Scheie Awarded $11.25 Million Grant to Study Glaucoma in African Americans

Researchers at the Scheie Eye Institute were recently awarded a five-year, $11.25 million National Institute of Health grant to study the genetics of glaucoma in African-Americans. Drs. Pinthir Sankar, Ediya Miller-Eells, and Meredith Regina of the Glaucoma Service, along with Chairman Joan O’Brien, led the initiative to understand the genetic causes of this familial disease.

Primary open-angle glaucoma (POAG) is a disorder characterized by progressive and irreversible retinal ganglion cell damage, optic nerve degeneration, and corresponding visual field loss. Studies show that African Americans are four times more likely than Caucasian Americans to have POAG. POAG also appears almost ten years earlier and progresses more rapidly in this population, making it the leading cause of irreversible blindness in African Americans.

“POAG prevalence is increasing in Africa...what we are seeing is an increase in the number of African Americans affected with POAG,” said Dr. O’Brien. “This is particularly concerning because of the challenges in diagnosing and managing this disease in the African American community.”

Family history has a strong influence on POAG prevalence, indicating that there is a genetic component to the disease. In fact, the risk of developing POAG increases tenfold when a parent or sibling is affected.

This study aims to enroll 8,000 cases (with POAG) and controls (without POAG) from the greater Philadelphia area. To date, 2,500 patients have been enrolled through the unified efforts of the entire local community. Additional data will be taken from the Kaiser Permanente Research Program, which received ARRA-Stimulus funding to analyze 100,000 genomes, and from the New York Genome Center. This effort is a collaboration of the University of Pennsylvania and the University of California, San Francisco.

The study team plans to identify the genetic variants responsible for POAG using advanced genotyping technology. Specifically, they aim to identify mutations in the genes that are known to be associated with POAG in other populations.

“This is a first step in understanding the genetic factors that contribute to POAG in African Americans,” said Dr. O’Brien. “We are excited about the potential of this research to provide new insights into the disease and improve patient care.”

“This is an excellent opportunity to make a significant impact on the health of African Americans,” said Dr. Sankar. “By understanding the genetic and environmental factors that contribute to POAG, we can develop targeted interventions to prevent or delay the onset of the disease.”

This study is expected to take five years to complete. The results will be published in peer-reviewed journals and presented at national and international meetings.

Scheie Eye Institute

UPENN ESTABLISHES OCULAR THERAPY CENTER

On July 14, 2014, the University of Pennsylvania announced the creation of the Penn Center for Advanced Retinal and Ocular Therapeutics (CAROT). This $30 million institute, led by Director Jean Bennett and Co-Director Albert Maguire, seeks to facilitate and expedite the development of novel therapies for retinal and ocular disorders. CAROT is the first of its kind in the United States and is expected to serve as a hub for research and collaboration in the field of ocular therapeutics.

CAROT’s mission is to translate basic research into clinically relevant therapies for retinal and ocular disorders. The center will bring together experts from multiple disciplines, including ophthalmology, genetics, and bioengineering, to work together on developing new treatments for diseases that currently have limited or no treatment options.

“CAROT is a unique opportunity to bring together the best minds in the field to address some of the most challenging problems in ocular therapeutics,” said Dr. Bennett. “We are excited about the potential of this institute to accelerate the development of new therapies and improve the lives of patients.”

The center will be located in the newly constructed Duke Center for Clinical Research, which will provide state-of-the-art facilities for research and clinical trials. The center will also include a clinical trial unit, a translational research lab, and a small animal research facility.

“CAROT is a testament to the University of Pennsylvania’s commitment to innovation and excellence in research,” said President Amy Gutmann. “We are excited to see this center grow and make a difference in the lives of patients.”

The center will be funded through a combination of private donations, grants, and institutional support. The initial phase of the center will include a core facility for preclinical and clinical research, a translational research lab, and a small animal research facility. The center will also include a clinical trial unit, which will be housed in the adjacent Duke Center for Clinical Research.

The center will be led by Dr. Jean Bennett, a world-renowned expert in retinal disease, and Co-Director Albert Maguire, a prominent ophthalmologist and researcher.

