DRS. BENNETT AND MAGUIRE NAMED 2015 HOSPITAL HEROES

By Rebecca Salowe

On Friday, March 20, 2015, Dr. Joan Bennett and Dr. Albert Maguire were celebrated at the 14th Annual Penn Presbyterian Medical Center (PPMC) Fundraising Gala as PPMC’s Hospital Heroes of 2015.

Every year, PPMC selects a Hospital Hero - someone who embodies the spirit of the University and whose incredible work deserves special recognition. Last year, PPMC posthumously honored Dr. John P. Pryor, a gifted trauma surgeon who was killed in action in Iraq. Drs. Bennett and Maguire are the first co-Hospital Heroes to be honored.

Drs. Bennett and Maguire’s work on gene therapy is revolutionary and far-reaching. Just a decade ago, gene therapy was a field with few promising research results. Despite all obstacles, Drs. Bennett and Maguire began to pursue genetic approaches to restore vision in blinding conditions.

First, they showed that vision could be restored in dogs blind from Leber’s Congenital Amaurosis (LCA) with mutations in the RPE65 gene. Clinical trials in patients for LCA due to RPE65 mutations followed, with similarly astounding results. Efficacy was reported in all twelve subjects, including five children. As a result, children who were once blind could ride their bicycles, read books, play sports, and lead more normal lives. Even adults who were severely visually impaired for decades showed clinically meaningful improvements in vision and greatly gained independence.

In 2014, Drs. Bennett and Maguire became the co-Directors of the newly created Center for Advanced Retinal and Ocular Therapeutics (CAROT). This $30 million institute seeks to facilitate and expedite the development of novel therapies for retinal and ocular disorders.

"Because of Joan and Al, blind people can see," said J. Larry Jameson, MD, PhD, Dean of the Perelman School of Medicine. "It’s truly a biblical story. And yet it is coming to reality through their persistence and their creativity over many decades."

In addition to their extraordinary scientific and clinical accomplishments, Drs. Bennett and Maguire are incredibly humble, hardworking, and embarrassingly kind. Their deep care about the betterment of patients’ lives truly embodies the mission of the University.

“They are admirable people, remarkable scientists, and tremendous caregivers and physicians,” said Joan O’Brien, MD, Chairman of the Ophthalmology Department.

All of these accomplishments contributed to their selection as the 2015 Hospital Heroes. The March 20th event honoring Drs. Bennett and Maguire was an enormous success, with more than 250 people attending. This event, organized by Maggie McIntosh Event Design, took place at the Ve in Philadelphia and featured the theme “I love Philly.” The reception hall was filled with statues of Rocky, a replica of the Statue of Liberty bell, and even a Ben Franklin impersonator.

Programming for the event included welcome remarks from Michele Volpe (Chief Executive Officer of PPMC), and a beautiful tribute video featuring Penn Medicine leadership. The tribute video was lovely and touching, highlighting not only the high impact research of Drs. Bennett and Maguire, but also their unique personalities, kindness, and funny memories. Drs. Bennett and Maguire also made a few remarks before everyone returned to the party. The evening ended with a surprise, when 20 mourners came out playing music, dancing, and handing out umbrellas.

The event raised over $180,000, which will benefit Molecular Ophthalmology research at the CAROT Center. Special thanks go to our top sponsors, which includes the Heart Institute of Southern New Jersey and John J. BiaNiaRosa, MD, JD and Clare D’Agostino, Esq.

As a Department, Scheie could not be more proud of Dr. Bennett and Dr. Maguire. They gave patients the gift of sight, one of the most precious gifts anyone can receive.

“Eyes are such an important organ,” expressed Marzor Ahantari, Director of ONS Imaging at CAROT. “With eyes, we feel so many things. Happiness and sadness…seeing your mother’s face…seeing the stars for the first time. It’s all just so much that anyone could give.”

Scheie BRINGS Glaucoma Screenings to Philadelphia

By Rebecca Margolis

Beginning in the summer of 2014, Dr. Joan O’Brien’s Glaucoma Genetics Study (GGS) team from the Scheie Eye Institute hit the road to deliver clinical services to the Philadelphia community. The team began conducting free glaucoma screenings throughout the city, with the goal of raising awareness of glaucoma and reaching people who may not realize they are affected by or at high risk for the disease. Glaucoma screenings and early treatment are essential to preventing irreversible blindness.

