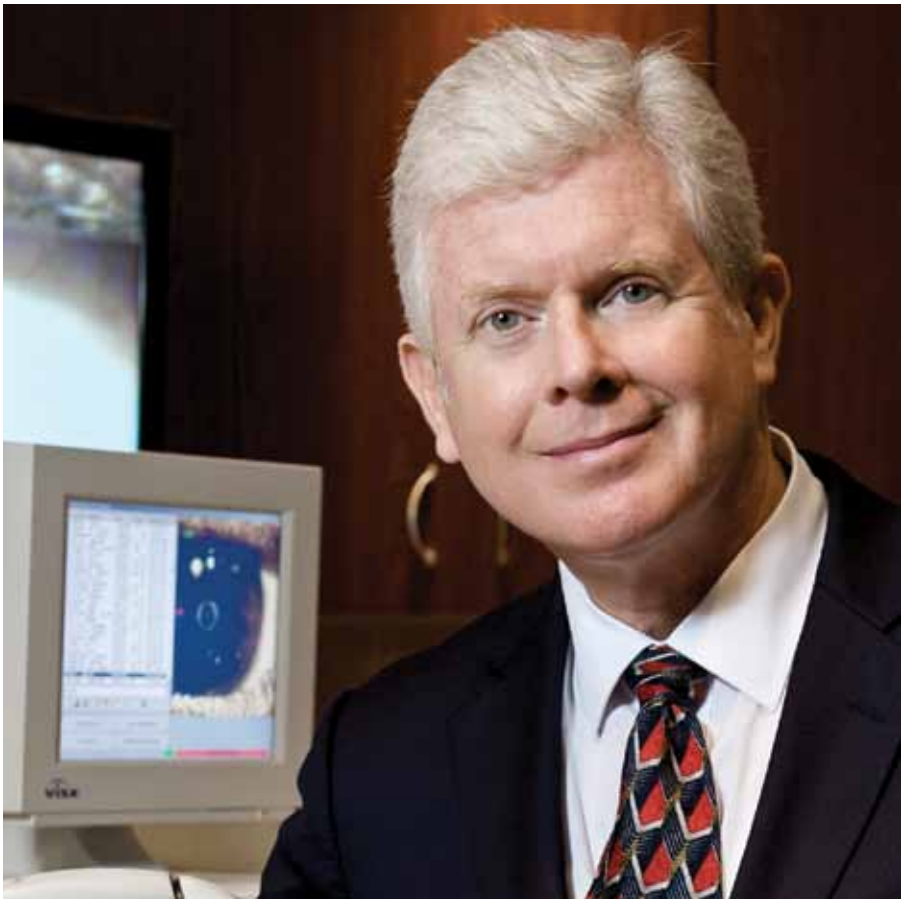
Harbour has been the principal investigator on major research grants from the National Cancer Institute, National Eye Institute, Melanoma Research Foundation, Melanoma Research Alliance, Research to Prevent Blindness, and other foundations. He founded the Collaborative Ocular Oncology Group and the Ocular Oncology Research Society as well as other collaborative initiatives in eye cancer treatment and research. He is the author or co-author of 100 abstracts and book chapters, more than 100 peer-reviewed articles in journals such as *Science, Cell* and *Nature Cell Biology*, and has been invited to deliver 158 lectures.

The Macula Society has presented Harbour with the Paul Henkind Memorial Award Lecture for outstanding retinal research and the Young Investigator Award. He received the Shaler Richardson, M.D. Service to Medicine Award from the Florida Society of Ophthalmology and the Association for Research in Vision and Ophthalmology's Cogan Award for important and worthwhile contributions to ophthalmic research.

"My expertise in taking care of patients with cancers inside their eye is complemented by other world-class Bascom Palmer physicians who treat patients with tumors on other parts of the eye. This has resulted in Bascom Palmer being the international destination for eye cancer care of unsurpassed quality."

Terrence P. O'Brien, M.D.

Charlotte Breyer Rodgers Chair in Ophthalmology



"The resources generated by this endowment provide a vital source of income to ensure support for the sight-saving clinical and scientific research as we continue to advance ophthalmic knowledge."

An internationally recognized expert in ocular infectious diseases, corneal, anterior segment and refractive surgery, **TERRENCE P. O'BRIEN, M.D.**, is the Charlotte Breyer Rodgers Chair in Ophthalmology. This chair, dedicated to ophthalmic research, was established through an endowment by Charlotte Breyer Rodgers of the famed Breyer Ice Cream Company.

