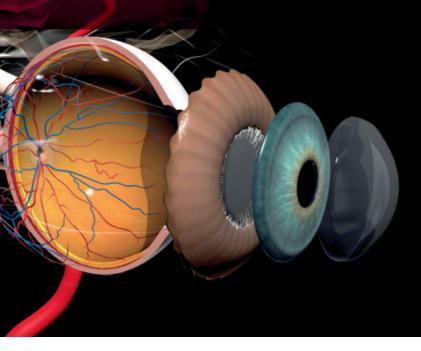
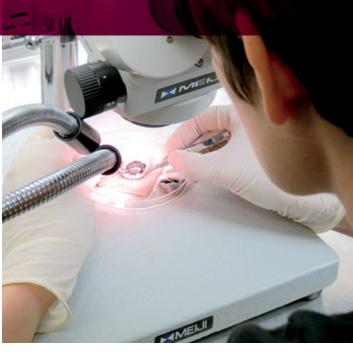




Advancing Eye Care





DEPARTMENT OF OPHTHALMOLOGY REVIEW

Dear Friends and Colleagues,

It is my pleasure to share with you the many accomplishments of the Department of Ophthalmology and to thank our benefactors for their ongoing critical support. Our committed clinicians, passionate educators, and skilled research scientists, as well as our dedicated residents and support staff, have worked collaboratively to make significant contributions to patient care, ophthalmic education, and vision science research. Our achievements are many, and we are honored by the positive impact we have had on our profession and the Chicagoland ophthalmic community. As part of CHE-Trinity Health, the *magis* values of care, concern, respect and cooperation are elemental to our work serving local and world communities. This report highlights the growth and development of our department, our accomplishments, and our continued focus on value, quality outcomes, and ethical, compassionate patient care.

In spite of the cutbacks in the healthcare environment, we have been fortunate to expand our services, recruit many new faculty, and incorporate innovative technology and research to yield measurable improvements in patient care and medical education. We are thrilled to offer our patients the latest eye care procedures in leading-edge facilities. Patients throughout Chicagoland benefit from our new Diagnostic Testing Service (DTS), and our new Loyola Craniofacial Service is a strong example of our collaborative, integrated approach to eye care.

Advancements in oculoplastics, cornea, low vision, innovative technology and superior research are hallmarks of our department. We have incorporated state-of-the-art technology in our subspecialties and have worked to create a robust research environment. In the past several years, we have introduced the innovative 3D technology from TrueVision[®], implemented Femtosecond Laser Cataract Surgery at the Hines VA, and installed a Tele-Retina Diagnostic system. These technologically advanced programs are supported by our flourishing research enterprise, which continues to engage in quality clinical and educational programs in Chicagoland.

In keeping with our long-standing tradition of service, we continue to participate in international service programs. In the fall of 2014 we will engage in our third annual Humanity First collaborative program in Antigua, Guatemala.

We recognize our accomplishments would not be possible without the support of our generous, committed benefactors. Their dedication to our mission and growth provides the critical capital necessary to ensure the high-quality educational, research and patient care services for which we are known. We are deeply grateful for their continued support. Warmly,

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CHARLES S. BOUCHARD, MA, MD THE JOHN P. MULCAHY PROFESSOR AND CHAIR





Treating the Human Spirit, One Patient at a Time

Debra Astrug, who once feared she was going blind, can see fine now, thanks to a stem cell transplant she received from her daughter, Jessica. The stem cells came from two pieces of tissue that Dr. Charles Bouchard, chair of Loyola's Department of Ophthalmology, removed from the cornea of Jessica's left eye. When Bouchard proposed the innovative procedure, she immediately agreed. "It's my mom," Jessica said. "If she needs part of my eye, she's got it."

Before the transplant, Debra Astrug's vision was extremely blurred – like looking through a glass smeared with Vaseline. She could not read or drive. When Jessica took her to buy groceries, Debra had to bring a magnifying glass to read labels. "It was horrible," she said. But since receiving the stem cell transplant, and wearing special contact lenses, Debra Astrug's vision has improved to 20/25. Stem cells are undifferentiated cells that have the ability to develop into specialized cells. For example, if the cornea is scratched, stem cells generate new cells that migrate to the damaged area and then divide and mature into corneal cells to repair the damage. Stem cell transplants are indicated for patients who have severe cases of limbal stem cell deficiency, or LSCD. (Limbal refers to the border of the cornea and sclera. The cornea is the transparent front part of the eye, and the sclera is the white part of the eye). In LSCD, the cornea becomes covered with abnormal vascularized tissue that has migrated from the conjunctiva (the mucous membrane covering the white part of the eye). LSCD can be due to various causes, including chemical burns, a severe whole-body allergic reaction to medications called Stevens-Johnson Syndrome /toxic epidermal necrolysis, multiple eye surgeries and long-term use of eye drop medications.

Loyola is among a handful of centers that perform living-related corneal stem cell transplants on patients who have too few corneal stem cells. Ophthalmologists traditionally have treated such deficiencies by transplanting stem cells from deceased donors. In these cases, in order to prevent the patient's immune system from rejecting the donated stem cells, patients take immune-suppressing drugs for several years or longer. But such drugs can have toxic side effects and also increase the risk of infections, Bouchard said. Bouchard is performing corneal/limbal stem cell transplants from living donors who are first-degree relatives of patients. Because the donor and recipient are closely related, most patients can avoid taking systemic immune-suppressing drugs.

In a living-related corneal-donor transplant, Bouchard scrapes away abnormal tissue from the patient's eye. From the donor's eye, he removes two tiny slices of tissue, which contain stem cells. He transplants them into the recipient's eye, attaching them with biologic glue. The tissue taken from the donor eye grows back in about a month.



In Astrug's case, the stem cell deficiency was due to graft-versus-host disease, a side effect of a bone marrow transplant that successfully treated a prior cancer. Jessica Astrug donated tissue as an outpatient procedure. Her only discomfort came from the stitches, which were removed after two weeks. The donation had no effect on her vision. "It's like it never happened," she said. Debra Astrug said she experienced only minor pain after the transplant. "I took ibuprofen, and I was fine."

Debra Astrug said any of her three grown children would have donated. Jessica was the logical choice because she lives the closest. "It's something families do for one another," Debra said. "I would lay down my life for my children."

Bouchard said a living-related corneal stem cell transplant can restore good-to-excellent vision, without putting the patient at risk from the side effects of immune-suppressing drugs. "This procedure is an example of the state-of-the-art surgical techniques that Loyola's corneal service can provide to patients with more complex eye problems," Bouchard said.

"This procedure is an example of the stateof-the-art surgical techniques that Loyola's corneal service can provide to patients with more complex eye problems."

CHARLES BOUCHARD, MA, MD

See More Online

Debra's Story



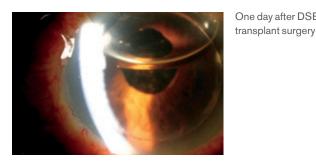
Ophthalmology Subspecialty Care Services

Dedicated health professionals in the Department of Ophthalmology are committed to excellence in patient care. Our patients are our primary focus, and we strive to make that evident in everything we do. From research to clinical implementation, we are committed to empowering the individuals with whom we have the privilege to work.

Over the last three years, the Department of Ophthalmology has examined over 32,000 patients annually, performed over 1,200 surgical procedures and conducted 75,000 diagnostic tests. We offer primary through tertiary care in all subspecialties, and utilize the latest technology to provide the highest quality care, superior outcomes and outstanding patient satisfaction. We are pleased to provide a review of the developments in some of our subspecialty services and programs.

Cornea

The Department of Ophthalmology is a leader in providing technically advanced care of the cornea and ocular surface. We have the privilege of treating patients with a wide variety of diseases, including the most critically ill patients seen in the Loyola Burn Unit. Patients who present with severe thermal injury, rare life threatening allergic reactions (e.g., Stevens-Johnson Syndrome), and severe ocular surface disease are managed at the highest level by our skilled physicians with state-of-the-art medical and surgical expertise. Our multidisciplinary team of corneal surgeons, ophthalmic plastic surgeons, oncologists (for immunosuppression), and optometrists (for complex contact lens rehabilitation) work together to develop comprehensive treatment plans resulting in visual recovery for many of our patients. Loyola's skilled surgeons



also perform state of the art corneal surgery including Descemet's membrane endothelial keratoplasty (DSEK), LASIK and PRK surgery, penetrating keratoplasty, deep anterior lamellar keratoplasty, lamellar keratoplasty, astigmatic keratotomy, and complex cataract surgery.

One day after DSEK

Oculoplastics

The oculoplastics service actively collaborates with many departments throughout Loyola. Most notable is our newly created interdisciplinary program to care for craniofacial abnormalities. The Craniofacial Program at Loyola University Ronald McDonald® Children's Hospital was spearheaded by oculoplastic surgery, pediatric otolaryngology and plastic/reconstructive surgery. The interdisciplinary team of physicians facilitates comprehensive care of craniofacial conditions including cleft lip and palate, craniofacial clefts, abnormally shaped skulls, craniofacial tumors, and other conditions affecting the growth and shape of the skull, face, ears, and eyes. The oculoplastics service has also made advancements in the diagnosis and treatment of diseases of the eyelids, orbit and lacrimal system.

Diagnostic Testing Service (DTS)

The Ophthalmology Department introduced a novel Diagnostic Testing Service (DTS) in 2013. Utilizing the latest techniques in state-of-the-art facilities, our board-certified ophthalmologists and licensed optometrists follow the highest standards of care, and provide diagnostic services and personalized treatment for adults and children in fluorescein angiography, ultrasonography, confocal microscopy, corneal topography/tomography, visual field analysis, optical coherence tomography of the anterior segment, optic nerve, and retina, and tele-retina services. We are delighted to serve our local community of eye care providers, and offer convenient scheduling of a wide variety of diagnostic tests for patients at the Loyola Outpatient Center in Maywood and the Loyola Center for Health at Burr Ridge.