So far, patients have been screened at churches, retirement centers, and health fairs throughout North and West Philadelphia. The team transports all necessary equipment for a comprehensive glaucoma exam to each site in a van. This van was purchased with a generous donation from the Board of Women Visitors and has proven instrumental in Scheie’s ability to reach far corners of the Philadelphia community.

continued on page 7
chair’s corner

Dear Friends,

I am looking forward to seeing many of you at the 141st Anniversary Meeting in late April. This event has become one of my favorite weekends of the year. From learning about cutting-edge research in ophthalmology, to catching up with old friends, to taking over the dance floor at the Rittenhouse Hotel, I can promise you that this weekend never disappoints. This year, our Kozar Speaker will be Stephen Orlin, MD and our Inaugural Honored Alumni Speaker will be Doug Cameron, MD. Both are truly outstanding speakers. I encourage all alumni to attend, if possible!

I would also like to briefly highlight another important spring event: the Presbyterian Hospital Heroes celebration, which took place on March 20. We are so proud of Dr. Jean Bennett and Dr. Albert Maguire, who were chosen as the Hospital Heroes of 2015. We discuss their revolutionary approach to gene therapy and the success of the event itself in our newsletter article, but I would like to add a few personal comments about Jean and AI. They are not only extraordinary as scientists, but are also idealistic, incredibly hard-working, and unfailingly kind. They have a sincere desire to collaborate not for personal recognition, but for the deeply felt belief that they should improve patients’ lives as quickly and as completely as possible. This has involved both scientific and surgical bravery and daily self-sacrifice. I cannot imagine anyone more deserving of the title “Hospital Heroes” than Jean and AI.

I would also like to acknowledge Dr. Samuel Jacobson, Dr. Artur Cideciyan, and all the other scientists at Scheie who have made this progress possible. Their research at the Center for Hereditary Retinal Degenerations has led to a greater understanding of retinal degenerations and paved the way for treatments for these incurable diseases.

I hope you all are enjoying the beginning of spring!

All my best wishes,
Jean O’Brien

DEPARTMENT OF OPHTHALMOLOGY
TO CELEBRATE 141 YEARS

By Aishah Raquib

The Scheie Eye Institute Alumni Association is pleased to host the 141st Anniversary Meeting and the 43rd Anniversary Scheie Eye Institute Alumni Event, on Friday, April 24th and Saturday, April 25th. This event will bring alumni together for a celebratory weekend filled with academic presentations, reunions with old friends, and dancing at the Rittenhouse Hotel.

This CME accredited conference features presentations from current faculty, residents, alumni, and guests on topics of interest in the subspecialties of cornea, ocular plastics, glaucoma, pediatric, retinal degeneration, and neuro-ophthalmology. The inaugural honored alumni lecture will be delivered by J. Douglas Cameron, MD, MBA. Our very own Stephen E. Orlin, MD will be the 10th Annual David M. Kozar Memorial lecturer.

Dr. Cameron currently serves as the Director of Research, Chief of the General Clinic, and Chief of the Inpatient Consultation Service in the Department of Ophthalmology and Visual Neurosciences at the University of Minnesota. He completed his fellowship in Ophthalmic Pathology in the Laboratory of Ophthalmic Pathology at the Scheie Eye Institute from 1972 to 1974. His lecture will be titled, “The 80-year Experience with Optic Nerve Glioma at the Armed Forces Institute of Pathology.”

Dr. Orlin, Associate Professor of Ophthalmology, serves as the Director of the Cornea Service, Chief of the Cornea Service, and Co-Director of the Refractive Surgery Service at the Scheie Eye Institute. Dr. Orlin completed his residency and fellowship at Scheie from 1985-1986. His lecture will be titled, “A Century of Corneal Surgery: Facts, Fads, and Fantasies.”

Scientific and clinical case presentations will be offered Friday, April 24th and on Saturday morning, April 25th. Residents, fellows, and current and former faculty members are warmly welcomed to attend this event. Our hope is that this conference provides attendees with the opportunity to learn about recent advances in clinical and academic Ophthalmology, as well as time to reunite with old friends and meet new ones.

There is no registration fee to attend this two day CME accredited conference, which will be held in the lower level of the Scheie Eye Institute, David M. Kozar Auditorium.

Finally, there will be an anniversary dinner on Friday evening, April 24th, at 7:00pm, at the Rittenhouse Hotel in Philadelphia. We look forward to seeing you there!
Scheie Celebrates African American Heritage Day

By Laura O’Keefe

On February 28, 2015, Scheie hosted its annual African American Heritage Celebration in honor of Black History Month. The celebration was founded over twenty years ago, but had not taken place for several years until Cheryl Nathaniel, a technician at Scheie, resurrected it in 2012. The celebration featured guest speakers and entertainment, an incredible buffet of homemade food, and even a little shopping!