“The establishment of CAROT is a key component of our strategic plan to make the University of Pennsylvania a leader in ocular therapeutics,” said President Amy Gutmann. “We are very excited about the potential of this center to accelerate the development of new therapies and improve the lives of patients.”

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Dear Friends,

I hope you are all enjoying the summer as far! We had an eventful spring at the Scheie Eye Institute, highlighted in the pages of this newsletter.

In March, we were thrilled to receive a $1.25 million grant from the National Institute of Health to study the genetics of glaucoma in African-Americans, an understudied but ever-increased population. The following month, we celebrated the 14th Anniversary of the Department of Ophthalmology and completion of the renovation of Scheie. Two hundred faculty alumni and friends returned for this event, which consisted of a COSE course by faculty and alumni, a ribbon-cutting ceremony with faculty, alumni, staff, and the Dean and CEO of UPENN, followed by a Champagne reception and finally dinner and dancing at the Rittenhouse Hotel. Our alumni president, Dr. Scott Golden, touches on this event and other major changes in the field of ophthalmology in his column. On July 14, the creation of the Center for Advanced Retinal and Ocular Therapeutics (CAROT) was announced, with Jean Bennett as Director and Al Maguire as Co-Director. This Center, in conjunction with Sam Jacobsen’s Center for Hereditary Retinal Degenerations and Retinal Function, will place UPENN Ophthalmology at the leading edge of clinical trials for gene therapy.

Exciting progress is made each day in clinical care and research. Recently, Dr. Mina Massaro and the Dry Eye Center received a generous donation from a grateful patient, Sally Douglas, to purchase a LipiFlow Machine to better treat patients with Meibomian Gland Dysfunction. Dr. Brian VanderBeek, with the Department of Ophthalmology, assisted in the purchase of a medical claims database for the University, which will greatly aid Dr. VanderBeek in research on clinical outcomes in ophthalmology. Scheie also donated an integrated clinical containing millions of pH sensors, which is used to sequence DNA, to the Chemical Heritage Foundation Museum, where it is currently on display. A curated display of the history of LipiFlow Ophthalmology is also on display in the lobby, with thanks going to Rebecca Salowee and the Curator of the Penn Museum, David McIntyre.

This newsletter issue also focused on the Importance of Education and Mentoring. Dr. Prathvi Sankar highlighted the Department’s broad involvement in medical school education, while Dr. Paul Tapino explained his pivotal role as Residency Program Director. In addition, Dr. Eydel Miller-Elis discussed her role in Departmental mentoring activities. The first Vice Dean of Diversity and Inclusion, Dr. Eve Higginbotham, weighed in on her new role and the importance of training a vibrant and inclusive environment at UPENN. In the Alumni Spotlight column, Dr. Robert Weinreb, once a Scheie resident, discussed the impact that his Scheie education and mentors had on his career.

I hope all of you enjoy the rest of summer, and I very much look forward to seeing all of you at the American Academy of Ophthalmology conference in October. The Alumni Reception at the Academy promises to be another great event. Please mark your calendars (October 18, 2014 at 7:30PM).

All my best wishes,
Jean O’Brien, MD

Patient Funds LipiFlow Machine TO FIGHT DRY EYES

"Currently, patients have to use warm compresses, and try to squeeze/massage some of the oil out on their own, but they cannot," explains Dr. Massaro. "Other treatment options include lid hygiene, antibiotics, and anti-inflammatory agents. However, these treatments do not provide full relief from the condition’s symptoms."

The LipiFlow Machine, which was approved by the FDA two years ago, offers new hope to these patients. The machine first analyses the dynamics and amount of lipid in the tear fluid, as part of a screening. The actual procedure then takes 15 minutes. Activations placed within the flares of the eye apply controlled warmth at 42.5°C to the inner eyelid surface, while simultaneously delivering intermittent pressure to the outer surface. This facilitates the release of lipids from the blocked meibomian glands, allowing normal flow of lipids to resume.

"If the oids in your eyelid are clogged, this machine will help you and provide great relief," said Dr. Massaro. "However, this procedure may not cure every patient; some patients do not respond because their skin type and genetics make them prone to secrete more viscous oil from their glands."

In addition to reducing the symptoms of MGD, the LipiFlow Machine can also help prevent permanent damage to the eye.