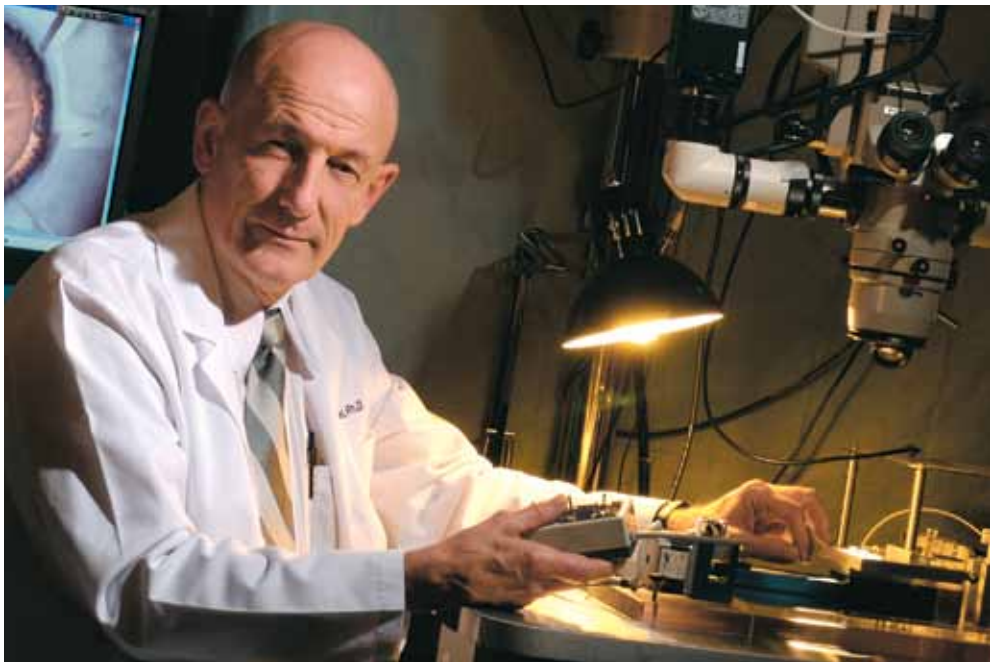
A clinician, educator and scientific investigator, O'Brien has an active clinical and surgical practice in external diseases and cornea, and is director of the refractive surgery service at Bascom Palmer Eye Institute at Palm Beach Gardens.

O'Brien is available for consultation on laser vision correction, corneal and external diseases, cataracts and intraocular lens. His research interests include refractive surgery techniques, the avoidance and management of complications of refractive surgery, ocular infectious diseases, and ocular microbiology.

O'Brien has written and contributed to numerous published ophthalmology articles, chapters and books throughout his career. He is past president of the Ocular Microbiology & Immunology Group and serves on the executive boards of the International Conference of Eye Infections. He is an active member of the Association for Research in Vision and Ophthalmology and the American Society of Cataract and Refractive Surgeons. He has repeatedly been selected as one of a select group of top doctors and best ophthalmologists in the United States. He has served as senior assistant editor of the prestigious *Journal of Refractive Surgery* and past editor-in-chief of *Contemporary Ophthalmology*. O'Brien is a frequent international visiting professor lecturing on advances in ocular infectious diseases and prevention and management of infectious complications with refractive and other ocular surgeries. He is a director for numerous continuing medical education courses and provides basic ocular microbiology training.

Jean Marie Parel, Ing.ETS-G, Ph.D.

Henri & Flore Lesieur Chair in Ophthalmology



"Responding to huge demand for the vitrectomy instruments we designed, Bascom Palmer launched a global training program. We knew every patient could not come to us for surgery, so we trained the top ophthalmologists around the world so they could do the procedures in their own countries."

During his 45 years at Bascom Palmer Eye Institute, **JEAN-MARIE PAREL, ING.ETS-G, PH.D.**, has dramatically improved patient care by developing novel technologies and treatments to help physicians and surgeons assist their patients. A premier biomedical engineer, research associate professor, and holder of the Henri & Flore Lesieur Chair in Ophthalmology, Parel has distinguished himself through unparalleled contributions to the field of ophthalmology.

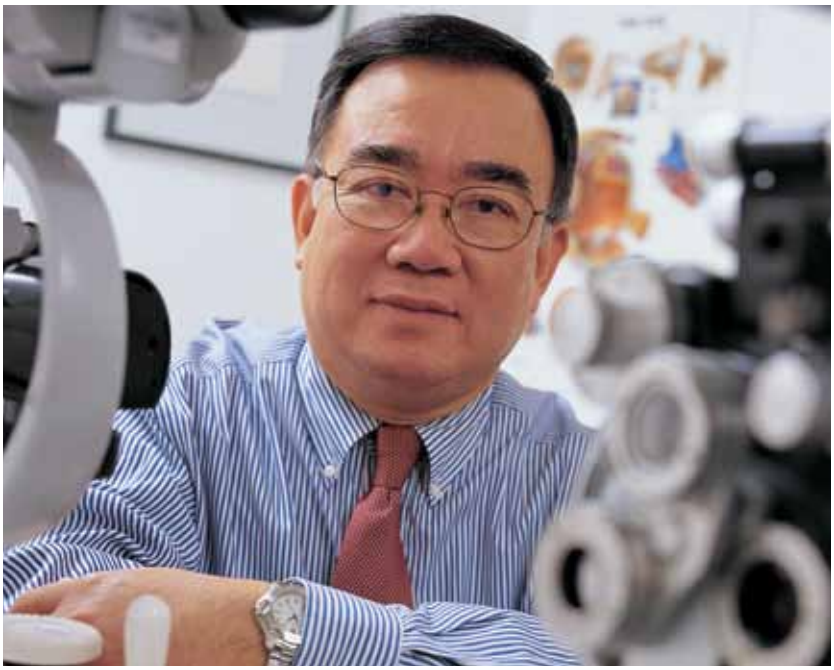
Parel founded Bascom Palmer's Ophthalmic Biophysics Center, a research and service laboratory located in the Evelyn F. and William L. McKnight Vision Research Center. In the early '70s, he developed a remarkable surgical instrument – the first vitreous infusion suction cutter (VISC). This revolutionary instrument included a small probe equipped with cutting blades and a suction tip to cut and remove the vitreous while inserting a sterile saline solution at the same time. The VISC allowed intraocular microsurgery while preventing eye collapse – and changed the course of modern retinal surgery.