The event began with lunch, served outside Kozart Auditorium. Seven tables were covered with a mouth-watering cornucopia of food, including juicy jerk chicken, red beans and rice, turkey wings, mac and cheese, and a smattering of cakes, cookies, and ripe fruit for dessert. Two other tables were filled with even more food filled the library, referred to as Hattie’s Kitchen, after Hattie Greene, who traditionally organizes this part of the event. While waiting in line for food, attendees browsed selections of jewelry and accessories for sale and contemplated the African artwork hanging on the walls.

Once everyone had a plate and took a seat in the auditorium, Takeshia Edwards, Master of Ceremonies, took the stage to introduce the day’s first speaker, Dr. Jean O’Brien. Dr. O’Brien, Chairman of the Ophthalmology Department, discussed the black community’s fight for civil rights. Her talk focused specifically on the Alabama bus boycott and Reverend Fred Shuttlesworth, who faced beatings and bombings with peace and compassion, working tirelessly for Civil Rights throughout his life.

Next, Dr. Kempen, Professor of Ophthalmology and Epidemiology at Scheie, spoke about his work for the Sight for Souls foundation. Dr. Kempen is working alongside Dr. Demitse Tadese of Ethiopia and Dr. Scott Lawrence of UNC Chapel Hill to establish the Discovery Eye Institute in Addis Ababa, the capital of Ethiopia. Dr. Kempen believes in the old adage, “Give a man a fish, and you will feed him for a day. Teach a man to fish, and you will feed him for a lifetime.” His goal is to develop a center of excellence which provides access to clinical care, while also offering advanced training in ophthalmology to local residents.

Eleven-year-old Nyla McGlai, the granddaughter of Scheie’s own Cheryl Nathaniel, spoke next. Nyla read her own interpretation of the famous “I Have a Dream” speech, which imagined a future free of judgment based on skin color, nationality, and other inimical markers of race. She called for her generation to make their future all it could be. The confidence and poise exhibited by such a young person speaking in front of a large crowd evoked great admiration and respect among all attendees.

“My granddaughter, Nyla, has been singing since she started talking,” said Cheryl Nathaniel. “I am so proud of her many accomplishments at her tender age of 11. We are so amazed at her poise and confidence while sharing her many talents with others.”

After Nyla’s speech, Presty GI’s Paula Holloway sang “I Believe in You and Me.” Pearl Cowgton also took the stage to sing spiritual songs throughout the event. Both singers had beautiful powerful voices, and were met with standing ovations from the crowd.

One of Scheie’s own patients, the eighty-year-old Ms. Nedra Duval, then performed stand-up comedy with jokes from the famous Black comedian, Jackie “Moms” Mabley.

Reverend Dr. Kevin R. Johnson, formerly of the Bright Hope Baptist Church and currently President/CEO of Opportunities Industrialization Center of Philadelphia, gave the next presentation. He has previously spoken at the largest Protestant Church in the world, and did not disappoint with his appearance at Scheie. Dr. Johnson made a very impassioned speech, full of imagery, which flowed from the pain and injustice experienced by the first people brought from Africa as slaves to his own experience struggling to be accepted by Morehouse College. He was eventually accepted and went on to a truly impressive career of community empowerment and economic development. He helped to develop housing for Temple University, invested with United Bank (in Philadelphia owned and operated African-American banks), and continues to write for the Philadelphia Tribune, the oldest African American newspaper.

Shesha Hollin concluded the event with a heartfelt speech to the Scheie family, thanking everyone for their hard work throughout the year. So many people worked to make the day a success, but special thanks is merited for Laura Ball, Phyllis Robin, and Cheryl Nathaniel, who began planning for this event months ago.

“What makes it special is that everyone participates. They give their time, they give donations, they prepare a dish… everyone contributes,” Laura explained. “It is this culture of teamwork and giving that makes Scheie truly feel like a family.”

OPTOMETRY GROWS AT SCHEIE

By Gideon Whitehead

Optometry at the Scheie Eye Institute has experienced great growth in past years. Each day, dozens of patients have their eyes examined and their prescriptions updated by one of our three optometric physicians. Drs. Ranjoo Prasad, Aloha Fleming, and Stacey Cesarano are highly-trained specialists in the area of vision correction.

Dr. Ranjoo Prasad has been here the longest of the three optometrists. In addition to her responsibilities as an optometrist, she serves as the Director of the Scheie Low Vision Center at the Rasten House.