"There are some very young people who have this condition and just learn to live with dry eyes," said Dr. Massaro. "But if you are not treated, when you get older, your glands can become atrophied and will not produce any oil. So it’s important to take care of the oil glands at a young age,"

Dr. Massaro, the Dry Eye Center, and the Scheie Eye Institute express their gratitude to Sally and her husband Andy Douglas for their generosity in funding this new tool to fight MGD.
OPHTHALMOLOGY CELEBRATES
140TH ANNIVERSARY

The Department of Ophthalmology celebrated its 140th Anniversary on April 11th and 12th. The celebration took place during Scheie’s Annual Alumni Weekend, which has been very well-attended in past years under the leadership of Dr. Stephen Orlin. This year’s celebration included a two-day academic program, ribbon-cutting ceremony and reception, and dinner and dancing at the Rittenhouse Hotel.

The academic program consisted of scientific and clinical presentations given by Scheie alumni, faculty, and guests. Topics reached across specialties, providing attendees with a diverse experience. The David M. Kizzire lecture was given by Dr. Daniel Albert, who spoke on the history of the Department of Ophthalmology at the University of Pennsylvania.

“Dr. Albert gave a very detailed history of the leadership of the Department from inception until the present day,” said Dr. Stephen Orlin. “It was very informative and enjoyed by all.”

After presentations concluded on Friday, several hundred alumni, faculty, staff, collaborators, and members of the ophthalmology departments, supporters of Scheie, and guests gathered in the lobby for the ribbon-cutting ceremony, which celebrated the completion of four years of renovations at Scheie. They were met with a surprise. The lobby, previously a quiet waiting area for patients, was transformed into a festive, elegantly decorated reception area. Everyone enjoyed hors d’oeuvres and champagne while listening to several short speeches.

The first three talks were given by Dr. Larry Jameson (Dean of the Perelman School of Medicine), Dr. Ralph Muller (Chief Executive Officer of the UPHS Health System), and Michele Valpe (Executive Director of Penn Presbyterian Medical Center). The speeches shared a common theme, focusing on the importance of eye health and the impact of the renovations at Scheie in delivering the most outstanding care to vision patients.

Dr. Jean O’Brien, Chairman of the Department of Ophthalmology, gave the final speech, where she highlighted her first-hand experience with the renovations and hopes for the future of the Department and the advancement of vision research. She also stressed the importance of connections and collaborations in all we do, whether it is a renovation or new scientific advancement. In addition, Dr. O’Brien acknowledged the enormous contribution of the renovation committee led by Dr. Alexander Brodsky and expressed appreciation for the involvement of all faculty, staff, residents, and fellows in designing the ideal model room, which was then implemented throughout the building renovation.

“While Scheie Eye Institute is a building with a strong foundation and an immoveable core, the Department of Ophthalmology seeks to be without walls,” she said. “It reaches across this University and even across the world to provide the broadest understanding of the visual system, what can disable it, and how we can correct it. It is the diversity of you all in this audience, which enriches us, enlightens us, grows our wisdom, and provides us and our patients with vision.”

Dinner and dancing at the Rittenhouse Hotel followed the ribbon-cutting ceremony. At this event, Dr. O’Brien honored Dr. Albert’s life and accomplishments and awarded him the Distinguished Alumni Award.

“When asked to describe him, there are so many academic accomplishments one can choose from,” Dr. O’Brien said as she introduced Dr. Albert. “But those who know him best tend to say what an honest, trustworthy, ethical, and kind person he is, how he cares for others, and how he develops the young minds around him.”

The 140th Anniversary combined the academic presentations, ribbon-cutting ceremony, and Rittenhouse Dinner into a weekend of education and enjoyment. Excitement was high as everyone was able to see the newly finished renovations and feel a strong sense of fellowship for Scheie’s future. Dr. O’Brien’s closing remarks at the ribbon-cutting ceremony captured this sentiment.