See More Online

Sarah Mittler's story: **DSEK** surgery video



Interview with Neema Hashemi, **MD**, Director of Laser Vision Correction Service





Tracy Williams, OD, customizes treatment for each low vision patient

Low Vision Rehabilitation Service

The Low Vision Rehabilitation Service enables people with vision loss to regain independence, quality of life and dignity. At Loyola, the patient's low vision experience focuses on setting and seeking solutions to individualized goals. Solutions and improvements can often be found in custom prescriptive glasses, optical devices, assistive/ adaptive technology, and individual training and counseling. Our doctors are residency trained in low vision rehabilitation, and typically spend 40-60 minutes during each low vision session. We implement a comprehensive, multidisciplinary program that includes the referring physician, rehabilitation teachers, occupational therapists, rehabilitation counselors, and other rehabilitation professionals.

Pediatric and Adult Strabismus

The Pediatric Ophthalmology, Adult Strabismus and Specialty Testing Service at Loyola has a strong reputation for quality care, accommodating nearly 6,000 patients per year. Our physicians have extensive experience with eye misalignment (strabismus), nystagmus, congenital ocular diseases, pediatric cataracts, blocked tear ducts, "lazy eye" (amblyopia), and trauma. Patients referred for strabismus include adults as well as children with binocular problems (diplopia, amblyopia and post-cataract binocular problems), which may be related to medical or neurological conditions such as diabetes, thyroid eye disease, myasthenia gravis, brain tumor, head trauma, Lyme disease, stroke, or the result of an unknown childhood injury or condition. Our specialized surgeons can help virtually everyone—regardless of age—suffering from various ocular misalignments and their consequences. During the past several years we have continued utilizing innovative strabismus surgical techniques and Botulism Toxin for a wide variety of strabismus conditions. An increasing number of congenital eye anomalies and cataracts have been referred to the service. Continued screening of children with learning disabilities is performed, and children with syndromic conditions are seen in referral.



Jose Vega's story: Crossed Eye video



Katie Szymcak's story: Crossed Eye video



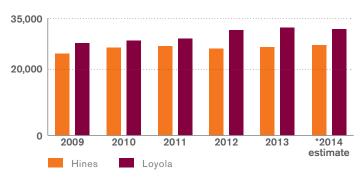


James F. McDonnell, MD, Director of Pediatric Ophthalmology and Adult Eye Alignment, with patient

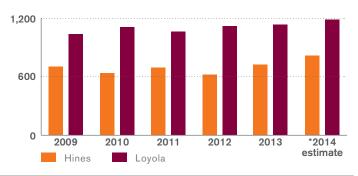
Edward Hines, Jr. VA Hospital

Faculty from the Ophthalmology Department at Loyola are proud to serve our nation's veterans at the Edward Hines, Jr. VA Hospital. Dedicated ophthalmologists and optometrists provide the highest quality of care in all ophthalmic subspecialties. In fiscal year 2013, we accommodated 26,898 eye clinic visits, and performed 728 major ophthalmic surgical procedures. Our state-of-the-art equipment enables ophthalmic care for veterans with cataracts, diabetic retinopathy, glaucoma, and macular degeneration, among other ailments. Cataract surgery is our predominant surgical procedure, and we are among a small number of distinguished VA hospitals in the country that have the ability to perform Femtosecond laser cataract surgery which provides safer and more effective cataract removal. We continue to provide surgical care for glaucoma, retina, cornea, oculoplastics, and ocular motility.

OFFICE VISITS LOYOLA UNIVERSITY AND HINES VA







Virtual Microscopy

Led by Dr. Jay Perlman, MD, PhD, Loyola joined some of the nation's most elite ophthalmology departments in a joint effort to create a virtual ophthalmic pathology microscopy workgroup. By synthesizing microscopy and digital technologies, participating ophthalmology departments electronically post and transmit microscope images that can then be viewed by colleagues across diverse geographical locations. The advanced technology enables image resolutions that are nearly the same as a specimen viewed under a traditional optical microscope. This collaborative interaction facilitates continuing medical education and quality assurance programs for ophthalmologists and pathologists. The workgroup, comprised of top physicians from Loyola, Johns Hopkins, Duke, University of Iowa, Northwestern, The New York Eye and Ear Infirmary, Rush, and Bascom Palmer Eye Institute, has developed a large database of high quality histopathologic specimens that provide an invaluable resource to interested individuals worldwide.

See More Online

Virtual Microscopy: website



Virtual Microscopy: instructional/demo video



Loyola at the Forefront of Healthcare Technology

The field of ophthalmology continues to make significant advancements in step with the seemingly constant evolution of healthcare. Loyola is a leader in adopting the most advanced technology for patient care, education and research for the diagnosis and treatment of eye disease. Recent technological improvements include 3D TruVision™ high definition surgical imaging, LenSx Femtosecond Laser Cataract Surgery, and Virtual Microscopy for online high resolution pathology.

3D TruVision™ – Three-Dimensional Surgical Imaging

Loyola faculty recently implemented the use of 3D TruVision[™] technology in our Ambulatory Surgery Center. This technology combines 3D visualization and guidance software that improves accuracy, efficiency and outcomes for our surgeons and their patients. Utilization of this advanced technology provides an increased depth of field with a big screen, immersive experience. In addition, it enables the surgical staff, residents and medical students to view the complexities and details of an actual microsurgery technique in real time. Loyola physicians have performed over 300 procedures utilizing this latest technology, and have seen significant benefits for our patients.

LenSx Femtosecond Laser Cataract Surgery

With the introduction of the LenSx Femtosecond Laser into our program, patients at the Hines VA hospital now have the option of choosing a computercontrolled, bladeless cataract laser procedure. This is currently the most technologically advanced procedure for cataract patients. Use of this technique allows a completely customized procedure for every patient and enables our resident physicians to become adept with leading edge technology.



Anuradha Khanna, MD instructing resident Lindsay Ambrecht, MD on LenSx Femtosecond Laser



Desktop 3-D stereo eye simulator in use

Advanced Technology is the Vision of Our Future

Loyola Ophthalmology is committed to using virtual reality technology to transition from the current two-dimensional learning paradigm. We are currently in the process of implementing a state-of-the-art, three-dimensional eye simulator, which will provide a motion-tracked experience for viewing and interaction from any angle. The model is anatomically correct and allows medical professionals and students the opportunity to learn by doing.

Stereo Eye Simulator

To experience the eye simulator on your own device, visit

"www.eonreality.com/eyesim" to download and open the necessary application. Once downloaded, hold your phone or tablet 12-14 inches above the eye image (marker) found below. The camera on your device will turn on, and will render the 3-dimensional eye model.



Statement of Ophthalmic Education



ANURADHA KHANNA, MD

Classroom learning has progressed from a blackboard to a Smart[®] board, and teaching aids have evolved from simple line diagrams to dynamic digital animations. Despite living in an evolving, three-dimensional world, our standard education continues to take place in two dimensions.

I have a vision that will change the way we teach, understand, and practice ophthalmology. Utilizing virtual reality technology, I believe we can create advanced educational content, bridging the gap between two-dimensional concept learning and threedimensional application. As Aristotle once said, "For the things we have to learn before we can do them, we learn by doing them." Interactive, three-dimensional tools will provide an immersive learning environment that facilitates conceptualization and motivates students to actively engage in learning.

Research has shown that simulation-based medical education combined with deliberate practice enables mastery learning in many specialties (McGaghie et. Al., 2012). At Loyola, I have modeled interactive eye simulators on McGaghie's research, with the goal of providing cutting-edge educational tools for medical and health professionals. In ophthalmology, we approach education on three different levels—undergraduate medical education, graduate medical education, and continuing medical education—and we can customize our use of this technology for each level.

Graduate Medical Education (GME)

Residency Training Program

The Department of Ophthalmology Residency Program continues to train outstanding ophthalmologists who pursue both academic and private practices. We are recognized for the joint educational opportunities offered by Loyola University Medical Center and the Edward Hines, Jr. VA hospital, as well as for our outstanding surgical training. Residents are exposed to a vast array of clinical and research opportunities, preparing them for successful practices of their own.

Senior Residents Class of 2014



HAJIRAH SAEED, MD

"I can't believe 3 years have flown by. The dedication of all my mentors has allowed me to explore and recognize what I love most about ophthalmology. Through Loyola's investment in my education, I am confident I will honor the principles of ophthalmology through my practice. I hope to combine compassion, ingenuity, and grace, while reinforcing the humanity and dignity of patient, practitioner, and profession."

Future Plans: Combined research/clinical fellowship in cornea at the Massachusetts Eye and Ear Infirmary



JULIA FU MALALIS, MD

"We are very lucky to have the opportunity to work with such outstanding attendings, great staff, and inspiring patients throughout our three years of residency. These strong relationships, well-rounded and comprehensive patient encounters, and varied surgical experiences have given me the confidence to be the physician I am today."

Future plans: Uveitis fellowship with Dr. Debra Goldstein at Northwestern University in July 2014



SHIVANI KAMAT, MD

"Residency has been a great and invaluable experience for me. I am appreciative of the amazing surgical experience I received at Loyola and I am so thankful for all the guidance I received from my attendings and fellow residents."

Future plans: Glaucoma fellowship at Massachusetts Eye and Ear Infirmary, then likely private practice



CHRISTINE MATA, MD

"As graduation draws near, I feel a sense of relief that I have made it through a lifetime of training, but at the same time, there's a tingle of anxiety over a world so unfamiliar. I am grateful and reassured, however, that Loyola has prepared me in the best way possible to handle the adverse situations that I, without any doubt, will face. It is my hope that the invaluable lessons learned from co-residents. faculty, staff, and patients over the past three years will never be lost to the pressures and chaos that the 'real world' will throw at us."