“At the Low Vision Center, I am actively involved with the functional part of the patient’s vision, as opposed to just treating the disease,” Dr. Prasad explained.

Dr. Prasad helps patients with disease-related vision loss learn to live with their difficulties. For example, she teaches patients how to compensate for incomplete visual fields so they can pursue the everyday activities of life. Dr. Prasad also works in a variety of community settings such as the University of Pennsylvania student-run United Community Clinic in West Philadelphia, where she performs free refractions once a month.

Dr. Aloha Fleming began working at Scheie in April 2013. A native of Philadelphia, she spent several years working at a private practice in Florida before returning to Philadelphia to work here at Scheie. She originally planned to return to Philadelphia as a private practitioner, but, when hearing of the open position at Scheie, decided to apply. She thought it would provide the perfect opportunity to focus on her favorite part of optometric practice: performing refractions for healthy patients. She also hoped to work at a research institution.

“Having research right here and knowing what is happening on that front is so exciting,” she said.

The third and newest member of the Scheie optometry team is Dr. Stacey Cesarano, who arrived at Scheie in November 2013. Prior to Scheie, she worked for two years at a Lasik vision center providing counseling for patients interested in refractive surgery and managing their postoperative care. Dr. Cesarano enjoys the variety of her experiences here at Scheie.

“This is the ideal experience for me as an optometrist because I can perform routine care and help people to see well,” she said.

Dr. Cesarano often consults with specialists in the Department and refers her patients for follow-up with an ophthalmologist. This kind of collaboration between the optometry team and the ophthalmologists is ideal for patients at Scheie.

Our optometry doctors are also supported by an expert team of opticians and contact lens specialists. The opticians assist people in selecting frames and lenses in the Scheie Optical Shop and provide patients with information about the options available to them in prescription eyeglasses, such as types of lenses, lens coatings, and frames. They also ensure that the frames fit the patient properly to maximize comfort. The contact lens specialists assist patients in finding the right kind of lens for their eyes. They are adept at determining what kind of lens to use in complicated cases such as keratoconus or other corneal disorders.

Anyone scheduled for an optometric visit at Scheie can be assured that they will receive the finest care available. Having such a large and varied team means that we are able to offer vast expertise in every area of eye health, including vision correction for healthy eyes. The Scheie optometry team also works in satellite facilities in Radnor, PA and at the Perelman Center for Advanced Medicine, which offers patients the ability to see physicians in their own neighborhoods.
CHAIRMAN JOAN O’BRIEN
gives LANDMARK
deSCHWEINITZ LECTURE

By Kateylen Gordon

Joan O’Brien, MD, Chairman of the Department of Ophthalmology at the University of Pennsylvania, recently gave the 77th annual George E. deSchweinitz Lecture. Her lecture, which took place on November 20, 2014 at the College of Physicians, was one of the best-attended in the history of the lecture series, drawing ophthalmologists from the tri-state area.

The College of Physicians, the oldest medical professional organization in the country, created the lecture series in 1936. It currently stands as the oldest lecture series in the United States. Named for Dr. George E. deSchweinitz, a world-renowned ophthalmologist and first Chairman of the Department of Ophthalmology at UPenn, the lecture series recognizes the leading contributors to the field of ophthalmology.

With her nearly 200 publications, recent induction into the Institute of Medicine, and numerous other recognitions, Dr. O’Brien is most deserving of this honor. An ocular oncologist by training, Dr. O’Brien pioneered much research on the genetics of retinoblastoma and uveal melanoma. In fact, she contributed to the confirmation of genes that are implicated in both disorders (RB1; GNAQ/ GNA11). Today, Dr. O’Brien leads an $11.25 million ROI grant from the National Eye Institute on the genetics of glaucoma in African Americans.

Continuing the lecture series’ history of diverse topics in ophthalmology, Dr. O’Brien’s lecture focused on the role of genetics in ophthalmic diseases. She spoke on advances in our understanding of the genetic components of glaucoma, her past and current research efforts, and the future role of genetics in diagnosing and treating diseases.

“She is one of the most sought-after speakers in the country—her lecture on ocular genetics was outstanding,” said Dr. Michael Sulewski, one of Dr. O’Brien’s colleagues at UPenn and the Chair of the Section of Ophthalmology at the College of Physicians, who has organized the lecture series for the past eight years.

Dr. O’Brien concluded her lecture with a discussion of her Primary Open-Angle African American Glaucoma Genetics study. She began by using the metaphor of “A Tale of Two Cities” to put her project in context of the city of Philadelphia. While Philadelphia is a hub for medical advancement, these centers serve one of the most impoverished populations in America. Her study aims to not only better understand the genetic risk factors for glaucoma in African Americans, who are at five-fold greater risk for developing the disease, but also address the socio-economic disparities that affect this population’s access to the ophthalmic care.