She said: “Today is a wonderful day to launch into a future that is bright in every sense of the word.”
Dr. Higginbotham Promotes Diversity

Eve Higginbotham, SM, MD, was named the first Vice Dean for Diversity and Inclusion at the Perelman School of Medicine in August 2013. Dr. Higginbotham, an active member of the Department of Ophthalmology, fosters a vibrant, inclusive environment at Penn. Dr. Higginbotham earned her BS and SM in chemical engineering from Massachusetts Institute of Technology (MIT) and her medical degree at Harvard Medical School. She then completed a glaucoma fellowship at the Massachusetts Eye and Ear Infirmary. Dr. Higginbotham later became the first woman to head an Ophthalmology Department at an academic medical center in the United States, serving as Chair of the University of Maryland School of Medicine Department of Ophthalmology and Visual Sciences.

Since then, Dr. Higginbotham has held numerous academic leadership positions, including Senior Vice President and Executive Dean for Health Sciences at Howard University and Dean and Senior Vice President for Academic Affairs at Morehouse School of Medicine in Atlanta. These experiences contributed to Dr. Higginbotham’s interest in administration and academic culture.

"My interest in administration dates back to my role as a chemical engineer," she reflected. "I have always had an interest in problem solving, working at the systems level, and improving processes to better serve the organization and the people that these processes were intended to serve. Also, as an ophthalmologist, I have felt it is important to advocate for our discipline, which has become marginalized in academic medical centers over the last two decades."

Dr. Higginbotham’s main responsibility as Vice Dean is to ensure that the Perelman School of Medicine is positioned to meet the expectations of a more diverse community, given the changes occurring nationally related to changing demographics and health disparities. The mission of the Office of Inclusion and Diversity, which was developed following extensive conversations, interviews, focus groups, and surveys, is to recruit outstanding talent to retain a diverse community of faculty, staff, and students, and to reaffirm the benefits of inclusion.

"I have enjoyed the interactions I have had with everyone, including staff, students, faculty, and administrators," Dr. Higginbotham expressed. "Everyone has been very welcoming and attests to an interest in moving the culture to an enhanced level of inclusiveness."

Dr. Higginbotham has had extensive experience facilitating the professional development of students, trainees, and faculty, particularly since her days as Assistant Dean of Faculty Affairs at the University of Michigan, prior to her role as a Department Chair at the University of Maryland.

"This position is a wonderful opportunity to be more fully engaged in research and to assist others in reaching their professional goals here at Penn," she said. "On a personal level, I have professional balance, allowing me the opportunity to teach, mentor, develop programs, see patients, and do research. I am very pleased to find many collaborators for my own professional interests, which now span from glaucoma research to health policy. I also have the opportunity to continue my external professional interests and obligations."

Resistance to change and limited research funding are the main challenges Dr. Higginbotham anticipates as Vice Dean.

"Change does not come easily, particularly within complex organizations," she said. "Thus, the challenges will emerge from those sectors that are not ready to change or do not perceive a need to change. A second challenge comes from the constraints that everyone is experiencing in research funding and the increased pressures that clinical practice now demands. The sequestration "tsunami" impacts everyone."

Despite these challenges, Dr. Higginbotham remains very confident that the University has the resources needed to rise above any obstacles.

"Penn offers a depth of resources that very few academic medical centers have available for faculty, staff, students and trainees, which provides the best opportunities for success," she said.

When asked what it was like to be the first person to fill the role, Dr. Higginbotham replied: "Transferring to Penn has been enjoyable. Everyone has been very welcoming and ready to partner on a number of proposed initiatives."

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Dr. Sankar Leads Medical Student Education

Dr. Prithu Sankar, a glaucoma specialist at Scheie, has always enjoyed teaching. As a resident at University of Pittsburgh School of Medicine and a fellow at Massachusetts Eye and Ear Infirmary, Dr. Sankar devoted much time to mentoring and working closely with medical students. He arrived at the Scheie Eye Institute in 2001 at the perfect time: the position of Director of Medical School Education had recently opened. Dr. Sankar has excelled in this position ever since.

"I am the interface between the medical school and the Department of Ophthalmology," explained Dr. Sankar. "The Department is included in all four years of medical education."

Dr. Sankar’s role evolves as students progress through their four years of medical school. During the students’ first year, the Department introduces students to ophthalmology through courses such as Introduction to Clinical Medicine, Genetics, and Brain and Behavior. The students dissect a cow eye, study eye anatomy, and learn clinical skills by practicing on each other. In 2013, the mean teaching score of the Department of Ophthalmology was 4.8 out of a 5-point scale. Students can also elect to join groups, such as Student-Sight Savers and the Ophthalmology Interest Group, during their first year.