Future Plans: Private practice with Dr. Steven Reinglass at Eye Care Centers of Lake County, located in Gurnee and Vernon Hills, IL













Technology Enhances Resident Education

Under the valued leadership of Drs. Bouchard, Perlman and Khanna and the generous support of the Perritt Charitable Foundation, our department's resources have continued to grow, enabling the constant evolution of our residency-training program. Residents at Loyola are privileged to train on the latest technology and in state-of-the-art wet laboratories. The latest surgical techniques are mastered in our regularly scheduled wet-lab sessions, and residents strengthen their diagnostic and clinical skills with the use of the industry's latest equipment, including the Pascal laser in retina and the LenSx system for cataract surgery. Though it can be challenging to adapt to the administrative pressures of training residents under the Next Accreditation System from the ACGME, the Department of Ophthalmology continues to provide the best educational experience possible for our residents, and we are excited for what the future holds in store for ophthalmology.

Wetlab

After months of careful planning, on Oct. 26, 2013, Loyola's Department of Ophthalmology hosted the 2nd annual Loyola Microsurgery Biometry Wet Lab for ophthalmology residents from all six residency training programs in the Chicago area. Forty residents participated from Loyola, Rush, Northwestern, University of Illinois, University of Chicago, and Cook County Hospital.

Twenty microsurgery stations were set up in the ENT wet lab facility, and an additional twenty- four microscopes were set up in our new "Advanced Procedure Education Center (APEC)" at the Stritch School of Medicine. Participants were invited to work on nine different procedures covering the anterior segment of the eye, with four stations dedicated to corneal transplants. Each station included two attendings and four residents, ensuring that each resident benefitted from an intensive teaching experience. This annual event is beneficial for both Loyola and its participants, and the event's chief organizer, Susanne Tidow-Kebritchi, MD, received many positive comments from participants. "It shows off our campus and facilities to young doctors who may not have otherwise visited Loyola, and it helps to build collegial relationships among the residents," says Charles Bouchard, MD, Chair, Department of Ophthalmology.



Thomas Stamm, MD Scholarship Recipient

The Ophthalmology Department was proud to present the 2014 Stamm Scholarship to Ms. Shannon Dibble. The Stamm Scholarship, presented to a Loyola medical student specializing in ophthalmology, is awarded to a senior year student who demonstrates remarkable academic and clinical performance during their ophthalmology rotation and commitment to a career in ophthalmology. Shannon exhibited exceptional performance on her clinical ophthalmology rotation, and we look forward to welcoming her to the Loyola ophthalmology family as a first year resident in 2015.

Undergraduate Medical Education (UME)

STAR Program (Student Training in Approaches to Research)

The STAR program is an eight-week, scholarship-based research education program. STAR scholars—whose projects are selected through a competitive review—receive a research stipend for the program. The ophthalmology STAR students are partnered with a faculty member mentor for guidance throughout their research experience.

Ensuring the Perfect Match

Mentorship with the Medical Student Director, Dr. Shayesteh, is established early in a medical student's career. Ongoing support and guidance throughout medical school and the application process allows students to optimize their credentials, and ensures their greatest chance of a successful match. Research opportunities, institutional and local ophthalmology events and clinical rotations provide further opportunities for medical students to develop relationships with ophthalmology faculty who further support them throughout the match process.

The annual ophthalmology match panel discussion invites all Loyola medical students interested in ophthalmology to discuss the process of matching into an ophthalmology residency. Those who attend, including newly matched MS4 students, residents, and attending ophthalmologists, provide guidance and support for the new class of applicants.

Ophthalmology Club

Designed to provide medical students at Stritch with the opportunity to explore the field of ophthalmology, the Ophthalmology Club invites students to learn about our practice, facilitates interaction with doctors in the department, and provides handson educational experiences in the hospital and community. The club's mission upholds that of the Loyola University Medical Center, which is 'Serving the Human Spirit', by facilitating volunteer opportunities for students to serve the Chicago community, specifically at local health fair screenings.

Chicago Students for Sight

This recently developed project at Loyola provides eye screenings at local health fairs throughout Chicago neighborhoods. This noteworthy project operates in collaboration with all Chicago-area medical schools and optometry schools, and in partnership with the congressional Glaucoma Caucus.

See More Online



ISPB Video of Loyola medical student and resident research projects

Continuing Medical Education (CME)

Providing the opportunity for continuing medical education (CME) for our own physicians and those throughout the community is a hallmark of the Loyola Ophthalmology program. Advanced CME is critical to attracting and retaining high caliber physicians to our department. The department of ophthalmology is privileged to host multiple CME events throughout the year.

Loyola was the proud sponsor of a citywide wet lab to train Chicago cornea surgeons in a new, innovative surgical technique, Descemet's membrane endothelial keratoplasty (DMEK). This program took place at the Stritch School of Medicine's advance procedure and education center (APEC) where other residency training wet labs take place. This event was supported in part by the Illinois Eye Bank and the Richard A. Perritt Charitable Foundation.



Mark Terry, MD, instructor

Resident Alumni and Mission Day

Every June, we are honored to host our annual Alumni and Mission Day in celebration of our most recent graduates of our Residency program. In 2013, our guests were captivated by the 'foreign bodies' information and photographs shared by Dr. Wendy Lee of Bascom Palmer Eye Institute, the James E. McDonald Lecturer. Equally motivating were the Richard G. Gieser World Service Lecturers who inspired physicians to take their skills to those who are less fortunate.

This year we welcomed Dr. William Harbour, the Mark J. Daily, MD Professor of Ophthalmology at Bascom Palmer. Dr. Harbour shared his expertise on "Benign Tumors and Pseudotumors of the Retina and Retinal Pigment Epithelium" as well as "Uveal Melanoma: Current Status and Future Directions".

Richard G. Gieser, MD, World Service Lectureship

- 6/13/14 Timothy J. Kietzman, MD, Neuro-Ophthalmology, Wheaton Eye Clinic, Wheaton, IL "Gilgit Eye Hospital: Bringing Honor to Shamed"
- 6/14/13 Steven O. Anderson, MD, Clinical Instructor Department of Ophthalmology, University of Minnesota, Minneapolis, MN "...The World's Eye Care"
- 6/15/12 Robert A. Rice, MD, FACS, Medical Director, San Antonio, TX "Life Journeys, My Evolving Mission Experience"

Eileen Gable, OD, presenting Richard G. Gieser, MD World Service Award



Recipient: Timothy J. Kietzman, MD



Left to Right: Richard G. Gieser, MD, Robert A. Rice, MD, Eileen Gable, OD, and Charles Bouchard, MD

See More Online



CME calendar

Chicago Subspecialty Guest Lecture Series For over 10 years we have invited local ophthalmologists practicing

at other academic institutions or in the community, to present in our Chicago Subspecialty Guest Lecture Series. The series provides the opportunity to enhance our clinical and surgical knowledge, while developing relationships within the Chicago ophthalmologic community. We are fortunate to have had many subspecialties represented. Our esteemed guest lecturers in the recent past have included:

- May 21, 2014, Thasarat Vajaranant, MD, Glaucoma
- March 19, 2014, David Pepperberg, PhD, Research
- January 15, 2014, Elmer Tu, MD, Cornea
- November 13, 2013, Nathalie Azar, MD, Pediatric Ophthalmology
- May 15, 2013, Heather Moss, MD, Research
- March 13, 2013, Ali Djalilian, MD, Research
- January 9, 2013, Gerald Fishman, MD, Retina
- November 28, 2012, Tamara Fountain, MD, Oculoplastics
- May 16, 2012, Richard Quinones, MD, Glaucoma
- January 11, 2012, Debra Goldstein, MD, Uveitis
- March 02, 2011, Beatrice Yue, PhD, Research

James E. McDonald, MD Lectureship

- June 13, 2014, J. William Harbour, MD, Professor and Vice Chairman, Dr. Mark J. Daily Endowed Chair, Director of Ocular Oncology, Bascom Palmer Eye Institute, Sylvester Comprehensive Cancer Center, University of Miami Miller School of Medicine, Miami, FL "Benign Tumors and Pseudotumors of the Retina and Retinal Pigment Epithelium" "Uveal Melanoma: Current Status and Future Directions"
- June 14, 2013, Jerry A. Shields, MD, Director of Ocular Oncology Service, Wills Eye Institute, Professor of Ophthalmology, Thomas Jefferson University, Philadelphia, PA "What's New and Interesting in Ocular Tumors?" "Serious Eye Cancers Masquerading as Common Benign Conditions"
- June 15, 2012, Wendy Lee, MD, MS, Assistant Professor of Clinical Ophthalmology, Bascom Palmer Eye Institute, University of Miami Health Systems, Miami, FL "Expect The Unexpected" (Part 1) "Expect the Unexpected" (Part 2)

Presentation of James E. McDonald, MD Lectureship Award



Virginia McDonald, MD, daughter of James E. McDonald, MD with William Harbour, MD



Charles Bouchard, MD and Jerry A. Shields, MD

Fall Glaucoma and Cataract Symposium

In September we are honored to present our annual Fall Cataract and Glaucoma Symposium. Over the years we have been privileged to present some of ophthalmology's most notable speakers, garnering a broad audience for our event. Our focus is on topics valuable to a general ophthalmologist, such as "challenging cataract surgeries" and the newest glaucoma treatments. Videos and case presentations by Loyola residents increase audience participation, as well as enhance the learning opportunities for panelists, speakers, colleagues, and residents. We are committed to this important conference, and have recruited Dr. Stephen Kaufman and Dr. Steven Vold as our guest speakers for Fall 2014 and Dr. Robert Osher and Dr. Kuldev Singh as our guest speakers in 2015.