Dr. Prithvi Sankar, a co-investigator on the study also in attendance at the lecture, confirmed this: “It is inspiring to see patients so willing and excited to engage in research aimed at aiding their community, and likewise an investigator so dedicated to elevating the existing disparities in care.” Glaucoma screenings at Scheie Eye Institute and outreach in the community have been successful in fulfilling this goal.

“We want to get people in the prime of life. We want to catch this when it’s more reversible,” explained Dr. O’Brien. “Once we get these genotypes from African Americans, they can be re-analyzed for all kinds of other types of diseases that probably are different in African Americans.”

Dr. O’Brien joins the distinguished ranks of 77 years of deSchweinitz lecturers, serving to enhance the prestige of the lecture series and add to her long list of achievements. According to Dr. Sulewski, “Professor deSchweinitz would have been very proud.”
Dr. Brucker Receives Prestigious Retina Honor

By Anna Sagaser

Last September, Dr. Alexander Brucker, Professor of Ophthalmology and Chief of the Retina and Vitreous Service of the Department of Ophthalmology, was named the 2014 recipient of the J. Donald M. Gass Lectureship by The Retina Society. The award honors Dr. Brucker for his commitment and immense contributions to teaching, research, and patient care in the field of retina and vitreous diseases. Dr. Brucker was named the 2014 recipient of the Lectureship during the annual Retina Society Meeting in Philadelphia, where he gave a lecture titled "In Memorium: the Art of Suterlal Bucking.

This Lectureship was inaugurated in 2006 in memory of Dr. Gass and in honor of his impact on ophthalmology. "I was amazed and flattered to be included in the list of prestigious individuals who have been recipients of this award in the name of Donald Gass," Dr. Brucker said. "He was greatly admired and was a leader of the retina community. To be given that honor was very humbling." Dr. Brucker joined the University of Pennsylvania as an Assistant Professor of Ophthalmology in 1977, after receiving his medical degree from New York Medical College, his residency training at the Friedenwald Institute of Maryland General Hospital, and his fellowship training at The Wilmor Ophthalmological Institute of the Johns Hopkins Hospital.

Dr. Brucker finds the combination of working in both clinical care and research extremely stimulating. "When you see patients going blind from a disease and all of the sudden you can prevent blindness, that makes an impact on everyone: the patients, society, and yourself. It's very rewarding to be able to make a difference," he said.

Dr. Brucker's current research focuses on three main areas: macular degeneration, diabetic retinopathy, and vascular occlusive diseases. "The Diabetic Retinopathy Clinical Research Network, the DRCR.net, has been the focus of my attention for several years," he explained. "I have been fortunate in that I've been intimately involved with the organization, its development of clinical trials, and its accomplishments. We are constantly running clinical research trials in diabetes with the DRCR.net."

Dr. Brucker has spent over 35 years conducting research on age-related macular degeneration. Many new treatments have been discovered for the wet form of macular degeneration. Recently, Dr. Brucker also began focusing attention on clinical trials related to the dry form of macular degeneration. Because there are no treatments for dry age-related macular degeneration, the opportunity for helping untreatable patients is enormous.

"Macular degeneration is an epidemic throughout the world—as people live longer, a larger portion of the population is going to have macular degeneration."

Dr. Brucker has been instrumental in building Penn's Retina Service and has served in many leadership positions at Penn. He served as Chairman of the Pharmacy & Therapeutics Committee, Clinical Practice Management Committee, and Operating Room Committee. He also conducted admissions interviews for the University of Pennsylvania School of Medicine for more than ten years.

In addition to his clinical practice, research, and leadership roles, Dr. Brucker is heavily involved with teaching. He is largely recognized as an outstanding teacher and role model for many medical students, residents, and fellows. Dr. Brucker stills remains in touch with many of his past students.

"I believe that one of the most rewarding parts of my career at Penn has been watching the maturation of the residents and fellows who have come through the program," he said. "There are lots of academic accomplishments that are very rewarding, but they take second place to being able to mentor and to guide young ophthalmologists into the community."