During their second year, students participate in core clinical clerkships. Scheie offers one week clinical clerkship in ophthalmology that all students are required to take. Groups of 10-12 medical students rotate through the Department a total of 16 times per year. In this clerkship, students continue to refine their clinic skills, learn about diseases that affect vision, and understand how visual function affects patients’ daily living.

After completing their first two years of medical school, the students decide how they want to approach ophthalmology.

"We have a one-month elective, called ORP (300), and have two other month-long electives, in Pediatric Ophthalmology and Neuro-ophthalmology," explained Dr. Sankar. "We also have a variety of research projects students can choose from."

While some students enter these electives set on ophthalmology as a career, others completely change their minds during the experience.

"We had one student who took a year off and he wanted to do neurosurgery," said Dr. Sankar. "He came into the elective here (OPH 300) just to learn the basics, and he liked it so much that he decided to switch careers. He matched at a great ophthalmology program."

Dr. Sankar is very involved in residency matches for the fourth year medical students.

"Students deciding upon ophthalmology meet with me as many times as they want during the application process," he said. "I try to make sure that they get everything done, and I also try to understand where they want to go and get them into programs that are a good fit."

This year, all 13 Penn medical students interested in ophthalmology matched within their top three residency choices. Eight of the 13 matched at their first choice residency program. To say that the students are grateful to Dr. Sankar for his guidance is an understatement.

"I think we can all agree that Dr. Sankar was one of the most important influences in our undergraduate medical careers and worked very hard to make sure each matched successfully," said Ayan Chatterjee, a fourth year medical student.

"Dr. Sankar’s passion for ophthalmology is contagious, and this quality makes him a superb teacher," added Alexander Piet, another fourth year medical student. "He has been a true inspiration and a role model for me and was a major reason why I confidently chose to pursue ophthalmology as a career."

Dr. Sankar’s guidance to medical students extends beyond classroom teaching and mentoring. Many students look to him as an example of the type of physician they hope to become.
residency program
THRIVES UNDER DR. TAPINO

For the past four years, Dr. Paul Tapino has led the residency program at the Scheie Eye Institute. Very few are as qualified for the job than Dr. Tapino; not only did he serve as the Assistant Residency Director for seven years, but he also completed his residency at Scheie.

The three-year Scheie residency program consists of five residents per year, for a total of 15 residents.

Residents rotate through each ophthalmology subspecialty at four main sites: The Scheie Eye Institute, Hospital of University of Pennsylvania, Children’s Hospital of Philadelphia, and the Veterans’ (VA) Hospital.

As Residency Director, Dr. Tapino’s primary job is to design a curriculum that meets the requirements of the Accreditation Council for Graduate Medical Education (ACGME). He also ensures that each resident meets his or her goals and milestones in becoming a competent and outstanding ophthalmologist.

Dr. Tapino is involved with every step of the residents’ journey, beginning with the selection process. Scheie receives about 500 applications each year for five spots. After screening all the applicants, Scheie chooses around 12 to 14 medical students to interview. Dr. Tapino and the selection committee then use each applicant’s interview, application, and letters of recommendation to decide who will best develop as a resident at the Scheie Eye Institute.

“A great fit for Scheie would be someone with competitive Board Scores, somebody who shows an interest in academic ophthalmology, and someone with an interest in basic science or clinical research,” explained Dr. Tapino.

In early July, the five new residents participate in an orientation week with Dr. Tapino. The week begins with an introductory breakfast for the residents with Dr. Tapino and Dr. O’Brien. Residents listen to lectures from faculty, begin practical sessions, and learn how to use different ophthalmic equipment and instruments.

After orientation, Dr. Tapino continues to work with the residents approximately two days per week. He supervises the resident clinic at Scheie and at the VA Hospital. It is here where Dr. Tapino matches each resident through a computer-simulated interview.

“When the residents first start, they are very timid, very shy, very reluctant,” Dr. Tapino said. “As the years go on, you see them grow as a resident into a competent and fully-functional ophthalmologist. And that’s the most rewarding, to see them grow from a stage where they pretty much know nothing about the eye, to the point where they see patients, make their own decisions, and execute a treatment plan.”

