

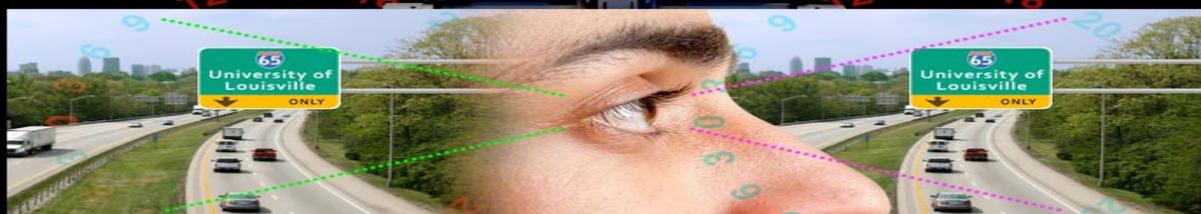
BETTER VIEWS



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SCHOOL OF MEDICINE

News from the Department of Ophthalmology and Visual Sciences

March 2018



Message from the Chair



It is my pleasure to introduce you to our revamped newsletter. With an outstanding tradition of teaching and education, the Department of Ophthalmology & Visual Sciences (DOVS) and the Kentucky Lions Eye Center are proud to offer this newsletter to our alumni, patients, supporters, and colleagues in the ophthalmic community. These newsletters will deliver current information on efforts in education, patient care, research, and community involvement.

Our clinical faculty continues to grow with the addition of several new faculty members in recent years so that we now have 17 ophthalmology/optometric specialists. Each of the specialists hired over the years joins an outstanding clinical faculty that includes seven physicians recognized as 2014 Best Doctors in America. Our clinical faculty will continue to expand our expertise and serve patients while assisting in teaching our residents.

The Department also continues to make strides in its educational efforts, with 12 residents and five fellows currently completing post-graduate work. In addition, the DOVS Alumni Council, under the direction of Sahana Vyas, MD, has begun hosting alumni receptions at various conferences and symposia. It is our hope you will attend these receptions as they are planned — and that you may consider joining the council in order to help plan them. As a result of this group's phenomenal efforts, nearly \$7,000 was raised for resident education this year. Thank you to everyone who supported this important effort! In the following pages, you can learn more about our promising residents and fellows and how they are coming along in their work.

Research continues to make exciting advances in the areas of Retinitis Pigmentosa, age related macular degeneration, and other eye diseases. Currently, the Department has several National Institute of Health and Department of Defense grants funding these research efforts, as well as unrestricted grant from Research to Prevent Blindness (NYC, NY), with supplemental funding coming from individuals, corporations, and other foundations.

You will also see in this newsletter various ways the Department is delivering eye care to underserved communities, such as rural areas in Western Kentucky, the West End Boys School, Home of the Innocents, and Louisville's refugee population.

For additional information on the Department of Ophthalmology & Visual Sciences, please read on and, as always, feel free to contact me should you have any questions.

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Our Tripartite Mission

Deliver excellent eye care, train eye doctors of the future, and perform research leading to the cure of blindness.



Making Moves

Dr. Maureen McCall gave an invited address entitled, “Diverse Glycinergic Receptor Subunits & Retinal Ganglion Cell Visual Function” at the International Conference “Vision and Visions: Current Concepts and Future Challenges of Retinal Research” in October in Germany.

Dr. Bart Borghuis gave an invited address entitled, “Understanding Excitatory and Inhibitory Synaptic Mechanisms in Starburst Amacrine Cell Direction Selectivity” at the international conference “MotionVision: Circuits, Computations, and Behavior” from October 30 - November 1 in Ashburn, VA.

Dr. Henry Kaplan, gave several invited addresses entitled, “The Role of Glucose in Cone Photoreception Rescue in RP” at the Annual Meeting of the American Society of Retinal Specialists in Boston from August 11 - 15, at Peking Union Medical College Hospital in Beijing, China from August 18 - 24, at Indiana Academy of Ophthalmology in Indianapolis, IN from September 14 - 15, and at the Annual Meeting of the Retina Society in Boston from October 4 - 6.