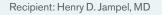
Arthur Light, MD, Memorial Lectureship in Ophthalmology

The late Arthur Light, MD, is remembered for his commitment to teaching, compassionate care of his patients and for his mission work as co-founder of FOCUS, Inc., an organization that provides free eye care to underserved populations around the world. This annual, named lectureship recently featured the following speakers:

- 9/7/2013 Henry D. Jampel, MD, MHS, Professor of Ophthalmology Glaucoma Service, Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, MD "Medical Therapy of Glaucoma: Generics, Adjunctives, and Targets"
 "Evidence-Based Medicine in Glaucoma: Does Anyone Care?"
- 9/15/2012 Garry P. Condon, MD, Chairman, Department of Ophthalmology, Allegheny Ophthalmic and Orbital Associates, Pittsburgh, PA, "Trabeculectomy 2012: Is There Still A Role?"
 "Acute Angle Closure Glaucoma: Better Surgical Management?"
- 9/10/2011 Douglas J. Rhee, MD, Massachusetts Eye & Ear, Director of Glaucoma Services, Boston, MA "Canal Based Surgeries for Glaucoma" "Overview of Diagnostic Testing for Glaucoma"

Shuchi Patel, MD, Director of Glaucoma Service presenting Arthur Light, MD Awards







Recipient: Douglas J. Rhee, MD

John J. Skowron, MD, Distinguished Professorship

John J. Skowron, MD, was a 1942 alumnus of Loyola University Stritch School of Medicine. Dr. Skowron's medical career spanned nearly 50 years, with a special interest in cataracts and glaucoma.

Dr. Skowron funded the Skowron Education Room and endowed the John J. Skowron, MD Distinguished Visiting Professorship, which features a nationally recognized ophthalmology sub-specialist who provides insight and shares experiences in a current topic of interest. Our most recent distinguished guests included:

- 9/7/2013 Uday Devgan, MD, FACS, Chief of Ophthalmology, Olive View UCLA Medical Center, Clinical Professor of Ophthalmology, Jules Stein Eye Institute, UCLA School of Medicine, Los Angeles, CA "Challenging Cataract Cases" (Part 1) "Challenging Cataract Cases" (Part 2)
- 9/15/2012 Anthony Aldave, MD, Associate Professor of Ophthalmology, The Jules Stein Eye Institute, Los Angeles, CA "Cataract Surgery in the Patient with Corneal Disease: Pearls and Pitfalls" (Part 1) "Cataract Surgery in the Patient with corneal Disease: Pearls and Pitfalls" (Part 2)
- 9/10/2011 Sadeer B. Hannush, MD, Wills Eye Institute, Assistant Professor, Philadelphia, PA "Management of the Subluxated IOL"

Susanne Tidow, MD, Symposium Director presenting John J. Skowron, MD Awards



Recipient: Anthony Aldave, MD



Starting in June 2015, the Richard G. Gieser World Service Lectureship will no longer be part of Loyola Alumni Day, but will be part of a Loyola Global Health Symposium sponsored by the Loyola Center for Global Health. This symposium will have a multispecialty focus involving many departments, including ophthalmology.

The Mark J. Daily Lectureship in Retinal Disease will begin at the 2015 Resident Alumni Day Program. This annual speakership will highlight a nationally recognized specialist in retinal disease.

Research Provides Clear Direction for the Future of Our Department



Evan B. Stubbs Jr, PhD



Bruce Gaynes, OD, Pharm D

With renewed focus and emphasis on integrated eye care programs, the Department of Ophthalmology has instituted a new organizational structure that comprehensively integrates the expertise of junior, intermediate, and senior faculty alike for the express purpose of promoting growth and development, while maintaining nationally recognized standards in patient care, resident education, and translational research initiatives in vision.

Five integrated divisions will oversee advancements in Medical Education, Clinical Operations, Clinical and Basic Research, Development and Marketing, and Community and Global Health. The Basic and Clinical Research division, directed by Evan B. Stubbs, Jr., PhD, and Bruce Gaynes, OD, Pharm D, respectively, is responsible for the advancement of resident education in research and development and progression of nationally and internationally recognized translational programs in vision research.

Biomedical Research

Under the direction of Charles Bouchard, biomedical research initiatives actively conducted by Loyola's Department of Ophthalmology faculty have expanded exponentially, serving to improve and advance patient care while enhancing educational teaching initiatives for the next generation of practicing ophthalmologists.

With the balanced addition of several experienced and highly accomplished research-intensive faculty, Loyola's Department of Ophthalmology currently enjoys national and international recognition in the development and advancement of patient care in areas as diverse as Stevens-Johnson Syndrome, uveitic glaucoma, oculoplastics, autoimmune neuropathy, and retinopathy. Collaborative advancements in low-vision technology with outreach organizations such as the Spectrios Institute for Low Vision offer comprehensive care and enhanced quality of life to those patients with irreversibly impaired vision.



In August of last year, Loyola University broke ground on the construction of The Loyola University Chicago Center for Translational Research and Education, a \$137 million medical research and education building designed to support faculty and staff working together to improve human health. A collaboration between Loyola University Health System and CHE-Trinity, this five-story, 227,000 square foot building will be located on the university's Health Sciences Campus and is scheduled to open in April 2016.

Research conducted at the center will translate medical discoveries into practical applications that will improve how we prevent, diagnose and treat disease. The center will accommodate principal investigators, post-doctoral trainees, physicians, nurses, fellows, graduate students, and students from Loyola University Chicago's Stritch School of Medicine and Marcella Niehoff School of Nursing.

Presentations

For their innovative research advancements, many of our departmental faculty enjoy sharing their clinical and research findings on local, national, and international stages. Recent presentations include:

INTERNATIONAL PRESENTATIONS

CHARLES S. BOUCHARD, MA, MD

"Vascular Manifestations of Ocular Diseases: Seeing the Pathology," 21st European Chapter Congress of the International Union of Angiology (IUA) and the National Congress of the Italian Society for Vascular Investigation (SIDV-GIUV), Rome, Italy, September 2013.

"Floppy Eyelid Syndrome," "Lamellar Corneal Surgery", and "Interface Opacity following DSEK," Instituto Panamerica Contra la Ceguera, Guatemala City (IPCC), Guatemala, September 2013.

"Current Management of Noninfectious Keratitis and Severe Ocular Surface Disease" Tianjin Medical University Eye Hospital, Tianjin, China, October 2013.

WALTER JAY, MD

"Vision, Aging, and Driving" at the Turkish Ophthalmology Society 47th National Congress, Antalya, Turkey, November 2013. "Vision Loss in Pregnancy" and "Benign Intracranial Hypertension" at the 54th Annual Session of the College of Ophthalmologists of the Ophthalmological Society of Taiwan, Taipei, Taiwan, November 2013.

"Vision, Aging, and Driving", The Buddhist Tzu Chi General Hospital Tzu Chu University, Hualien, Taiwan, December 2013.

FELIPE DE ALBA, MD

"Eylea: Should I change my anti-VEGF agent for AMD treatment?," and "Vitrectomy choices: 20, 23, 25 gauge....is there a difference?," and "Diabetic Retinopathy: Laser versus Anti-VEGF agents," Clinica Oftalmologica y Laboratorio Optico de la Laguna, Torreon, Mexico, July 2013.

OMER IQBAL, MD

"Immune-mediated activation of coagulation in Stevens-Johnson Syndrome/ Toxic Epidermal Necrolysis," 2nd international Congress on Research of Rare and Orphan Diseases - RE(ACT), Basel, Switzerland, March 2014.

NATIONAL PRESENTATIONS

EVAN B. PRICE, MD, H.E. MOSS, MD

"A multi-site assessment of neuro-ophthalmology education and resident attitudes toward methods of content delivery," poster session presented at the 40th Annual North American Neuro-Ophthalmology Society Meeting, Rio Grande, Puerto Rico, March 2014.

EVAN B. STUBBS, JR., PH.D.

"Prenyltransferases as novel therapeutic targets for the management of debilitating neuropathies," International Symposium on Lipid Signaling Pathways and Neurodegenerative Diseases, Columbia, MO, June 2014.

KELLY A. LANGERT, PH.D.

"GTPases as inflammatory mediators in Guillain-Barré syndrome", an America Society for Neurochemistry, Long Beach, CA, March 2014.

CHARLES S. BOUCHARD, MA, MD

"Surgical Management of Severe Ocular Surface Disease," the Joint Commission on Allied Health Personnel in Ophthalmology, New Orleans, LA, November 2013.

"Immune Mediated Disease of the Anterior Segment" as part of: "Current Topics in Cornea External Disease: Highlights of the Basic and Clinical Science Course 8 BCSC Review Course", AAO Annual Meeting, New Orleans, LA, November 2013.

JAMES F. MCDONNELL, MD

"General Medical Knowledge and Terminology," "Evaluation of the Patient with Double Vision," & "Diet, Nutrition, and the Eye," Joint Commission on Allied Health Personnel in Ophthalmology, New Orleans, LA, November 2013.

SHUCHI PATEL, MD

"Overview of Glaucoma," Joint Commission on Allied Health Personnel in Ophthalmology, New Orleans, LA, November 2013.

"A Prospective Trial Evaluating Scleral Rebound Tonometry," American Glaucoma Society, San Francisco, CA, March 2013.

WALTER JAY, MD

"Multiple Sclerosis Eye Findings and Current Treatment Strategies," "Vision, Aging, and Driving" & "Use of Smartphones and Tablet Computers in Low Vision Rehabilitation," Joint Commission on Allied Health Personnel in Ophthalmology, New Orleans, LA, November 2013.