When he became Residency Director in 2010, Dr. Tapino set several goals for the program, the primary being to increase surgical volume at Scheie. Now, a third-year resident regularly performs surgery at the VA Hospital and Scheie. Facially increasingly involve residents in hands-on surgery and pass appropriate cases to residents. The Department is also very close to obtaining an additional operating room at the VA Hospital. Furthermore, Scheie added a surgical eye simulator at the VA Hospital, which enables residents to advance through modules that mimic the steps and intraoperative situations that may arise in a true operating room setting.

Residents also now have the option to study at superior ophthalmologic institutions around the globe. A formal, reciprocal agreement was formed in 2013 with the Aravind Eye Hospital, a leading institution in preventing and treating avoidable blindness in Southern India and globally. Scheie residents may visit Aravind during their elective time in the third year for four weeks.

“My trip to Aravind was an unforgettable part of my residency,” said Devin Atharva, a past resident. “I was exposed to a wealth of pathology, particularly infectious eye diseases, which are not typically seen in our practice. I also had the opportunity to learn manual small incision cataract surgery; an elegant technique which can even be applied to patients with mature cataracts that we sometimes see here. Lastly, I was most impressed with the warm staff with which the residents and attendings were accepted as part of their Aravind family.”

In 2013, the Residency Review Committee for Ophthalmology, functioning in accordance with the policies and procedures of the ASCOGE, accredited the residency program for the next ten years.

“The strength of our residency program is the direct reflection of the strength of our leadership,” said Dr. Jessica Watson, a third-year resident. “Dr. Tapino works tirelessly on our behalf to make ours a challenging yet supportive residency program, and he sets the tone for collegial, patient-centered learning.”

Dr. Tapino consistently goes above and beyond for residents, added Dr. Anita Khalil, a first-year resident. “In addition to being an excellent clinician, he is a superb teacher. He always encourages us to stretch the boundaries of our knowledge. I aspire to be like the kind of ophthalmologist he is.”

The feeling is mutual.

“Just as I challenge them, they challenge me – to be a better teacher, a better program director,” said Dr. Tapino. “It’s the day-to-day interactions with the residents that keep me going and have me look forward to coming to work.”

Dr. Joan O’Brien adds: “I know we have the best Residency Director in the country. Dr. Tapino is completely selfless in his devotion to the residents, both as people and as trainers. He works tirelessly on their behalf and continuously develops new programs and ideas to further enhance resident education. The entire Department is grateful for this unique achievement. Dr. Tapino is an outstanding mentor and role model for our residents.”

Dr. Miller shines as Mentor

Mentoring occurs within the walls of the Scheie Eye Institute each day. As Director of Departmental Mentoring Programs, Dr. Eydie Miller-Ellis strives to formalize this process and ensure that the Department meets each individual’s needs.

Dr. Miller counsels medical students, residents, fellows, and faculty of all backgrounds. She often helps the medical students select a specialty or find a clinical or research opportunity in the Department. The majority of Dr. Miller’s interactions, however, centers around the residents and fellows of the Scheie Eye Institute.

“It starts with me being a teacher and discussing specific cases,” explained Dr. Miller. “This naturally flows into conversations about my experiences as a resident and subsequent challenges during my career, and then discussing their concerns, career goals, and choices.”

Dr. Miller also mentors faculty regarding career advancement and females regarding work-life balance.

“I offer whatever insights I have and organize an annual event with the female faculty, residents, and fellows where we can join in fellowship together and learn from each other,” she said.

The relationship with her mentors is the most gratifying part of Dr. Miller’s job.

“The mentor-mentee relationship is reciprocal,” she said. “My mentors broaden my perspective and help me see various issues from a different point of view. I especially benefit from the residents and fellows, who keep me technologically up-to-date!”

Dr. Miller’s enjoyment of mentoring extends beyond one-on-one interactions and into her involvement in ophthalmic organizations. She is the President-Elect of the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO), which educates and certifies ophthalmic technicians and accredits technician training. She helped to develop computer simulations that both teach and test various ophthalmic skills and presented on those simulations at the 2014 World Ophthalmology Congress in Tokyo. Dr. Miller is also involved in the international arm of JCAHPO and helps administer the certification examinations to technicians in the Caribbean and perform accreditation site visits for training programs.