After introducing automated vitreoretinal surgery instrumentation, intraocular fiber optic for illumination, endophotocoagulation, coaxial bipolar endodiathermy and motorized operation microscopes, Parel conceived laser-based instruments for corneal transplantation and ametropia treatments in the early '80s. Later, he developed biodegradable controlled drug release implants, synthetic vitreous substitutes, keratoprosthesis, implants for glaucoma and correction of ametropia, and a non-invasive coulomb-controlled iontophoresis system to treat intraocular infections and diseases. Parel also introduced Phaco-Ersatz, a surgical technique designed to restore accommodation in presbyopes that requires advanced technologies, such as tri-dimensional ultrasound biomicroscopy, spectral domain optical coherence tomography imaging systems, and methods to prevent postoperative lens epithelium proliferation. He recently developed an instrument to assess photosensitivity in patients with retinal dysfunctions and another to treat keratitis via photodynamic therapy.

Parel has overseen the creation of more than 300 surgical instruments, systems and diagnostic devices. His numerous awards include the Gold Medal from the International Congress of Ophthalmology, the Prince Philip Prize for Australian Scientific Design, the Relja Zivojnovic Award from the European VitreoRetinal Society, and membership in the Iron Arrow Honor Society, the highest attainable award from the University of Miami. He is president of the Accommodation Club, and a long-time member of the Phi Beta Delta International Scholars Honor Society, Retina Society and Club Jules Gonin.

David T. Tse, M.D.

Dr. Nasser Ibrahim Al-Rashid Chair in Ophthalmology



Through a generous donation from Nasser Ibrahim Al-Rashid, Ph.D., Bascom Palmer established the world's first interdisciplinary research center dedicated to eradicating optic nerve injuries and lethal orbital malignancies. Al-Rashid also endowed a chair in ophthalmic plastic, orbital surgery and oncology in honor of and gratitude for **DAVID T. TSE, M.D.**

Tse's clinical interests include the full spectrum of lacrimal, eyelid and orbital reconstructive surgeries due to disease or injury, as well as aesthetic and rejuvenative surgeries. His clinical research efforts center on innovative ways to treat extensive skin cancers and lethal orbital malignancies as well as translational research.

Tse and his team at the University of Miami pioneered the use of intra-arterial cytoreductive chemotherapy in treating adenoid cystic carcinoma of the lacrimal gland – an organ in the socket that produces tears to lubricate the eye. This novel approach involves infusing a high concentration of chemotherapy into the artery of the tumor to cause shrinkage and death of cancer cells resulting in a vast improvement in long-tern disease-free survival. Tse's research team also isolated a tumor cell line for this lethal cancer – an advancement that allows clinicians to develop a system for pharmaceutical library testing of candidate drugs to tailor a patient's treatment.

Tse's accomplishments additionally include the development of an orbital tissue expander for children born without an eye. An expandable balloon is implanted into the socket and is progressively inflated with fluid to stimulate eye socket growth. The expander minimizes facial disfigurement and reduces the number of surgeries often required to manage this condition.

More recently, Tse and a team of University of Miami engineers developed a rapid and cost-effective method of fabricating orbital prosthesis through 3-D printing. The integration of this technology into clinical practice will allow patients in remote parts of the world with eye socket deformity to be fitted with an affordable prosthesis.

An esteemed teacher, Tse has had more than 60 visiting professorships and has presented 13 named lectures. He is the recipient of the American Academy of Ophthalmology's Trustees Award, the El-Maghraby International Award, and the University of Southern California/Doheny Eye Institute and the University of Miami Distinguished Alumnus Awards and the University of Miami Invention Recognition Award.

"Bascom Palmer is the incubator for the next generation of thought leaders in orbital surgery. Our research team is dedicated to investigate molecular underpinnings of a broad spectrum of orbital diseases in which effective therapy remains elusive, and to transform the culture of biomedical research in order to hasten the discovery and implementation of new treatment and prevention strategies."

Hilda Capó, M.D.

John T. Flynn Chair in Ophthalmology

"I would not practice ophthalmology anywhere else. Bascom Palmer has tremendous resources, including the most advanced diagnostic and ancillary testing equipment available anywhere in the world. Our young patients and their parents get near-immediate answers."

Since its founding, Bascom Palmer Eye Institute has had a service dedicated solely to the unique ophthalmic needs of children, thanks to the insight and commitment of John T. Flynn, M.D., one of Bascom Palmer's earliest faculty members. In January 2015, **HILDA CAPÓ, M.D.**, the medical director of the pediatric ophthalmology service at Bascom Palmer, was awarded the John T. Flynn Chair in Ophthalmology, in honor of Flynn and his tireless advocacy of the vital role clear vision plays in the mental, social and physical development of children, and to support research in pediatric ophthalmology.

Capó, a professor of clinical ophthalmology with dual fellowship training, specializes in pediatric ophthalmology and adult strabismus. She is renowned for her clinical skills in the areas of pediatric neuro-ophthalmology and the use of adjustable sutures in adult strabismus surgery, particularly for patients with double vision and patients who have had previous surgery.

Under Capó's leadership, the pediatric ophthalmology service expanded to include subspecialties such as pediatric retina and pediatric glaucoma. A pioneer in identifying the anesthetic agent's role in onset of double vision after cataract surgery in adults, she has published about double vision after glaucoma surgery and has authored and co-authored numerous publications and book chapters.

Capó serves as vice president of the medical board, chair of the quality assessment and improvement committee, and compliance and coding physician for Bascom Palmer's Anne Bates Leach Eye Hospital. She is the recipient of the American Academy of Ophthalmology Achievement Award and the American Association of Pediatric Ophthalmology and Strabismus Honor Award. Capó was presented with the Latino of the Year Award by the Latin Club of America and the GEMS Woman of the Year Award in Medical Sciences.

Janet L. Davis, M.D., M.A.

Leach Chair in Ophthalmology

"Bascom Palmer's uveitis center has grown significantly in the past few years, particularly in terms of research. We also aspire to have the best uveitis training in the country."