Ongoing Funded Research Initiatives

Ambrecht L, Bu P., & Qiao J. "The mechanisms of the neuroprotective effects of sulforaphane on retinal ischemia-reperfusion injury," Illinois Society for the Prevention of Blindness.

Blitzer A. & Stubbs Jr. E.B. "TGF- β 2 mediated enhancement of eNOS expression in human trabecular meshwork cells," LUMC STAR award.

Blitzer A., Von Zee C.L., Stubbs Jr. E.B. & Perlman J.I. "TGF- β 2 and ET-1 in the aqueous humor of patients with POAG," Illinois Society for the Prevention of Blindness.

Kamat S., Russo P., & Patel S. "The effect of continuous pre-recorded instructions using headphones during perimetry," Illinois Society for the Prevention of Blindness.

Langert, K.A., "Limiting Leukocyte Trafficking Attenuates Experimental Autoimmune Neuritis," Career Development Award Type-1, Department of Veterans Affairs.

Mitchell N., Gai X., & Bouchard C.S. "HLA alleles as biomarkers for genetic susceptibility of cotrimoxazole- induced Stevens Johnson syndrome and toxic epidermal necrolysis," Illinois Society for the Prevention of Blindness.

Nikolic N. Uoo D.A., & Bu P. "Selective uptake of vital stains in the orbital tissues: nerve, muscle, and adipose," Illinois Society for the Prevention of Blindness.

Ottman A., Iqbal O., de Alba F., Gaynes G., Fareed J., & Bouchard C.S. "The effects of aspirin and its metabolites on human retinal pigment epithelial cells: Implications in the pathophysiology of age-related macular degeneration," Illinois Society for the Prevention of Blindness.

Pittner A, Nolan M., & Bouchard C.S. "Cataract Assessment," Illinois Society for the Prevention of Blindness.

Stubbs Jr. E.B. & Von Zee C.L., "Mechanisms regulating transforming growth factor- $\beta 2$ mediated endothelin-1 expression," Midwest Eye-Banks Scientific Research Award.

Stubbs Jr. E.B. "Rho GTPase siRNA as a Therapeutic Strategy in Experimental Autoimmune Neuritis," Department of Veterans Affairs.

Tamboli D. & Patel S. "The natural history of cystoid macular edema after photocoagulation treatment in patients with glaucoma," Illinois Society for the Prevention of Blindness.

Peer-Reviewed Publications

2014

Bu P, Vin A, Sethupathi P, Ambrecht L, Zhai YG, Nikolic N, Qiao L, Bouchard C. Effects of Activated Omental Cells on Rat Limbal Corneal Alkali Injury. Exp Eye Res 2014; 121:143-146.

Gaynes BI. Statins and cataract (letter). JAMA Ophthalmology 2014; 132:362-363.

Gaynes BI. Efficient bottle adaptation provides for adjustment of ophthalmic drop volume and drug dosage (letter). Clinical and Experimental Ophthalmology 2014; In press.

Hayward DM, Yoo D, Lee JM, Wild E, Vandevender D, Prabhu VC. Myoepithelioma of the Orbital Apex and Middle Cranial Fossa : Case Report and Review of the Literature. Neuro-2014; 38:14-20.

Langert KA, Pervan CL, and Stubbs Jr. EB. Novel role of Cdc42 and RalA GTPases in Tumor Necrosis Factor- α mediated secretion of CCL2. Small GTPases 2014; In press.

Schmeling M, Gaynes BI, Tidow-Kebritchi S. Heavy metal analysis in lens and aqueous humor of cataract patients by total reflection X-ray fluorescence spectrometry. Powder Diffraction 2014; In press.

Saeed HN, Presta MV, Yoo D. Subperiosteal Haematoma after General Anesthesia. British Journal of Anaesthesia 2014; 112:772-773.

Vira S, Abugo U, Shih C, Udell I, Sperling B, Hannush S, Basti S, Bouchard CS. Descemet stripping endothelial keratoplasty for the treatment of combined Fuchs corneal and endothelial dystrophy and Keratoconus. Cornea 2014; 33(1):1-5.

2013

Gaynes B, Leugrans S, Bennett D. Neuroticism modifies the association of vision impairment and cognition among community dwelling older adults. Neuroepidemiology. 2013; 40:142-146.

Gaynes JS, Micic C, Gaynes BI, Borgia J. Quantitation of in vitro a-1 adrenergic receptor antagonist binding capacity to biologic melanin using tandem mass spectrometry. Current Eye Research. 2013; 38: 1214-1220.

Iqbal O, Fisher G, Vira A, Syed D, Sadeghi N, Freeman D, Campbell E, Sugar J, Feder R, Fareed J, Bouchard CS. Increased expression of secreted frizzled-related protein-1 (StRP-1) and microtubule-associated protein light chain 3 (LC3) in keratoconus. Cornea 2013; 32:702-707.

Iqbal O, Syed D, Mosier M, Malalis J, Mata C, Lin A, Mitchel N, Abro S, Hoppensteadt D, Fareed J, Bouchard C. Immune-mediated activation of coagulation in patients with Stevens-Johnson Syndrome/toxic epidermal necrolysis. Blood 2013; 122 (21).

Langert KA, Von Zee CL, and Stubbs Jr. EB. Tumor Necrosis Factor- α enhances CCL2 and ICAM-1 expression in peripheral nerve vascular endoneurial endothelial cells. ASN Neuro 2013:5.

Langert KA, Von Zee CL, and Stubbs Jr. EB. Cdc42 GTPases facilitate Tumor Necrosis Factor-α mediated secretion of CCL2 from peripheral nerve microvascular endoneurial endothelial cells. J. Perph. Nerv. System 2013; 18:199-208.

Malalis J, Lee J, Jay WM. Primary osteosarcoma of the skull base in a pregnant patient. Neuro-Ophthalmology 2013; 37:38-40.

Meeks LM, Blomquist P, and Sullivan BR. Outcomes of Manual Extracapsular versus Phacoemulsification Cataract Extraction by Beginning Resident Surgeons. J Cataract Refract Surg. 2013; 39:1698-701.

Singh V, Torricelli A, Nayeb-Hashemi N, Agrawal V, Wilson SE. Mouse strain variation in SMA+ myofibroblast development after corneal injury. Exp Eye Res 2013; 115:27-30. Vin AP, Hu H, Zhai Y, Von Zee CL, Logeman A, Stubbs Jr. EB, Perlman JI, Bu P. Neuroprotective effect of resveratrol prophylaxis on experimental retinal ischemic injury. Exp Eye Res 2013; 108:72-75.

Vira S, Shih CY, Ragusa N, Sheyman A, Feder R, Weisenthal RW, Rosenwasser GOD, Hannush SB, Udell IJ, Bouchard CS. Textural interface opacity interface haze after Descemet stripping automated endothelial keratoplasty (DSAEK): A report of 30 cases and possible etiology. Cornea 2013; 32(5): 54-59.

Wanek J, Gaynes B, Lim JL, Molokie R, Shahidi M. Human. Bulbar conjunctival hemodynamics in hemoglobin SS and SC disease. American Journal of Hematology. 2013; 88:661-664.

Selected Textbook Chapters

2014

Sullivan BR. Lens Particle Glaucoma. In eMedicine: Ophthalmology [interactive textbook online], Ed. Adler JN, Brenner B, Dronen S, et al. Emedicine.com. St. Petersburg, FL 2014.

Sullivan BR. Angle Recession Glaucoma. In eMedicine: Ophthalmology [interactive textbook online]. Ed. Adler JN, Brenner B, Dronen S, et al. Emedicine.com. St. Petersburg, FL 2014.

2013

Bouchard CS. BCSC Book 8, External Disease and Cornea, Chapter 68, Ocular Immunology; Chapter 7, Clinical Approaches to immune –related disorders of the external eye, 2013.

Lin A, Bouchard CS. Noninfectious Keratitis. In: Yanoff & Duker's Ophthalmology. 4th. ed. Elsevier Limited. Chapter 4.17, 243-252, 2013.

Vira S, Bouchard CS. "Limbal Dermoid," Copeland and Afshari Principles and Practice of Cornea, Jaypee Brothers, New Delhi. Chapter 73, 954-958, 2013.

Published Abstracts

2014

Ambrecht L, McDonnell JF, Perlman JI, Bu P. Protected retinal function by sulforaphane on rentinal ischemic injury. ARVO Abstract #1891-B0156, Orlando, FL 2014.

Bouchard C, Maki S, Undevia N, Gaynes B, Price R, Valdez D. The association of systemic and ocular disease and the under diagnosis of floppy eyelid syndrome in patients with obstructive sleep apnea. ARVO Abstract #1465-C0104, Orlando, FL 2014.

Braimah V, Robinson J, Chun R, Jay WM. Usage of accessibility options for the iPhone/ iPad in a visually impaired population. ARVO Abstract #4151 - A0139, Orlando, FL 2014.

Gaynes BI, Spektor T, Nikolic N. Hospitalization rate among chronically ill low vision patients using a home prescription label reader vs. a pill box. ARVO Abstract# 4160 - A0148, Orlando, FL 2014.

Iqbal O, Ottman A, Gaynes J, De Alba F, Gaynes BI, Fareed J, Bouchard CS. The effects of aspirin and its metabolites on peripheral blood mononuclear cells and human retinal pigment epithelial cells – implications in the pathophysiology of age-related macular degeneration. ARVO Abstract# 634 - B0161, Orlando, FL 2014.

Kirchner I, Kondapalli S, Yoo D, Bouchard CS. Ocular complications following acoustic neuroma resection. ARVO Abstract #2779 -A0258, Orlando, FL 2014.