Jazz-4-Sight

Join us April 7th for Doc Severinsen in concert featuring the UofL Jazz Ensemble. Concert tickets are available for \$140, which includes dinner and a silent auction. To attend the concert only is \$50. The concert and gala will benefit the Department of Ophthalmology Pediatric Division.

For more information or to purchase tickets, visit uofl.me/severinsen



Research

Our visual sciences community came together on September 6, 2017 for our first Vision Sciences Retreat at UofL. The visual sciences community at UofL continues to expand and has become one of the largest in academia. Our faculty and their research efforts are housed in the Departments of Ophthalmology & Visual Sciences, Anatomical Sciences & Neurobiology, Biochemistry & Molecular Genetics, Pharmacology & Toxicology, Psychological & Brain Sciences, and Bioengineering. We receive financial support for our research from Federal agencies, mainly the National Institutes for Health (NIH) and Department of Defense, Research to Prevent Blindness (NYC, NY), pharmaceutical companies, and foundations.

The retreat included guest speakers from our other various departments and a keynote address by Dr. Jose-Alain Sahel, Chairman at University of Pittsburgh, on cone-directed strategies in retinal dystrophies. Fifteen laboratories presented a brief synopsis of their research interests and scientific expertise.

As a follow up to the retreat, the Visual Sciences Research Collaborative Group met to discuss several initiatives to enhance research efforts. This includes submission of a NIH core grant proposal in 2018, a NIH training grant proposal to support graduate students and postdoctoral fellows, and collaborative research projects.

“The visual sciences community at the University of Louisville is in an exciting growth phase with a bright future,” notes Dr. Henry Kaplan, Evans Chair of Ophthalmology & Visual Sciences and Director of the Kentucky Lions Eye Center, “and great opportunities lie ahead.”

Residents Corner



Congrats, Dr. Gross!

Joshua C. Gross, MD, a first-year resident, presented his research at the annual meeting of the Association of University Professors of Ophthalmology (AUPO) in January. Dr. Gross presented on the association between reduced blood flow in the retina and a more rapid progression of open-angle glaucoma in patients with diabetes mellitus.

Open-angle glaucoma is the second leading cause of blindness worldwide and is expected to affect three million Americans by 2020. Dr. Gross found that diabetic open-angle glaucoma patients had reduced retinal blood flow and experienced faster optic nerve and visual field deterioration than glaucoma patients without diabetes.

“Dr. Gross’ research and presentation were excellent,” says Dr. Kaplan, Department Chair, “and we are honored to have him serve as one of only five residents nationally invited to present their research at the prestigious AUPO annual meeting.”



Seeing the Positive



In 2014, Carol Martin, vice president for Korrekt Optical, was walking downtown when she slipped on a patch of ice and fell head first into the curb. “I felt pretty bruised up, “ she says, “but it was nothing compared to the pain I felt the next day.” Carol went to the ER and was diagnosed with an optical floor blowout fracture; she was referred to the Kentucky Lions Eye Center, where she saw Dr. Bill Nunery. Initially, an implant was used for facial reconstruction, but Carol’s body immediately began rejecting it. “I called after a few hours,” says Carol, “and Dr. Nunery immediately returned my call. He told me to text a photo to him. When he saw it, he asked me to return to his office.” Carol underwent reconstructive surgery of the area below her eye.

“In the end and after three procedures, Dr. Nunery was able to save my vision,” says Carol, “and I felt a debt of gratitude to him and his wife, who assisted in my plan of care.” Carol wanted to repay the Kentucky Lions Eye Center, and given her role at Korrekt Optical, she knew she had the opportunity to help.

While at the Center as a patient, Carol noticed other patients around her, many of whom were struggling to pay for their lenses and frames. Carol worked with Korrekt Optical to donate up to 144 pairs of glasses to individuals with need. The program, now in its third year, has donated frames and lenses to 243 patients. Patients receive a voucher from the Kentucky Lions Eye Center demonstrating their need, and visit a Korrekt Optical store to pick out a pair of glasses. “We allow them to choose from a wide array of styles, send them to our lab with their prescriptions, and create happy patients able to see with quality eyewear,” says Carol. “I underwent a horrific experience,” she adds, “but thanks to Dr. Nunery, my vision was saved and I was able to see the positive in all this by helping others also benefiting from the Kentucky Lions Eye Center.”