After completing her ophthalmology residency, **JANET L. DAVIS, M.D., M.A.**, followed an unusual career trajectory by completing two fellowships: the first in vitreoretinal surgery at Bascom Palmer; the second in ocular immunology at the National Eye Institute Laboratory of Immunology. She then returned to Bascom Palmer and its patient care facility – the Anne Bates Leach Eye Hospital. In January 2015, Davis was awarded the Leach Chair in Ophthalmology, the first chair funded at the University of Miami School of Medicine, created with a gift to support ophthalmic research from Anne Bates Leach, the hospital's namesake.

A medical and surgical retina specialist, Davis is a world-renowned expert in the field of uveitis. As director of Bascom Palmer's uveitis service, she initiated a consultative uveitis clinic for the resident physicians. Her academic interests are infectious and inflammatory diseases of the eye, with an emphasis on diagnostic procedures and clinical management of uveitis, including the surgical management of uveitic complications. She has participated in important multi-center trials in ocular inflammatory diseases, as well as Phase I and II trials for drug development and surgical implantation of devices and stem cells.

She is an emeritus director of the American Board of Ophthalmology and a past president of the American Uveitis Society. A recipient of the American Academy of Ophthalmology (AAO) Senior Honor Award and the Silver Fellow designation of the Association for Research in Vision and Ophthalmology, Davis is also a member of the Retina and Macula Societies, the American Ophthalmological Society, the International Ocular Inflammation Society, and is the current president of the International Uveitis Study Group. She has written extensively on uveitis, infections of the posterior segment and vitreoretinal lymphoma, and has collaborated on publications about endophthalmitis and macular degeneration. She is an executive editor for *American Journal of Ophthalmology* and the current chair of the AAO Annual Meeting Program Sub-Committee for Retina.

Sander R. Dubovy, M.D.

Victor T. Curtin Chair in Ophthalmology

Ophthalmic pathology and the understanding of ophthalmic disease at the tissue level is integral to the proper education of training ophthalmologists. Victor T. Curtin, M.D., Bascom Palmer's second faculty member, established the Florida Lions Ocular Pathology Laboratory at Bascom Eye in 1962 and guided its growth for nearly 40 years. Today, it is directed by **SANDER R. DUBOVY, M.D.**, one of only a handful of physicians who is board-certified in ophthalmology and anatomic pathology. Dubovy is the holder of the Victor T. Curtin Chair in Ophthalmology, which was established with a major gift from the Lions of South Florida to support experimental ophthalmic pathology.

The Florida Lions Ocular Pathology Laboratory at Bascom Palmer is likely the busiest ophthalmic pathology laboratory in the United States. One of less than 10 dedicated eye pathology laboratories in the county, pathologic material is sent to the laboratory from throughout the United States as well as internationally for both primary diagnosis and second opinion. The resident's pathology rotation is considered one of the central areas for education at the Institute. Dubovy directly supervises residents in the gross dissection of surgical specimens and in the evaluation of tissue at the microscopic level through a multi-headed microscope. Given the paucity of specialists trained in the specialty, he established an ocular pathology fellowship and has trained fellows from around the world.

Dubovy's clinical practice involves both clinical ophthalmology and diagnostic ocular pathology. His practice is limited to medical retinal disease and includes age-related macular degeneration, diabetic retinopathy, retinal vascular disease and inherited retinal diseases. The clinicopathologic correlation of ophthalmic disease has resulted in more than 125 peer reviewed publications, shedding new light on the diagnostics, pathophysiology and clinical outcomes of a number of ophthalmic disease entities. A skilled photographer, four covers of the journals *Archives of Ophthalmology* and *Ophthalmology* have featured his photomicrographs.

An outstanding educator, Dubovy has received multiple teaching awards for resident education as evidenced by Bascom Palmer residents typically achieving their highest sub-section scores in ocular pathology on national board exams. He lectures and teaches ophthalmic pathology at universities throughout the country, has presented five named lectureships, served as visiting professor at 20 institutions, and has been an invited speaker at scientific meetings in 20 foreign countries. He is the recipient of the Honor Award from the American Academy of Ophthalmology.

Dubovy serves as medical director of the Florida Lions Eye Bank, on the Medical Advisory Board of the Life Alliance Organ Recovery Agency, and on the board of directors of the American Association of Ophthalmic Oncologists and Pathologists.

"The tremendous amount of clinical and pathologic material at Bascom Palmer is essential to the expansion of our research efforts on a national and international level."

Steven J. Gedde, M.D.

John G. Clarkson Chair in Ophthalmology

"I believe there is tremendous potential to positively impact patient care through education. Graduating residents and fellows can elevate the quality of patient care that is delivered in their local communities. As they in turn educate others, they participate in the exponential dissemination of knowledge."

Bascom Palmer's second chair, John G. Clarkson, M.D., is dean emeritus of the University of Miami Miller School of Medicine. An internationally recognized vitreo-retinal specialist, researcher and administrator, he currently serves as executive director of the American Board of Ophthalmology. Bascom Palmer's newest endowed chair honors Clarkson's academic leadership and supports medical education at Bascom Palmer. It is fitting the inaugural holder of the John G. Clarkson Chair in Ophthalmology is **STEVEN J. GEDDE, M.D.**, Bascom Palmer's vice chairman of education and residency program director.