Nolan M, Pittner A, McGaghie W, Hill G, Dwarakanathan S, Feder R, Farooq AV, Traish A, Bouchard CS. Standardizing cataract surgery rating between resident and attending ophthalmologists: An educational intervention. ARVO Abstract# 2806-A0391 Orlando, FL 2014. Pervan-Von Zee CL, Lautz J D, Langert KA, Blitzer AL, Stubbs EB. TGF-β2 mediated canonical induction of ET-1 requires functional Rho GTPase signaling in human trabecular meshwork cells. ARVO Abstract #5692 - D0185, Orlando, FL 2014.

Tamboli DA, Singh AD, Topham A. Treatment patterns and survival of patients with etinoblastoma: A surveillance, epidemiology, and end results dataset evaluation. ARVO Abstract #3086 - A0019, Orlando, FL 2014.

Yu M, Bu P, Bell BA, Boriushkin E, Lin F, Qiao J, Sturgill-Short G, Yu X, Zhang SX, Peachey NS. Retinal degeneration in CCL2/ DAF1 double-defficient mice. ARVO Abstract #366 - C0137. Orlando, FL 2014.

2013

Duke SL, Bu P, Yoo DK. Use of omentum for engineering in vivo levator palpebrae superioris: A pilot study. ARVO Abstract # 6379-D0290, Seattle, WA 2013.

Gaynes B, Russo M, Goldmeier D. Efficacy of a novel synthetic topical tetrapeptide on eliciting analgesia subsequent to experimentally induced chemical cornea injury. ARVO Abstract # 5416-A0060, Seattle, WA 2013.

Iqbal O, Fisher G, Vira S, Kahn D, Syed D, Fareed J, Bouchard CS. The increased expression of secreted frizzled-related protein-1 (SFRP-1) and microtubuleassociated protein light chain 3 (LC3) in keratoconus. ARVO Abstract # 5301-C0220,, Seattle, WA 2013.

Kamat S, Saeed H, Been G, Gaynes B. Postoperative diplopia and enophthalmos after orbital fracture repair. ARVO Abstract # 746-DO405, Seattle, WA 2013.

Kondapalli S, Kirchner I, Yoo D. " Ocular Complications after Acoustic Neuroma Resection." American Academy of Ophthalmology Annual Meeting. 2013

Kondapalli SA, Czyz CN, Foster JA, Cahill KV. Cosmetic and quality of life outcomes of the direct brow lift. ARVO Abstract # 5345-D0106, Seattle, WA 2013. Malalis J, Mata C, Kahn D, Lin A, Mosier MJ, Bouchard CS, Cunanan J, Hoppensteadt D, Fareed J. Proteomic analysis of plasma and mucosal samples from patients with Stevens-Johnson Syndrome/Toxic Epidemal Necrolysis. ARVO Abstract # 2062-D0201, Seattle, WA 2013.

Nayeb-Hashemi N, Krueger R, Minoru Tomita. Correlation of Temperature and Humidity to the Incidence of LASIK Flap Striae In A Very High Volume Refractive Surgery Center. ARVO Abstract # 3119-D0054 Seattle, WA 2013.

Patel S, Duke S, Logeman A. A prospective trial evaluating scleral rebound tonometry. ARVO Abstract # 3456-D0083, Seattle, WA 2013.

Saeed HN, Bouchard CS. Familial corneal patterns in pellucid marginal degeneration (PMD): Uncovering a possible etiology. ARVO Abstract # 882-B0106, Seattle, WA 2013.

Von Zee CL, Lautz JD, Langert, KA, Stubbs Jr. EB. Functional cooperatively between canonical and non-canonical signaling pathways in TGF- β 2 mediated ET-1 expression. 2013 ISER Molecular Mechanisms in Glaucoma, abstract #2, Sarasota, FL 2013.

Xin J, Mesnard NA, Stubbs Jr. EB., Sanders VM and Jones KJ. Increased IL-17+ and TNFα+ cells in the mSOD1 mouse model of Amyotrophic Lateral Sclerosis. Muscular Dystrophy Association, Washington, DC 2013.

Zemke A, Irvine D, Coalter J and Jay WM. Ipad vs closed circuit television low-vision reading rates and preferences. ARVO Abstract # 2749-B0003, Seattle, WA 2013.

Our Partners:

- HERMANO PEDRO HOSPITAL, ANTIGUA
- INTERNATIONAL ROTARY CLUB OF
 GUATEMALA
- GOOD SAMARITAN HOSPITAL CHICHICASTENANGO
- EYE CLINIC OF DR. MOLINA
- HUMANITY FIRST USA (GIFT OF SIGHT GUATEMALA)

With an on-going commitment to both local and international service, we look forward to continuing our current traditions of emphasizing mission work around the globe. We are excited to enhance our Missions Day program to involve other subspecialties, and provide a forum for sharing information on best practices with renowned missions organizations. This bold new program will be considered in the fall of 2015.

Creating a Vision Beyond the Borders

In 2014 the world has never seemed so small, and the need for quality eye care so large. The global community is comprised of people from all nations who are impacted by a truly global economy, global climate and shared global health issues. As part of our mission of education, research and clinical care, the Loyola University Department of Ophthalmology is committed to addressing the needs for quality eye care locally and abroad.

Our global missions philosophy was inspired by our former Department Chair, James McDonald, MD. Dr. McDonald championed the notion of bringing surgical eye care to remote regions of Africa. This tradition of volunteerism lives on through the support of Richard Gieser, MD, and the devotion and passion of our current Department Chair, Charles Bouchard, MD. In addition to bringing critical eye care to impoverished communities in foreign countries, the Loyola Department of Ophthalmology seeks to foster the spirit of mission work among its ophthalmology residents. Our program attracts compassionate applicants who are driven to use their skills and training to give the gift of sight to those most in need, with the least access to quality care. The Department has accomplished considerable growth in missions outreach and continues to pursue both local and international opportunities for service.

Beginning in 2006, senior ophthalmology residents traveled to Guatemala to offer ophthalmological services in remote, underserved villages and towns. Our residents have been impressed by the strength of the Guatemalan people and the gratitude expressed by them for the medical care the residents provided. On reflection, the residents were grateful for the opportunity to learn and share in international care, and all professed the desire to continue international mission work as part of their careers.





The Places:

ANTIGUA: Nearly all teams who travel to Guatemala find time to tour the old capital city of Antigua, a city of cobblestone streets surrounded by seven mountains. This city houses Hermano Pedro Hospital and the International Rotary Club that was instrumental in arranging care within Guatemala.

CHICHICASTENANGO: Internationally famous for "market days" which feature the crafts of the indigenous Mayans that call this city their home. Good Samaritan Hospital provides medical care to those in need throughout this city.

CHICHIMALA: This city, located in the southeast of Guatemala, is home to Dr. Molina's practice and the site of a joint outreach with the Illinois College of Optometry.

Individual residents and faculty have been graciously hosted in the local communities of Flores, San Benito, Dolores, Santa Rita, Coban, Guatemala City, Joyabaj, and the Peton region.

The human connection and interaction with the local people drives many to leave the comforts of home and serve others. The strength and courage of the Guatemalan people make it easy for the members of our department to uphold our primary purpose of serving those in need. We offer screenings and care for basic visual needs, surgical interventions to save sight, and ongoing forums for intellectual exchange. Together with our partners, we are bringing clearer vision to the world.









Perritt Foundation and Donor Honor Roll

Richard A. Perritt, MD Charitable Foundation



For 35 years, Ron Tyrpin served as an investment adviser to one of the pioneers of ophthalmology who practiced in Chicago. Richard A. Perritt, MD, performed eye surgeries on two popes and various worldwide dignitaries, and was responsible for several breakthroughs in the field. When Dr. Perritt died in 1991, Mr. Tyrpin and his wife, Diane, of Barrington Hills, began to serve as trustees of the newly established

Richard A. Perritt Charitable Foundation. Due to knowledgeable investments, as a result of astute financial management, the Foundation has been able to fund numerous projects close to the heart of Dr. Perritt: pioneering ophthalmology research, education of ophthalmologists, and children's eye health care.

"It's very, very satisfying to fulfill Dr. Perritt's wishes," explains Mr. Tyrpin, whose entire family is involved in the foundation. Diane Tyrpin is a Loyola University Chicago alumna. Sons John, also in the investment field, and Mark, a Quincy, Ill., banker, have taken over much of the Foundation's operations. Both serve on the board. "The family works hard to make sure the money is used as promised, to stay true to the principles of Dr. Perritt," explains Ron Tyrpin, foundation president.

The substantial generosity of the Perritt Charitable Foundation continues to be instrumental in supporting our research mission and resident education. Every dollar is leveraged to perform important translational research from ischemic retinal disease to corneal stem cell transplantation and to train the best, brightest and most ethical and compassionate ophthalmologists. Today, Perritt-funded and Loyola-trained residents are bringing the leading edge medical treatments and compassionate ethical care to patients at home and abroad. We are proud to honor the legacy of Dr. Richard A. Perritt and are enormously grateful for our steadfast partnership with the Richard A. Perritt Charitable Foundation.

Gifts and Endowments

The Department of Ophthalmology is fortunate and grateful to have a long history of generous benefactors and donors. The Department is proud to recognize those who have established endowments or contributed over \$500,000 to date for ongoing needs of the department.