In addition, Dr. Miller co-directs the Rabbin Vivarian Excellence in Ophthalmology Program for the National Medical Association. The program’s mission is to increase the number of underrepresented minorities in ophthalmology and in academic medicine, by providing research opportunities and mentorship. Lastly, Dr. Miller is very active in Women in Ophthalmology, a national organization whose mission is to improve the professional environment for women ophthalmologists and to create opportunities for leadership, education, and public service within the profession.

“It’s a wonderful organization that, in addition to medical education, focuses on work-life balance, professional and personal empowerment, and networking,” Dr. Miller said. “I was honored to receive the Suzanne Vernonouo Toumanian Mentorship Award in 2011 from this organization that has done so much to mentor me.”

The Department is grateful to Dr. Miller for her superb clinical work as a glaucoma specialist and her enthusiastic mentoring of colleagues and the future generation of ophthalmologists. Dr. O’Brien states: “Dr. Miller-Ellis is very modest about her achievements. Dr. Miller recently served on the Vision Chair of Mentoring, which successfully recruited Dr. Evan Krygier, Dr. Miller is known across Ophthalmology as a selfless, approachable, and extremely thoughtful mentor.”

Dr. Joan O’Brien adds: “Dr. Sankar is a master clinician, a devoted and unfailingly teacher, and the finest Director of Medical Student Education I have ever met. He has received two Pearl Awards and the Dean’s award for his many contributions to teaching and mentoring. The Department of Ophthalmology and the School of Medicine at UPenn are fortunate to have such a superb role model for medical students and young physicians.”
Words from Scheie Alumni President

The annual spring alumni meeting at the Scheie Eye Institute was a fabulous event once again. Now summer is here after a long winter in the northwest and around the country. As a new season rises in, so do new residents, fellows, and associates. Clearly, change always comes to individuals, institutions, and practices.

The field of medicine and surgery has been heading in a different direction for some time too. Technology, science, and research have pushed us as physicians to new heights as we aim to treat our patients. However, much change has come from the political and economic front as well. In many ways, this has been ongoing for at least my 20 years in medicine.

I recall being asked in 1991 while applying to medical school, "Would you ever want to be a doctor, since the golden days of medicine are over?" The question referred to the business and regulation side of medicine.

However, great strides in clinical ophthalmology have been made in my almost 30 years of practice. We no longer perform extra-capsular cataract extraction as standard practice, nor do we watch patients with age-related macular degeneration lose vision. We no longer use pilocarpine as primary treatment for glaucoma. Our clinical knowledge and surgical techniques have never been so effective. Yet with all these clinical advances, physicians still struggle to use medications that are not terminally and pre-certified for patients who may need them.

So where does this leave us? It is time for physicians to become more engaged in the business and politics of medicine. We need to promote dialogue with the insurance companies and our elected leaders to help implement policies and laws that are functional and practical. I encourage everyone to become more involved with local, state, and national organizations like the American Academy of Ophthalmology. I urge you to contribute to state and federal Political Action Committees and surgical scope funds. We need to stand up for ourselves and our patients. This is why I became a doctor and ophthalmologist: to help people. The time to speak truth and clearly on behalf of patients as one group is here.

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SCHEIE VISION

volume 3, issue 2

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SAVE THE DATE

Saturday, October 11, 2014
Philadelphia Vision Walk
Independence National Historical Park, Philadelphia, PA
Sponsored by Scheie Eye Institute

Saturday, October 18, 2014
3:30PM – 10:30 PM
Scheie Eye Institute Alumni Association with Academy Celebration
Hyatt McCormick Place
Chicago, IL

Friday, April 24 – Saturday, April 25, 2015
2015 Scheie Eye Institute Alumni Association
CME-Accredited Conference
alumni

spotlight

DR. ROBERT WEISENTHAL

But don’t show me the macula and ask me to guess the vision because I will never be right.”

According to Dr. Weisenthal, much has changed at Scheie since his time as a resident.