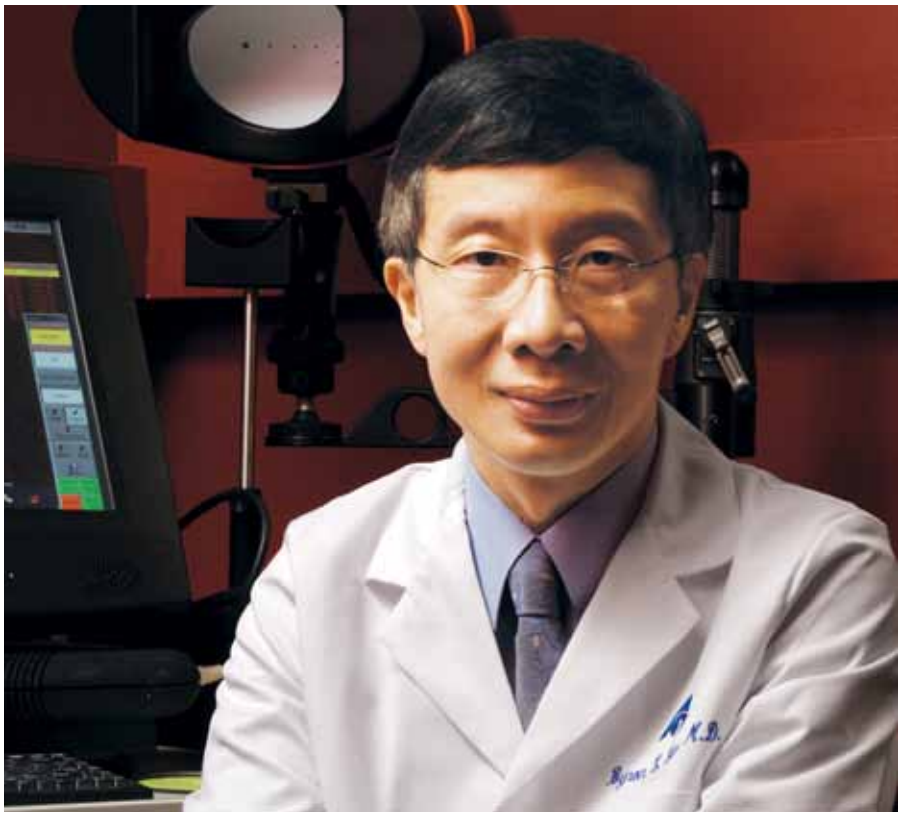
Gedde is dedicated to teaching the next generation of ophthalmologists. Under his leadership, the residency program continues to attract the brightest, young physicians who are entering the field of ophthalmology. Many of the graduates of Bascom Palmer's training programs join academic institutions, where they in turn teach others, allowing an exponential dissemination of knowledge. All of Bascom Palmer's residency and fellowship graduates provide outstanding care to patients in their local communities, further widening the sphere of influence of the Bascom Palmer Eye Institute.

Gedde is nationally and internationally recognized as a leader in the field of glaucoma and has established a busy referral practice. He led the Tube versus Trabeculectomy Study and Primary Tube versus Trabeculectomy Study, multi-center randomized clinical trials comparing tube shunt surgery with trabeculectomy. These studies provide valuable information to guide surgeons in selecting between the two most commonly performed glaucoma procedures. He has participated in other clinical trials, including the Ocular Hypertension Treatment Study, Ahmed Baerveldt Comparison Study, and Primary Trabeculectomy Antimetabolite Study. Gedde has published more than 250 peer-reviewed articles, abstracts, and book chapters on a broad range of topics in glaucoma and medical education. He is editor of the second edition of "Curbside Consultation in Glaucoma: 49 Clinical Questions."

Gedde currently serves as president of the Florida Glaucoma Society. He is past president of the Program Directors Council and an active member of the Association of University Professors of Ophthalmology. Gedde serves on the editorial board of the journal *Ophthalmology*. He received an Achievement Award and Senior Achievement Award from the American Academy of Ophthalmology. Gedde was selected as the Excellence in Health Care Educator of the Year, and has received multiple resident teaching awards.

Byron L. Lam, M.D.

Robert Z. & Nancy J. Greene Chair in Ophthalmology



"We are fortunate to be in an exciting era where novel diagnostic techniques and innovative therapies, including gene therapy and stem cell therapy, are being tested and will ultimately be implemented for previously untreatable conditions."

BYRON L. LAM, M.D., has been a productive clinical scientist for over 20 years. His broad background in neuro-ophthalmology and hereditary retinal degenerations has enabled him to collaborate with basic and clinical scientists resulting in many successful translational projects. In January 2015, Lam was awarded the Robert Z. & Nancy J. Greene Chair in Ophthalmology for the support of ophthalmic research.

Lam's early work on visual function tests led him to realize the importance of understanding disease mechanisms and testing of potential therapies of difficult-to-treat conditions. Lam's many neuro-ophthalmology interests include idiopathic intracranial hypertension, hereditary optic neuropathies, and anterior ischemic optic neuropathy. He has conducted research studies, such as the Leber Hereditary Optic Neuropathy Gene Therapy Trial with Bascom Palmer professor, John Guy, M.D., and cerebrospinal fluid dynamic studies with Noam Alperin Ph.D., a University of Miami professor of radiology.