Dr. Brucker has also contributed greatly to the field of retina outside the Penn community. He has authored more than 100 research papers and serves as the Editor-in-Chief for RETINA, the Journal of Retinal and Vitreous Diseases, the leading journal focusing on retinal and vitreous diseases throughout the world. He also serves as the Editor-in-Chief for Retinal Cases and Brief Reports, as an editor of The Chinese Journal of the Ocular Fundus, and on the advisory board of the Asian Pacific Journal of Ophthalmology. Additionally, he served as President of the Macula Society, as Chairman of the Board of the Juvenile Diabetes Research Foundation of Philadelphia, and as a member of the Retina Society, the American Society of Retinal Specialists, and The Club Jules Gonin. Dr. Brucker has also been recognized for his leadership role as a voting member of the Food and Drug Administration's Ophthalmic Device Panel for seven years.

The J. Donald M. Gass Lectureship from the Retina Society is not the first honor that Dr. Brucker has received. He previously received the Golden Apple Award for outstanding teaching on three separate occasions, the Gass Medal from the Macula Society, and the Life Achievement Award from the Ophthalmic Club of Philadelphia. In addition, Dr. Brucker has been named one of the Best Doctors of Philadelphia by Philadelphia Magazine in each of its issues over the past 31 years. Dr. Brucker has also been invited to give numerous named Lectureships throughout the world.

However, Dr. Brucker was especially honored to give the Gass Lectureship at the Retina Society meeting right here in Philadelphia.

"This afforded me an unusual opportunity of having my entire family with me when presenting a named lectureship and receiving an important award," he explained. "I had my children and my grandchildren with me at this special time right here in Philadelphia. That was in itself a life-long dream and something that doesn't happen to many people."

Dr. Brucker is excited to continue teaching young ophthalmologists and pursuing his research and clinical efforts at Penn.

"Nothing that I have done has been done in a vacuum. All of my accomplishments have been achieved with the support of people around me. I'm extremely grateful to people such as Joan DuPont, Director of Clinical Research, and Shari Grand Drossner, one of my research coordinators, for their loyalty and dedication, which has enabled us to accomplish what we have accomplished in the area of clinical retina research. There are many other unnamed individuals who have contributed enormously to the work which we carry out here at the Scheie Eye Institute. It's a very exciting time. The Department is expanding, there's a tremendous amount of clinical and basic science research that's being done and generated in the Department, and the leadership under Dr. O'Brien has been instrumental in supporting young researchers and encouraging new ideas. For the Retina Service, we continue to grow, we continue to contribute to the Department's growth both in the clinical care of patients and in the areas of research and education, and we are very proud of what has been done under the present leadership moving forward."

From all of us at the Scheie Eye Institute, congratulations Dr. Brucker!
Words from Scheie Alumni President

Spring 2015 has arrived, and as the President of the Scheie Alumni Association, I am very excited for the 141st Anniversary Meeting, which will take place on April 24th and 25th. I would like to take a moment to congratulate Dr. Steven Orin, our 10th Annual David M. Koza Memorial lecture, on three points.

To begin, Steve has continued to put together a great Alumni meeting each year after year. The past few years have been reformatted with emphasis on the alumni and clinically oriented talks and cases. It has truly been a great meeting with wonderful energy! For those of you who have not been back to West Philly recently, I encourage you to visit the renovated facilities at Scheie, see old friends, and enjoy an enlightening weekend.

Secondly, Steve was recently honored by the Greater Philadelphia Ophthalmic Society with its Life Member award. It was a fun night with some great toasts and certainly well-deserved. Finally, as mentioned above, Steve will give the David Koza Memorial Lecture at the Alumni Meeting this year. Having been trained by both David and Steve, I know this will be a wonderful talk and tribute. I can picture David sitting in the second row, aisle seat with a plethora of questions and comments.

So, a big shout out to Dr. Steven Orin for all he does as a mentor, colleague, physician and friend. I look forward to seeing you all in Philadelphia!

Scott M. Goldstein, MD
Pediatrics & Adult
Oculo-Facial Plastic Surgeon
Tri-County Eye & Wills Eye Institute

Dr. Morgan Envisions the Future of Optic Research

By Melissa Homsher

Millions of people around the world experience vision loss and blindness from inherited retinal diseases. Although these diseases are rare, many have little or no treatment available and can lead to permanent blindness.

When a genetic error occurs, the cells in the back of the eye, which are responsible for converting visual signals to transmitting them to the brain, may develop incorrectly, function ineffectively, or even die. Because these changes occur in microscopic cell layers, it is difficult for physicians to determine which parts of the eye are affected and whether a treatment worked for individual patients. Dr. Jessica Morgan, Assistant Professor of Ophthalmology, is hoping to answer these questions through her research.