“The facilities have been upgraded, the quality of the residents is superb (not sure if I would be accepted today), and Joan O’Brien is an excellent Chairman and leader,” he said. “I think that the only thing that has not changed at Scheie is my friendship with Stephen Drlin, who is an excellent and well-respected corneal specialist.”

Today, Dr. Weisenthal specializes in cornea and external disease at CHW Eye Care, performing corneal transplants, discosert stripping endothelial keratoplasty (DEK), descemeto membrane endothelial keratoplasty (DMEK), deep anterior lamellar keratoplasty (DALK), corneal surgery, and LASIK. He earned the Achievement Award from the American Academy of Ophthalmology for his contribution to numerous courses, covering Cornea and External Disease and Corneal Transplantation, as well as paper and poster presentations.

Dr. Weisenthal’s main areas of research include data analysis of corneal transplantation outcomes, selection of intraocular lens, power after previous retractive surgery, and LASIK surgery. He has contributed to a number of FDA studies involving the use of Antinkic lenses through Optimax and collagen cross-linking. He has also written chapters for a number of textbooks such as Cornea by Krocken, Holland, and Mannis and the LASIK Handbook by Rob Fender. He currently serves as the committee chair editing the Basic Clinical and Science Curriculum (BCSC) textbook Book 8 on Cornea and External Disease, recently joined by Dr. Drlin.

Since 1992, Dr. Weisenthal has traveled with Dr. Thomas Persaud ever 17 times to LaCeiba, Honduras to perform surgery at no charge for the very poor of the country. This year, they brought a team of 18 individuals (including surgeons, anesthesiologists, optometrists, and volunteers), and the group performed 159 surgeries and saw more than 500 patients. On a previous visit, world famous visiting Hickory Hahn came with the team and played while Drs. Weisenthal and Persaud performed surgery.

“I have brought all three of my sons on this trip, which has had a dramatic impact on their lives.” Dr. Weisenthal said. “My wife, Jennifer, has also traveled with us four times and plays a critical role as the surgical coordinator facilitated by her fluent Spanish. We are very grateful for this opportunity. I feel that during the mission you always get back much more than you provide. It is my favorite week of the year.”

Dr. Weisenthal is very close with his three sons. His oldest is in medical school at the University of Rochester, exploring his interest in Orthopaedics. His second son, who currently works at the National Institute of Health (NIH), is applying to medical school. His third son works in Guatemala through a Princeton-Latin American Fellowship for a NGO called Pueblo a Pueblo helping the Mayan Indians with education, sanitation, and health care.

Dr. Weisenthal is one of so many Alumni who lead interesting, full lives. We are proud to call him part of the Scheie family.

scheie research

SHOWCASED AT CHF MUSEUM

The Scheie Eye Institute recently donated an artifact to the Chemical Heritage Foundation (CHF) Museum. CHF is an organization devoted to understanding the history of science and the effects of matter and materials on the modern world. Originally launched in 1982 as the Center for the History of Chemistry by the University of Pennsylvania and the American Chemical Society, and subsequently incorporated as a nonprofit, CHF seeks to foster dialogue on science and technology in society. Their modern facility in Old City now includes a library, archive, conference center, and exhibit spaces. The museum’s permanent collection contains scientific instruments, rare books, and personal papers from prominent scientists.

Visitors to CHF are greeted by new exhibit, titled pH: From Dyes to DNA, showcasing applications of pH-sensors in industry and medical research. One of the artifacts on display, an integrated circuit containing millions of pH sensors, was donated by the Scheie Eye Institute. The artifact was previously used to sequence DNA as part of the Primary Open-Angle African American Glaucoma Genetics (POAGG) study, led by Drs. Joan O’Brien, Eydie Miller-Ellis, Prithvi Sivaraj, and Meredith Regina. A member of the research team, Benjamin Tschantz, works with the sensor in the displayed photos. This exhibit can be viewed at the CHF lobby, open 10AM-5PM on weekdays with free admission and located at 315 Chestnut Street.

PHOTO CREDIT: Courtesy of the Chemical Heritage Foundation. Photo by Conrad Ehr.
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 Bioinformatics 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 www.uphs.upenn.edu/ophtalmology or call us at 215.662.8415.