ENDOWED CHAIR AND PROFESSORSHIPS

John Krasa Chair In Ophthalmology John P. & Therese E. Mulcahy Chair in Ophthalmology John P. Mulcahy Chair in Ophthalmology Lucian and Irene Dyba Matusak Professorship Charles Turgrimson Pediatric Fund

ENDOWED LECTURES

James E. McDonald Lectureship Arthur Light Memorial Lectureship in Ophthalmology John J. Skowron Endowment for Education in Ophthalmology Richard G. Geiser World Service Lecture Mark J. Daily Lectureship in Retinal Disease (2015)

OTHER ENDOWMENTS

Thomas A. Stamm Service and Education Fund Robert J. Barnes Award Fund Ophthalmology Resident Endowment (Richard A. Perritt, MD)

GIFTS FOR PATIENT CARE, RESEARCH AND/OR EDUCATION Richard A. Perritt Charitable Foundation Zale Family Trust Frederick M. Selfridge, M.D.

Departmental Honors, Awards, and Recognition

As a measure of success and recognition for their outstanding contributions to the investigative field of ophthalmology and patient care, many of our dedicated faculty have been awarded highly competitive peer-reviewed research funding from a variety of distinguished national, private, and local granting agencies, including the National Institutes of Health, the Department of Veterans Affairs, Midwest Eye-Banks, Illinois Society for the Prevention of Blindness, the American Society of Cataract and Refractive Surgery, and the Richard A. Peritt Charitable Foundation. It is only through these limited and invaluable resources that advancements in the management and care of vision-compromised patients can truly be realized.

Honors



LINDSAY AMBRECHT, MD AND 2014 CHIEF RESIDENT was honored with first place award in the 2014 Beem Fisher competition for her work entitled "Protected Retinal Function by Sulforaphane on Retinal Ischemic Injury." Coauthored by Drs. Jay Perlman, James McDonnell, and Ping Bu.



CYNTHIA PERVAN, PhD was honored with a prestigious and highly competitive ISER travel award to present her finding on "Functional cooperativity between canonical and non-canonical signaling pathways in TGF- β 2 mediated ET-1 expression". Co-authored by J.D. Lautz and Drs. Kelly Langert and Evan Stubbs, Jr.

OMER IQBAL. MD was named a member of

and expand scholarly repertoire.

the first class of the Loyola Leischner Institute

Fellowship of medical education, to strengthen



DIANA TAMBOLI, MD AND SECOND YEAR RESIDENT was honored with second place award in the 2014 Beem Fisher competition for her work entitled "Retinoblastoma: A Surveillance, Epidemiology, and End Results Dataset Evaluation for Treatment Patterns, Survival, and Second Malignant Neoplasms". Co-authored by Drs. Alan Topham, Nakul Singh and Arun D. Singh.



HAJIRAH SAEED, MD AND THIRD YEAR RESIDENT was honored with a prestigious ASCRS Resident Excellence travel award to attend the 2013 American Society of Cataract and Refractive Surgery Symposium and Congress.



SHUCHI B PATEL, MD AND DIRECTOR OF

GLAUCOMA SERVICES was honored with a prestigious and highly competitive Mentoring for Advancement of Physician-Scientists (MAPS) Award for her proposed work "Correlating CPAP use, Intraocular Pressure & Ocular Perfusion Pressure in Patients with Glaucoma".



KELLY LANGERT, PhD was honored with a prestigious ASN travel award to present her research findings on "Cdc42 and RalA GTPases facilitate TNF-α mediated release of MCP-1 from peripheral nerve microvascular endothelial cells". Co-authored by Jonathan Lautz and Dr. Evan Stubbs, Jr.

Full-Time Faculty of the Department of Ophthalmology

The faculty of the Department of Ophthalmology is committed to excellence in patient care, education, and advanced research. Our 16 full-time and 16 part-time clinical faculty members provide primary and subspecialty care in cornea/external disease, oculoplastic/reconstructive surgery, pediatrics, neuro-ophthalmology, contact lenses, low-vision, glaucoma, and retina/vitreous. We train 12 ophthalmology residents per year. Our five full-time research faculty perform cutting-edge research to improve eye care for generations to come. Many of our Loyola University Medical Center (LUMC) faculty physicians also hold joint appointments at the Edward Hines Jr. Department of Veterans Affairs Hospital.



CHARLES S. BOUCHARD, MA, MD Chair, Department of Ophthalmology, John P. Mulcahy Professor of Ophthalmology LUMC and Hines VA Dr. Bouchard is the John P. Mulcahy Professor and Chairman of the Department of Ophthalmology. He received his master's degree in physiology from the Boston University School of Medicine and his MD from Northwestern University Medical School. He completed his ophthalmology residency at George Washington University and a fellowship in corneal and external disease at Georgetown University.

Dr. Bouchard's practice is focused on corneal immunology and ocular surface reconstruction. This includes surgically managing patients suffering from severe dry eye as a result of graft vs. host disease following bone marrow transplantation. He also specializes in anterior segment surgery including DSEK surgery, corneal transplantation, recurrent pterygium surgery, corneal stem cell transplantation, complex cataract surgery, amniotic membrane transplantation, and LASIK surgery. He has been named a "Best Doctor" by *U.S. News and World Report*, a *Chicago* magazine "Top Doctor", and one of "Chicago's Best Ophthalmologists" by Consumer's Checkbook. Dr. Bouchard received the American Academy of Ophthalmology Senior Honor Award in 2010.

FELIPE DE ALBA, MD
Associate Professor
LUMCDr. de Alba is associate professor and director of the retina and vitreous service.
He graduated summa cum laude from the Universidad Autonoma de Coahuila in
Mexico, where he also received his medical degree. He completed his residency at
the University of Nebraska Medical Center and a fellowship in vitreoretinal surgery
at the University of Illinois.
Dr. de Alba's clinical expertise is in vitreoretinal surgery, diabetic retinopathy and
macular degeneration.



EILEEN GABLE, OD Associate Professor LUMC and Hines VA

Dr. Gable is associate professor and serves as director of the department's foreign missions program. She received her doctor of optometry degree from Pennsylvania College of Optometry and completed a primary care residency at the Illinois Eye Institute.

Dr. Gable's clinical expertise is in pediatric eye care and comprehensive eye care.



BRUCE GAYNES, OD, PHARM D Assistant Professor Hines VA Dr. Gaynes is a clinical assistant professor of ophthalmology and director of clinical research. He received his optometric degree with honors from the Illinois College of Optometry followed by completion of an optometric residency in primary eye care at the Department of Veterans Affairs Medical Center, in Newington, CT. Dr. Gaynes also holds a master of science degree in pharmacology from the Indiana University School of Medicine and a doctorate of pharmacy from the University of Illinois College of Pharmacy. In addition, Dr. Gaynes completed a preceptorship in geriatric medicine from the University of Pennsylvania School of Medicine and experiential training in conducting pharmaceutical-based outcome studies sponsored by the American Society of Health System Pharmacists.

Dr. Gaynes' clinical expertise is in comprehensive optometry and his research interests include ocular pharmacology and toxicology, as well as the application of novel ocular imaging systems to optimize diagnosis and treatment of neurologic and vascular systemic disease.



WALTER JAY, MD Professor LUMC Dr. Jay is a professor of ophthalmology and the director of the neuroophthalmology service. He received his medical degree and completed his residency at the University of Chicago, and went on to complete a fellowship in neuro-ophthalmology at the University of California School of Medicine, San Francisco. Dr. Jay is co-editor of the International Journal of Neuro-Ophthalmology and has been recognized as a "Best Doctor" by *U.S. News and World Report.* Dr. Jay's clinical expertise is in neuro-ophthalmology and comprehensive ophthalmology.



ANURADHA KHANNA, MD Associate Professor Hines VA Dr. Khanna is associate professor, director of ophthalmology education and the director of the ophthalmology service at Hines VA Hospital. She received her medical degree from the Government Medical College in India and her residency training at Cook County Hospital in Chicago. She completed a fellowship in uveitis at the University of Illinois.

Dr. Khanna specializes in uveitis and comprehensive ophthalmology. She has a special interest in the innovative use of technology in medical education.



JAMES F. MCDONNELL, MD Professor LUMC Dr. McDonnell is professor of ophthalmology and director of the pediatric ophthalmology and adult ocular alignment service. He is also director of retinopathy of prematurity care in the neonatal intensive care unit and the director of development and marketing for the department. Dr. McDonnell received his medical degree from Northwestern University Medical School. His residency training included work at the Eye Institute at the Medical College of Wisconsin in addition to work in emergency and internal medicine at Northwestern University. He completed a fellowship in pediatric ophthalmology at the University of Wisconsin, Madison. Dr. McDonnell has been recognized as a "Top Doctor" by *U.S. News and World Report*, named a *Chicago* magazine "Top Doctor", given the Patient's Choice Award, named "Chicago's Favorite Kid Doc" by Chicago Parent magazine, and named one of "America's Top Ophthalmologists" by the Consumers Research Council of America.

Dr. McDonnell's clinical interests include pediatric and adult strabismus (eye misalignment), retinopathy of prematurity, and pediatric tearing disorders.

Full-Time Faculty (continued)

NEEMA

NAYEB-HASHEMI, MD

LUMC and Hines VA

Assistant Professor

SHUCHI PATEL. MD

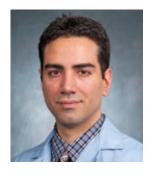
Assistant Professor

JAY I.

Professor

Hines VA

LUMC and Hines VA



Dr. Nayeb-Hashemi is assistant professor and the director of the cornea and refractive surgery services. He attended Johns Hopkins University as an undergraduate, completing his bachelor of science in biomedical engineering and received his masters in the field at Washington University in St. Louis. He then attended medical school at the University of Texas Medical Branch in Galveston, where he graduated with research Honors and was inducted into the Alpha Omega Alpha medical honor society. His ophthalmology residency was completed at the University of Illinois at Chicago, where his interest in corneal and refractive surgery led him to complete a fellowship at the Cleveland Clinic.