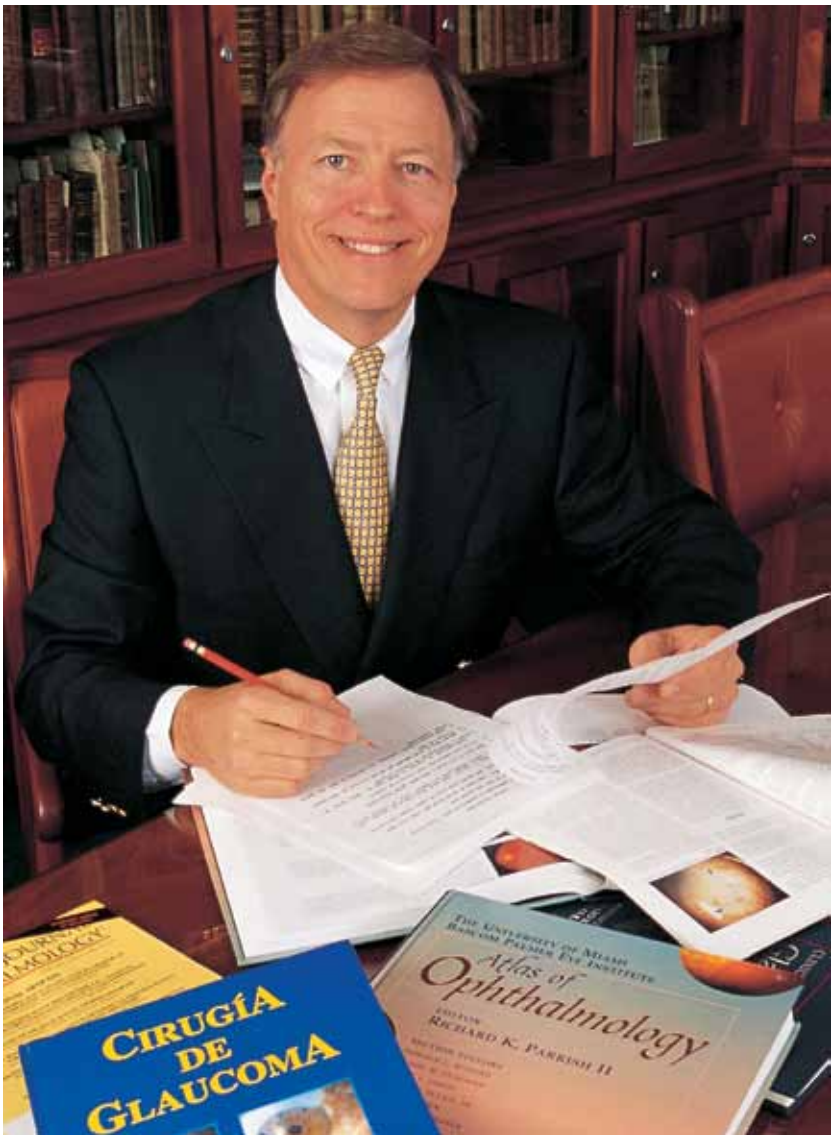
Lam has established a 17-year database of hereditary retinal degeneration patients. His vast experience includes research into the identification of physiologic biomarkers associated in retinal degenerations with Bascom Palmer research professor, Rong Wen, M.D., Ph.D. In addition to phenotypic-genotypic correlation studies, Lam participates in several clinical trials, including retinal pigmentary epithelium stem cell for Stargardt maculopathy, and gene therapy studies in achromatopsia. Most recently, Lam has been involved with the novel treatment of the Argus® II Retinal Prosthesis System.

Lam's ability to effectively integrate clinical and basic science and to make important connections between them is demonstrated by the textbook he wrote in 2005: "Electrophysiology of Vision; Clinical Testing and Applications." The book is among the most popular text in its field and is used by students, physicians-in-training, researchers and clinicians. Lam has also been involved in ocular epidemiologic research on how visual impairment increases mortality through indirect pathways such as its effect on the activities of daily living and well-being, with David Lee Ph.D., a University of Miami professor of epidemiology.

In addition to his clinical practice, Lam is medical director of neuro-ophthalmology and scientific co-director of Adrienne Arsht Hope for Vision Retinal Degeneration Laboratory. Lam received the Senior Achievement Award from the American Academy of Ophthalmology. He is on the editorial board of *Journal of Neuro-Ophthalmology* and is a member of the Visual Impairment/ Intracranial Pressure Research and Clinical Advisory Panel at NASA.

Richard K. Parrish II, M.D.

Edward W.D. Norton Chair in Ophthalmology



"I stayed at Bascom Palmer not to be a teacher, but to remain a student for the rest of my life. A day does not pass that I learn far more from the residents, fellows and my patients than I teach them."

While the evolution of medical science during the twentieth century provided opportunities for many inspired ophthalmic leaders, few have excelled to achieve the worldwide acclaim accorded Edward W.D. Norton, M.D., founding chair of Bascom Palmer Eye Institute. A man of unquestionable integrity, wisdom and energy dedicated to the preservation of vision, it is appropriate that the endowed chair to support ophthalmic research, named in his honor, be awarded to **RICHARD K. PARRISH II, M.D.**, a dedicated scientist, teacher and world-renowned glaucoma specialist.

An alumnus of Bascom Palmer's glaucoma fellowship program, Parrish embraced the concepts and principles that Norton established to ensure the Institute's success. Parrish joined the faculty in 1982, and has served the University of Miami as professor of ophthalmology, residency program director and Bascom Palmer's third chairman. He is currently the associate dean for medical education, chairman of the graduate medical education committee, and the Accreditation Council for Graduate Medical Education's designated institutional official for the Jackson Health System.

Parrish's research interests have focused on clinical trials in glaucoma: the Fluorouracil Filtering Surgery Study, the Ocular Hypertension Treatment Study, and the Tube versus Trabeculectomy Study. The improvement of visual health care delivery in South Florida's Haitian-American community is his current research focus.

His early publications on the modulation of wound healing after filtering surgery with fluorouracil stimulated interest in how to measure and improve outcomes of glaucoma surgery. "Visual impairment, visual functioning and quality of life assessments in patients with glaucoma," his American Ophthalmological Society thesis, described the patients' perspective on how glaucoma affects their daily lives.