If you know an adult in need of glasses, call (502) 588-0550 to schedule an appointment. For children, please call (502) 588-0551.

Where to go?

Did you know your eye physicians are available at:

Kentucky Lions Eye Center
University of Louisville
301 E Muhammed Ali Blvd
Louisville, KY 40202
Adults: (502) 588-0550
Pediatric: (502) 588-0551

The Springs Medical Center
6400 Dutchmans Pkwy #310
Louisville, KY 40205
(502) 742-2848

Old Brownsboro Crossing
Medical Plaza II
9880 Angies Way #330
Louisville, KY 40241
Pediatric: (502) 588-2552

Elizabethtown Health Center
1239 Woodland Drive #114
Elizabethtown, KY 42701
(270) 506-4087

Kosair Children's Outpatient
Center
720 Second Ave #102
Bowling Green, KY 42101
(270) 793-9803

The Springs Health Centre
2200 E Parrish Ave
Building B #101
Owensboro, KY 42303
(270) 663-1069



Keep an Eye On It

Elizabeth Lewis felt a little awkward on her first day after summer vacation. As a teacher walking into her classroom, she knew the sty that had developed on her eyelid was distracting. She visited an optometrist her friend recommended and learned that the sty was nothing to worry about, but that the freckle in her eye needed to be watched. Elizabeth was at first confused. "I didn't know freckles appeared in the eye," she says. She eventually thought nothing of it and kept getting her annual checkups. The freckle eventually grew and her doctor recommended she see a specialist. Elizabeth saw a physician her optometrist recommended but wanted a second opinion. Her stepsister, a pediatrician, was friends with the Kentucky Lions Eye Center's Dr. Aparna Ramasubramanian and referred her for a visit. Dr. Rama, as she is affectionately known by her patients, diagnosed Elizabeth with uveal melanoma, a form of eye cancer. Elizabeth decided to continue seeing Dr. Rama because of the care she initially provided.

Elizabeth underwent ocular radiation treatment for four days and then received follow up injections. "Dr. Rama was always accessible," says Elizabeth. "If something wasn't right or I was concerned, I would text her and she would put me at ease." When she developed Dry Eye Syndrome from the injections, Dr. Rama referred Elizabeth to a specialist at Kentucky Lions

Eye Center who was able to preserve her sight through specialized eye drops. "This specialized treatment from a team of physicians saved my eye sight," Elizabeth exclaims.

Three years later, Elizabeth is a cancer survivor. "I undergo regular liver scans and chest x-rays, since uveal melanoma is known to metastasize to these areas," says Elizabeth, "but it doesn't slow me down." She is full of enthusiasm and enjoying life to the fullest, whether its reading, traveling,



Elizabeth recommends regular eye check ups

volunteering, or helping others through her career as a life coach.

"I am grateful Dr. Rama saved my vision," says Elizabeth. "As we age, our sight naturally worsens. It's important to our eye health to see an eye doctor. You have to keep an eye on it," she says with a laugh.

To schedule your patient visit at the Kentucky Lions Eye Center, call 502-588-0550.

Kentucky Lions Eye Center

Did you know the Kentucky Lions Eye Center has 30,000 office visits per year and sees approximately 27,000 patients within that same time frame? The clinic serves adults and children and includes ophthalmologists and optometrists focusing on various specialties, such as uveitis, Retinitis Pigmentosa, age-related macular degeneration, cataracts, retinoblastoma, and diabetic retinopathy. The clinic is one of only five full service eye cancer clinics in the country and hosts one of the only low-vision clinics in Kentucky. New patients are being accepted. Please call (502) 588-0550 for adults and (502) 588-0551 for children.



Community

Toni Ganzel, M.D., Dean for the University of Louisville School of Medicine, has several priorities for the School, one of which is to deliver healthcare to the broader community through increased partnerships in underserved areas. The Department of Ophthalmology & Visual Sciences has fully embraced this initiative.

Throughout 2017, several ophthalmologists and optometrists provided eye screenings at the Home of the Innocents, the West End Boys School, and Kentucky Refugee Ministries. In September, physicians, residents, and fellows from the Department met 149 high school students for the medical school preview at the science museum, a part of Research! Louisville, an annual celebration of health-related research that seeks to promote excellence in and awareness of health research.