After completing her Bachelor’s degree at Wake Forest University in physics and mathematics, Dr. Morgan went on to earn her MS and PhD in Optical Engineering from the University of Rochester. Since then, she has worked as a Research Associate for the University of Pennsylvania and was recently promoted to Assistant Professor of Ophthalmology.

Dr. Morgan’s research focuses on the integration of cutting-edge technology into clinical care. Specifically, she uses high-resolution adaptive optics imaging to study the cells of the retina in patients with blinding diseases.

“The idea is that we can study the pathogenesis of retinal disease by taking high resolution images of individual cells over time,” she explained. “This way, when we can physically see the rod and cone cells responsible for the first step in the visual process, we can study disease progression at the cellular level.”

For patients suffering from inherited retinal diseases such as Choroideremia and Stargardt’s disease, this type of technology could change the way we diagnose and treat their illness. The technology also may have important applications for age-related macular degeneration.

“Many of these diseases currently do not have a known treatment, but we are entering an era where cellular and molecular treatments are possible,” Dr. Morgan said. “High resolution imaging allows us to study the effectiveness of treatment at the level of individual cellular structure and function.”

Dr. Morgan, in collaboration with Dr. Jean Bennett, is using this precise technology to study microscopic changes in retinal cell layers in patients receiving gene therapy for Choroideremia. This Phase III trial, available only at the University of Pennsylvania, replaces a defective retinal protein. Physicians hope that gene therapy can prevent cone cell death and restore the retinal pigment epithelium, which nourishes and supports photoreceptor cells.

Choroideremia runs in families, and patients travel from all over the world — as far as Belgium and Iran — to participate in research studies for this condition. Dr. Morgan is vital to the study of disease progression and the effectiveness of gene therapy intervention, as she is responsible for imagining the retinal cells to assess their structure and function before and after experimental treatment. In the future, researchers hope to apply this same technology to other blinding diseases.

“We have already seen success in another inherited retinal degenerative disease, Leber’s Congenital Amaurosis, using gene therapy. There are huge possibilities for the future of treatment in retinal disease,” Dr. Morgan explained.

Dr. Morgan’s research paves the way for the understanding and development of these life-changing treatments. As a whole, Scheie continues to make large strides in conducting ophthalmic research and changing the future of clinical care.

SAVE THE DATE

2015 Scheie Eye Institute Alumni Association CME Accredited Conference

April 24, 2015
7:30am – 4:30pm
Scheie auditorium, breakfast and lunch served
7pm
Dinner & Dancing at Rittenhouse Hotel

April 25, 2015
7:30am – 12:30pm
Scheie auditorium, breakfast and lunch served
**alumni spotlight**

**DR. DANIEL GOMBOS**

By Vikas Natesh

Dr. Daniel Gombos is a Professor and Chief of Ophthalmology at MD Anderson Cancer Center, with joint appointments at Baylor College of Medicine and the University of Texas Medical Branch, Galveston. After completing fellowships at University of California San Francisco (with Dr. Joan D’Errico) and St. Bartholomew’s Hospital in London, Dr. Gombos was recruited by MD Anderson as an ocular oncologist.

At MD Anderson, Dr. Gombos focuses on retinoblastoma and uveal melanoma. He helped to create the Retinoblastoma Center of Houston, a center-wide program that brings in resources of major healthcare institutions in Houston. As the clinical co-director for this center, Dr. Gombos has collaborated on several children’s oncology group protocols.

Dr. Gombos also built the uveal melanoma program at MD Anderson and brought in new technologies, such as Rhenium Plaques, for treatment. Plaques are radioactive implants sewn onto the surface of the eye, used to destroy uveal melanoma cancer cells.

"These plaques were very successful in Europe and allowed for salvage of the eye with less ocular toxicity," he explained.

In addition to working on surgical techniques for ocular cancer management, Dr. Gombos conducts prognostic testing for uveal melanoma using genetic expression profiling.

**SCHEIE HOSTS UVEITIS CONFERENCE**

By Nick Patel

On January 6, 2015, the Scheie Eye Institute rang in the New Year by hosting the second citywide uveitis conference. The conference featured grand rounds style case presentations on uveitis by residents and fellows from Scheie, Wills Eye, Drexel, and Temple. Delicious Mexican food was also served.

Dr. John Kempen from Scheie and Dr. Jessica Ackert from Drexel initiated the first uveitis conference in September 2014 at Drexel, with the aim of strengthening training opportunities for ophthalmologists and increasing the quality of care for uveitis patients in Philadelphia. This conference will continue to convene on a quarterly basis.