Parrish has served as member of the editorial board of *Archives of Ophthalmology* and is executive editor of *American Journal of Ophthalmology.* He was president of the American Ophthalmological Society and served as councilor to the American Academy of Ophthalmology from the American Glaucoma Society.

Victor L. Perez, M.D.

Walter G. Ross Chair in Ophthalmic Research

"The close link between our research and clinical care is the ability to quickly adapt and innovate. Bascom Palmer's Ocular Surface Center is able to offer patients individualized therapies that can make a big difference in their treatment outcomes and quality of life."

VICTOR L. PEREZ, M.D., professor of ophthalmology, microbiology and immunology, is the holder of the Walter G. Ross Chair in Ophthalmic Research. This endowed chair memorializes the generosity of Walter G. Ross, a decorated officer in the U.S. Army Corps of Engineers, respected diplomat, and international entrepreneur. Support from the chair is used to advance the frontiers of medical science, primarily by translating research findings into clinical uses.

Perez was selected for this distinction based on his novel treatments for patients with severe ocular surface disorders, who are often told nothing more can be done for them. As director of Bascom Palmer's Ocular Surface Center, one of just six such centers in the United States, Perez is devoted to the diagnosis and treatment of patients with corneal scarring; severe dry eyes, including thermal and chemical burns; immunosuppression challenges; meibomian gland dysfunction; allergies; and Stevens-Johnson syndrome. Among his current laboratory studies is Ocular Graft versus Host Disease, a possible complication that includes severe dry eye following a stem cell or bone marrow transplant.

A cornea and external disease specialist, Perez led a multidisciplinary team that performed the first modified osteo-odonto-keratoprothesis (MOOKP) in the United States. In MOOKP, a patient's tooth and surrounding bone are carefully removed from the mouth. An optical lens is then inserted into the extracted tooth, which is implanted under the patient's skin to create a biointegrated unit the body will accept.

Bascom Palmer and Perez have partnered with the Boston Foundation for Sight on the prosthetic replacement of the ocular surface environment (PROSE). This special type of contact lens protects and rehabilitates the surface of the eye. Bascom Palmer is the only PROSE location in Florida and Latin America. Bascom Palmer is also in the midst of opening the first and only ex vivo expansion program for limbal stem cells in the United States. This group, in collaboration with Children's Hospital in Boston, discovered a new gene/marker for limbal stem cells that will allow it to select limbal stem cells in the eye that can be purified and transplanted with the potential for better success.

Vittorio Porciatti, D.Sc.

James L. Knight Professorship in Ophthalmology

"Using the tools of 21st century medicine – including genetics, cellular biology, molecular diagnostics and advanced imaging – Bascom Palmer researchers are poised to understand why the eye may become susceptible to disease and how biotechnologies may help to prevent these conditions."

The John S. and James L. Knight Foundation created a professorship in opthalmology with an emphasis on vision research and education. In January 2015, **VITTORIO PORCIATTI, D.SC.**, was awarded the position. Professor of ophthalmology, neuroscience and biomedical engineering, Porciatti is director and vice chair of research at Bascom Palmer Eye Institute.

Porciatti's scientific career as a visual neuroscientist is unconventional. His professional career began In Italy after obtaining a diploma in chemistry. He then worked in a chemical plant producing chlorine derivatives of ethylene and soon realized he was better suited for laboratory work. He subsequently joined a nuclear research facility of the Italian Ministry of Defense as a research associate in the radiochemistry and then radiobiology laboratories.

The stimulating nuclear research environment eventually developed Porciatti's interest in visual neurophysiology. He honed his electrophysiological skills on brain research in both clinical and basic research environments, and concentrated on the benefits of translational research and the importance of using non-invasive electrophysiological tools in patient and experimental models. In several landmark studies, he described electrophysiological techniques for the functional exploration of the visual pathway, from the retina to the visual cortex. Joining Bascom Palmer in 2001, Porciatti has developed a program on early detection and reversibility of glaucoma. Since 2003, his programs have been continuously funded by National Institutes of Health (NIH) R01 grants together with a NIH-P30 core grant to support research activities.

Porciatti's studies published in major journals have shown that the pattern electroretinogram (PERG) was altered in diseases of the retinal ganglion cells (RGCs). The PERG represented the only known way to evaluate the function of RGCs thereby providing a unique tool for physiological and clinical applications. The PERG technique is now widely used, and Porciatti's current NIH-funded research on early detection of glaucoma uses the PERG as its main tool. In glaucoma, it is not known whether visual loss precedes or is secondary to neural loss. Porciatti's research has shown that patients with suspicion of glaucoma who were followed over time, showed that loss of retinal ganglion cell function anticipates loss of optic nerve tissue by eight years on average, providing a sizeable time window for preventive treatment.

William E. Smiddy, M.D.

M. Brenn Green Chair in Ophthalmology

WILLIAM E. SMIDDY, M.D., is an internationally recognized and respected vitreoretinal specialist. He is principally occupied with a busy practice that has an emphasis on surgical treatment of vitreoretinal diseases, and has also made numerous contributions through his clinical research efforts. He is the holder of the M. Brenn Green Chair in Ophthalmology, which is awarded through the generosity of philanthropist M. Brenn Green to support research in diabetic eye disease.