Students participated in color vision tests including checking their own eyes and stereovision tests, which checks for depth perception. Demonstrations included examination of the retina, a discussion of eye diseases, and a wet lab.

In 2018, the Department of Ophthalmology & Visual Sciences will again conduct eye screenings at Home of the Innocents for their Back to School celebration and will partner once more with Kentucky Refugee Ministries. In addition, the Department will provide eye screenings to 300 children at Camp Herndon, a summer camp program in Central Kentucky serving children and youth with diabetes.



Students observing a demonstration.

“It is an absolute privilege to be able to help people as an ophthalmologist.”

- Dr. Niloofar Piri

Meet the Residents: Dr. Niloofar Piri



Niloofar Piri, M.D. is a second-year resident with a unique journey unlike many of her peers. Dr. Piri grew up in Iran and attended the most prestigious medical

school in the country, Tehran University of Medical Sciences, straight out of high school. She took a competitive exam and ranked 27th out of millions, shortening her 8-year journey into 7, including an 18-month internship.

After graduation, she completed her residency at Farabi Eye Hospital. “In my role, I served thousands of patients and completed hundreds of surgeries daily,” says Dr. Piri, “which made me a confident ophthalmologist.” After her marriage and completing one year as a general ophthalmologist in Iran, she applied for her dream specialty, retina.

She completed a surgical fellowship and created the uveitis clinic while continuing to work hard and see large numbers of patients. She and her husband decided to come to the U.S. and she chose UofL. Dr.

Piri’s next step is to take a two-year fellowship in uveitis and retina.

The first time she saw the retina of a patient with an indirect ophthalmoscope, she stopped breathing. “What amazed me,” she shares, “is that this is the only part of the body you can look at and see the vessels without cutting the tissue, and I realized that this is what I want to do.”

Dr. Piri participated in the Women in Ophthalmology Symposium in August, where she presented a patient she saw at the Robley Rex VA Medical Center with a unique inflammatory reaction inside the eye. “The inflammation was actually metastatic cancer to the eye,” explains Dr. Piri, “the CT scan showed the source to be from his lung, and he began chemotherapy.”

For Dr. Piri, helping patients such as this veteran is the most satisfying moment. “To see a smile on the patients face,” she says, “reminds you that it is an absolute privilege to be able to help people as an ophthalmologist.”

Faculty Promotion

Congratulations to Qiutang Li, PhD., on her upcoming promotion to professor within the Department. Her appointment will take effect on July 1. Dr. Li earned her Ph.D. from Washington University in St. Louis in 1997 and also holds a BS and MS from Peking University in Beijing, China. Dr. Li’s research interests are focused on addressing biological and clinical questions that have direct relevancy to the understanding, prevention, and treatment of eye disease. Her current research focuses on understanding the link between proteins and their implications on eye disease, such as age-related macular





How You Can Help

Follow Us on

Facebook!

Social Media is the way of the future. Follow our department Facebook page for tips, research projects, and instant updates about the department.

@ULOphthalmologyVisualSciences



The Department of Ophthalmology & Visual Sciences is a thriving department and the UofL Vision Science Center is one of the top 15 nationally in research funding. Research funds are limited, have steadily decreased, and do not cover all research costs. Additional revenue comes from fees for service, such as patient care, which also does not fully fund Department expenses. This is why philanthropy is important.

Your gifts make a difference and support important initiatives, such as resident education, eye care for underserved communities, and continuing medical education for physicians looking to stay on the cutting edge of their fields for the care of their patients.

Current funding is needed for:

- ◆ Resident education;
- ◆ Renovations for resident wet lab;
- ◆ Low-Vision Clinic; and,
- ◆ Research for Age-Related Macular Degeneration, Retinitis Pigmentosa, Glaucoma, and Uveitis

Thank you to everyone who supports the Department and the Kentucky Lions Eye Center. To learn how you can further support the Department, please contact Telly McGaha, Senior Director of Development, at (502) 852-3034 or telly.mcgaha@louisville.edu.

Kentucky Lions Eye Center

University of Louisville
301 E. Muhammad Ali Blvd.
Louisville, KY 40202-1594

Adult Clinic
(502) 588-0550
Pediatric Clinic
(502) 588-0551