Dr. Nayeb-Hashemi's clinical expertise is in corneal disease and refractive surgery.



Dr. Patel is assistant professor and director of the glaucoma service. She received her medical degree and completed her residency at the University of Chicago, followed by a glaucoma fellowship at the Harvard University Massachusetts Eye and Ear Infirmary.

Dr. Patel's clinical interests include glaucoma and comprehensive ophthalmology. Her research interests include the effect of sleep apnea and its treatment on glaucoma progression and intraocular pressure, improvement of current glaucoma surgical techniques and the role of Optical Coherence Tomography (OCT) in the early detection and monitoring of glaucoma progression.



Dr. Perlman holds a joint appointment as professor of ophthalmology and PERLMAN, MD, PHD pathology and is chief of ophthalmology at Hines VA Hospital. He is director of ophthalmic pathology for the department of ophthalmology at Loyola. Dr. Perlman completed both his MS and PhD degrees in biological sciences at Purdue University. He earned his medical degree at the Albert Einstein College of Medicine and finished his ophthalmology residency at Bronx Lebanon Hospital Center. He completed two years of fellowship training in ophthalmic pathology, including one year at the Armed Forces institute of Pathology and a second year at the University

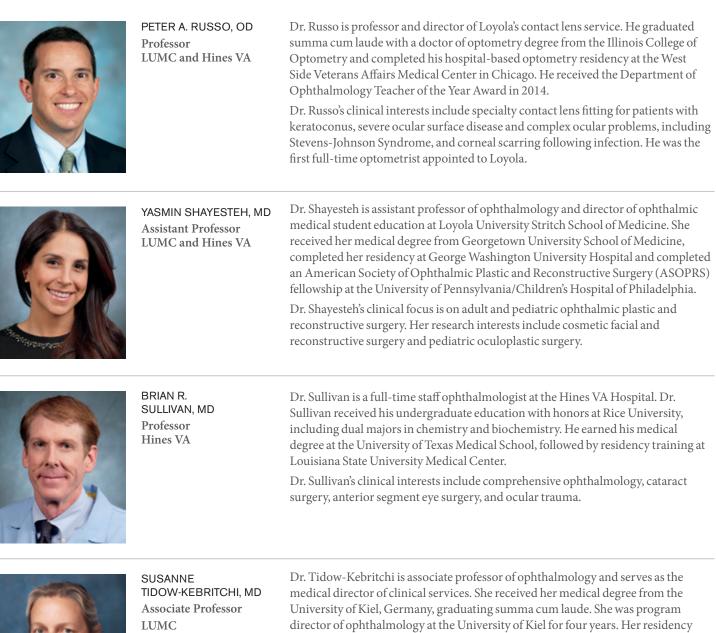
of Illinois Medical Center.

Dr. Perlman's clinical expertise is ocular pathology. His research interests include ocular physiology, anatomy and pathology, with specific focus on the retina and retinal pigment epithelium, and the role of glutamate and free radicals in retinal disease.



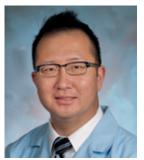
EVAN PRICE, MD Assistant Professor LUMC and Hines VA Dr. Price is an assistant professor of ophthalmology. He received his medical degree and completed his residency in ophthalmology at Loyola. Dr. Price completed his neuro-ophthalmology fellowship training at the Illinois Eye and Ear Infirmary and Northwestern University. He also completed a fellowship in medical education through the Department of Medical Education at the University of Illinois, Chicago.

Dr. Price's clinical interests include neuro-ophthalmology and comprehensive ophthalmology, and his research interests are in the fields of undergraduate and graduate medical education.



training in the United States included more than two years in internal medicine and three years in ophthalmology, both at Loyola University Medical Center.

Dr. Tidow-Kebritchi's clinical interests include comprehensive ophthalmology and cataract surgery.



DAVID YOO, MD Associate Professor LUMC and Hines VA Dr. Yoo is an associate professor, ophthalmology residency program director, director of the division of ophthalmic plastic and reconstructive surgery, and director of the inpatient consultation service. He received his medical degree from Northwestern University Medical School. He completed his ophthalmology residency at Northwestern University and his fellowship in ophthalmic plastic and reconstructive surgery at Henry Ford Hospital in Detroit.

Aside from general oculoplastic issues, Dr. Yoo's clinical interests include management of Graves' disease, multidisciplinary approaches to craniofacial disorders and tumors, and periorbital rejuvenation.

Part-Time Clinical Faculty



ROBERT J. BARNES, MD Clinical Associate Professor



ROBERT CHUN, OD Clinical Assistant Professor



CATHLEEN M. CRONIN, MD Clinical Assistant Professor



PATRICIA DAVIS, MD Clinical Assistant Professor



THOMAS JOHN, MD Clinical Associate Professor



BRUCE LARSON, MD Clinical Assistant Professor



VARUN MALHOTRA, MD Clinical Assistant Professor



DANIEL OWENS, MD Clinical Assistant Professor



REBECCA PARRISH, CO Orthoptist



LOIS POLATNICK, MD Clinical Assistant Professor



BRIAN PROCTOR, DO, FAOCO Clinical Assistant Professor



EDWARD SUNG, MD Clinical Assistant Professor



SHIVAN TEKWANI, MD Clinical Assistant Professor



SUSAN VIERLING, MD Clinical Assistant Professor



R. TRACY WILLIAMS, OD, FAAO Clinical Associate Professor

Full-Time Research Faculty



PING BU, MD Research Assistant Professor



OMER IQBAL, MD Research Associate Professor



KELLY LANGERT, PHD Research Associate



CYNTHIA PERVAN, PHD Research Assistant Professor



EVAN B. STUBBS JR., PHD Professor

Alumni Focus

Loyola has been training superior ophthalmologists for decades, and many of our graduates have full-time academic appointments and are now training future physicians of their own.

NICK MAMALIS, MD (Class of 1987), University of Utah Department of Ophthalmology and Visual Sciences

JONATHAN HOLMES, MD (Class of 1991), Mayo Clinic

SUSANNE TIDOW-KEBRITCHI, MD (Class of 2003), Loyola University Medical Center

 ${\tt RUKHSANA\,MIRZA,MD}\,({\rm Class\,of\,2005}), {\rm Northwestern\,University}$

BRENT HAYEK, MD (Class of 2006), Emory University

JOHN CLEMENTS, MD (Class of 2010), Casey Eye Institute

RAYMOND AREAUX, MD (Class of 2012), University of Minnesota Children's Hospital

EVAN PRICE, MD (Class of 2013), Loyola University Medical Center

We are also fortunate to welcome several of our graduates to the current part-time clinical staff at Loyola.

ROBERT BARNES, MD (Class of 1986) – Glaucoma

CATHLEEN CRONIN, MD (Class of 1982) – Pediatric Ophthalmology and Strabismus

DANIEL OWENS, MD (Class of 2009) – Surgical Retina

SHIVAN TEKWANI, MD (Class of 2010) – Medical Retina

THE LOYOLA AAO ALUMNI RECEPTIONS









Photos, top to bottom:

Robert Foody ('87), Jeff Zimm ('90) and Eligijus Lelis ('89)

Kevin Flaherty ('88), Alan Chow ('83)

Charles Bouchard, James Dickey ('92), Jonathan Holmes ('91), Lizabeth Raemont ('91), Michael Oats ('92)

Robert Barnes ('86), Sophia Barnes, Nick Mamalis ('87), Karl Holling ('85)



1 LOYOLA OUTPATIENT CENTER

2160 S. First Avenue Maywood, IL 60153 (708) 216-3833

- Cataract
- Comprehensive
- Contact Lens
- Cornea
- Cosmetic
- Glaucoma
- Neuro-Ophthalmology
- Oculoplastics
- Pediatrics
- Refractive
- Retina

2 LOYOLA CENTER FOR HEALTH AT BURR RIDGE

6800 N. Frontage Road Burr Ridge, IL 60527 (708) 327-1000

- Comprehensive
- Contact Lens
- Cornea
- Cosmetic
- Glaucoma
- Neuro-Ophthalmology
- Oculoplastics
- Refractive
- Retina

3 LOYOLA CENTER FOR HEALTH AT HICKORY HILLS

9608 Roberts Road Hickory Hills, IL 60457 (708) 233-5333

- Cataract
 - Comprehensive
 - Glaucoma
 - Neuro-Ophthalmology

4 LOYOLA CENTER FOR HEALTH AT OAKBROOK TERRACE NORTH 1S260 Summit Avenue

Oakbrook Terrace, IL 60181 (630) 953-6600

- Contact Lens
- Glaucoma
- Oculoplastics
- Pediatrics

5 LOYOLA CENTER FOR HEALTH AT HOMER GLEN (PLANNED)

15750 Marian Drive Homer Glen, Illinois 60491 (708) 645-3400

- Comprehensive
- Glaucoma
- Pediatrics

28 Loyola Medicine

For more information on the Loyola residency program, research and upcoming educational events, please contact:

Loyola University Health System Department of Ophthalmology 2160 S. First Ave. Maywood, IL 60153 (708) 216-8643

For Patients:

For an appointment please call **Patient Access Center:** (708) 216-8563

For more information about our department please visit our website:

www.loyolamedicine.org/medical-services/ ophthalmology-services

For Referring Physicians:

Visit us at

www.loyolamedicine.org/health-professionals to learn more about Loyola Connect, an electronic medical record that offers efficient communication between referring physicians and Loyola doctors.

We offer referring physicians dedicated phone lines to facilitate appointments with specialists.

Loyola Physician Referral Line (708) 327-DOCS (708-327-3627)

Loyola Physician Transfer Line (855) 4-LOYOLA (855-456-9652)

Administrative Office (708) 216-8643

See More Online

Department of Ophthalmology website







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