Treatment for uveitis often includes corticosteroid eye drops for superficially located inflammation. For sites of inflammation not susceptible to eye drops, steroid injections or systemic corticosteroids and rheumatoid drugs, if needed, can be used. If left untreated, uveitis can lead to many complications, including permanent vision loss.

"Holding periodic conferences creates an atmosphere of collaboration rather than competition among ophthalmologists and the area," said Dr. Kempen, the Chief of the Ocular Inflammation Service at UPenn. When Dr. Kempen first came to Penn in 2005, Philadelphia was the largest metropolitan area in the country without a "card carrying" uveitis specialist. Not only was he the first fellowship-trained uveitis specialist in Philadelphia, he also pioneered the first service in the city dedicated solely to uveitis inflammation.

Scheie resident Dr. Neelam Shah and retina fellow Dr. Harpal Sandhu also found the conference to be a valuable experience. Dr. Shah presented a case on pediatric necrotizing sicca, an instance of uveitis inflammation that had never before been reported in literature. She described the conference as "an informative opportunity to learn about rare conditions." Dr. Sandhu, who also gave a case presentation at the conference, similarly saw the event as a "tremendous learning opportunity to learn from the very best."

The next uveitis conference is scheduled to take place on April 22, 2015 at Temple University.

**Glucoma Screenings continued from page 1**

At each location, the GGS team sets up a mobile screening clinic, where a glaucoma specialist evaluates each patient. So far, these events have succeeded in screening and counseling over 140 patients. The team encourages provider-patient discussions focused on facilitating a better understanding of glaucoma's prevalence in the Philadelphia community, as well as answering questions about management and screening for the disease.

"When speaking to the people who come to our screenings, we emphasize the risk factors for glaucoma as well as the importance of getting yearly ophthalmology check-ups," explained lead research coordinator, Laura O'Keefe. "Because glaucoma does not initially affect visual acuity, many people with good vision don't bother to see an optometrist or ophthalmologist until significant vision loss has occurred. By educating at-risk people about the importance of regular screenings, we believe we can greatly impact some of these patients who may not otherwise see an ophthalmologist."

In addition to these community outreach events, GGS researchers have recently developed a free telemedicine clinic at Scheie with standard-of-care glaucoma screening tests.

Advertisements on SEPTA, newspaper ads, and flyers given to participants help to spread the word about these screenings and the importance of keeping up with regular ophthalmology exams. The team has screened 45 people in this clinic since November, with 14 patients receiving either a diagnosis of glaucoma or presentation suspicious for glaucoma.

"These screenings have been extremely effective in terms of identifying patients at risk for glaucoma and other diseases," Dr. Prithvi Sankar explained. "Other glaucoma specialists and myself take time to go through the information collected during screenings in depth and are able to make confident, informed decisions as to whether patients require urgent treatment or follow-up that can take more time."

Both the outreach events and the telemedicine clinic are services provided to lessen the burden of glaucoma and vision loss on the surrounding community. Participants of the screenings are also educated about glaucoma genetics research and given the opportunity to participate in clinical studies at Scheie if they are interested.
About the Scheie Eye Institute

The Scheie Eye Institute, founded by Harold G. Scheie in 1972, is a leader in the field of ophthalmological research, education, and patient care.

Our physician-scientists focus on translational research, ranging from age-related macular degeneration to glaucoma to retinitis pigmentosa. The Scheie Eye Institute is consistently among the top three recipients of National Eye Institute funding.

Our full-time residency and fellowship program is devoted to training 15 residents and 8 fellows to become leaders in the future of ophthalmology. In fact, Scheie is now the first institute to receive a training grant in Ocular Genetics and Electrophysiology from the National Institute of Health. This will enable us to train scientists and ophthalmologists to interpret the huge amount of genetic information which will become available to us within the next five years as whole genome sequencing becomes widely affordable.

The Scheie Eye Institute employs 60 physicians and researchers to consult and treat eye problems of every kind. Last year alone, Scheie had 100,000 patient visits. For more information about the Scheie Eye Institute, look us up online at http://www.pennmedicine.org/ophthalmology/ or call us at 215.662.8415.

Giving to Scheie

Private contributions have helped to propel the Scheie Eye Institute to the forefront of research and patient care. Many of our greatest breakthroughs have been made possible through donations from individuals and organizations. These gifts enable vision-saving therapy for those in our community and people around the world. If you would like to make a donation to the Scheie Eye Institute, please visit us online at http://www.pennmedicine.org/ophthalmology/ or send a check to the Scheie Eye Institute, Attn. Lisa Lupiccini, 51 N. 39th Street, Philadelphia, PA 19104.

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