Smiddy's field of specialty, the surgical treatment of retinal problems, includes conditions such as retinal detachments, complications of cataract surgery and diabetic retinopathy. His particular area of interest is surgical treatment of macular diseases such as epiretinal membranes and macular holes. His heavy clinical duties allow him to conduct his research efforts at a clinical level. Smiddy's initial research efforts focused on histopathologic effects of laser on the retina as well as clinicopathologic correlation of various surgically approachable macular diseases, such as epiretinal membranes and impending macular holes. In the early 1990s, Smiddy contributed to the development of vitrectomy for the treatment of macular holes, and performed clinical studies defining subgroups that would respond best. As a consequence, macular holes, previously thought untreatable, are now one of the most successfully treatable retinal conditions. In addition, Smiddy has studied and introduced numerous contributions to management of retinal complications of anterior segment surgery. For example, he introduced an important and now-established method of repositioning dislocated intraocular lenses. Smiddy has been active in diabetic retinopathy clinical studies for more than two decades. More recently, he has developed economic cost containment strategies for management of several common disorders.

Smiddy's significant accomplishments in the field of ophthalmology have garnered recognition worldwide. He was honored with the Macula Society's Rosenfeld Award and the Belgian Ophthalmological Society's Jules Francois Prize, an international prize awarded annually to the physician under age 40 who has made the greatest contributions to the diagnosis and treatment of macular holes. He has received Honor and Senior Honor Awards from the Vitreous Society and the American Academy of Ophthalmology, the Silver Medal from the Association for Research in Vision and Ophthalmology, and an Honor Award from the American Society of Retinal Specialists. He has presented lectures in more than a dozen foreign countries, and is an integral part of the training of medical students, residents and fellows, as well as continuing medical education courses for practicing ophthalmologists.

"I am gratified that patients around the world can benefit from my contribution to the development of vitrectomy for the treatment of macular holes. Once thought untreatable, macular holes are now one of the most successfully treatable retinal conditions."

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Seeing is believing. For 50 years, the most important innovations in ophthalmology have come from one place – Bascom Palmer Eye Institute at the University of Miami Miller School of Medicine. Which is why, in an annual survey conducted by *U.S.News & World Report*, Bascom Palmer was once again ranked #1 in ophthalmology in the nation by board-certified ophthalmologists around the U.S., as well as being named the #1 hospital in the Miami-Fort Lauderdale metropolitan area. To us, there's no greater testament to our talented doctors, researchers, educators and dedicated staff. To learn more, call Bascom Palmer at 1.800.329.7000.

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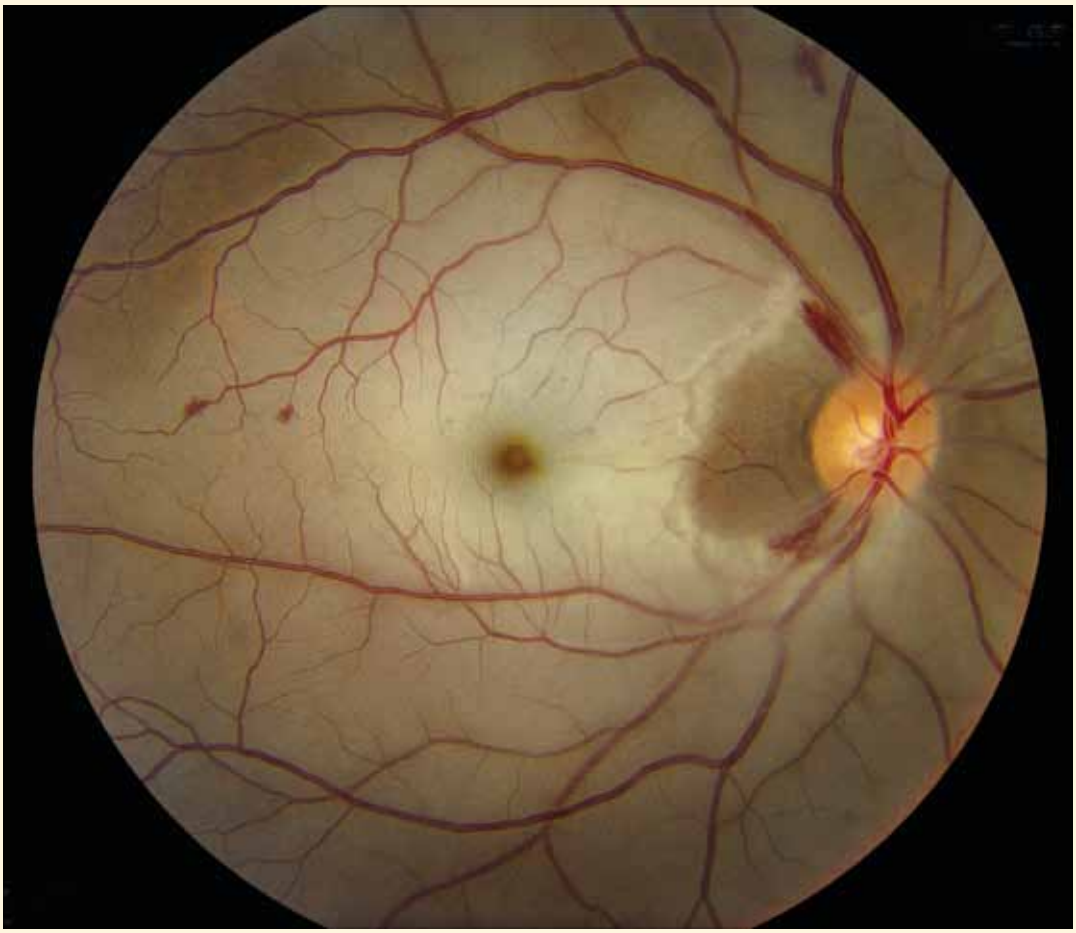

Central artery occlusion: Fundus photograph displays diffuse whitening of the neural retina with a foveal "cherry red spot."