


scheie vision

 Raymond and Ruth Perelman School of Medicine at the University of Pennsylvania



CARING FOR EYES OF ALL SIZES:

How One Algorithm
Can Predict Eye Disease
in Premature Infants

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A MESSAGE FROM THE CHAIR

Welcome to the Summer 2017 edition of *Scheie Vision*! This summer we feature a range of topics, including a new patient support group, collaborations on retina research, a column on our beloved staff of patient service representatives, and more. We also provide a recap of the 143rd Anniversary Meeting and Rittenhouse Dinner, held in April. This year's dinner saw the largest turnout in history, with 281 attendees.

We opened the Anniversary Meeting with an update on the Scheie Eye Institute's most recent advancements and initiatives. Scheie now has 17 ophthalmic specialties and 58 clinical and research faculty across six facilities. In the last fiscal year, Scheie physicians saw 117,865 patients and performed 2,431 surgeries. Scheie is a pioneer in ophthalmic research, with 116 current ongoing clinical trials and an h-index (research impact) of 99. The Department was the number two recipient of National Eye Institute funding in 2016.

The teaching programs at Scheie train some of the nation's leading physicians. Scheie is among the top 1% of residency programs in the United States for grants and trials per alumnus. This year, five residents were chosen out of a competitive pool of over 500 applicants. All of Scheie's five outgoing residents matched with top fellowship programs. Ten medical students from the Perelman School of Medicine also matched to selective ophthalmology residencies. In addition to research and teaching, Scheie is committed to making an impact through service initiatives, such as Dr. César Briceño's work in Colombia, which was featured in this issue.

At Scheie, we value the importance of making research and medical advancements accessible to everyone. The primary purpose of *Scheie Vision* is to communicate updates on the Department's research, clinical, and outreach initiatives to the Scheie community at large. Over the past year, our newsletter has evolved into a magazine format to allow for a smoother and more visually-oriented reading experience. The bi-annual publication now has more than 10,000 recipients. We welcome all members of the Scheie community—patients, alumni, faculty, and friends—to flip through these pages and learn more about the values and advances of our world-renowned ophthalmology center.

Wishing you all a happy summer and fall!



Joan O'Brien, MD



CELEBRATING DR. BRUCKER'S

40 Years at the Scheie Eye Institute

By Ava Kikut

In 1977, Dr. Alexander (Sandy) Brucker, fresh from his retina fellowship at Johns Hopkins Hospital, decided to join the Scheie Eye Institute for a few years before returning to Baltimore. “It was going to be a short stopover for a three year period,” Dr. Brucker said. “That three year period has turned into 40 years.” Over the past four decades at Scheie, Dr. Brucker has become a world renowned clinician, educator, and researcher. He is annually recognized as one of the nation’s top doctors by *Best Doctors in America*, *America’s Top Doctors*, *Philadelphia Magazine*, and *Suburban Life Magazine*. He has been a memorable teacher and mentor to many Scheie alumni. And his research has been invaluable to the field of retinal and vitreous diseases.

Dr. Brucker became interested in the retina during his residency at The Friedenwald Institute of Maryland General Hospital in Baltimore. At the time, fluorescein angiography (a method for taking photos of the back of the eye) was gaining popularity. Dr. Brucker began taking photos with the fundus camera and presenting them to other residents. “I was really excited by what was going on in the back of the eye...and it was a very broad and expanding field that was at the cutting edge of everything. That started me on the trail of going into the retina subspecialty,” explained Dr. Brucker.

“HE TAUGHT US HOW TO PRACTICE MEDICINE WITH DILIGENCE AND WITH THE HIGHEST ETHICAL STANDARD, THAT AS LONG AS YOU TAKE CARE OF THE PATIENT LIKE FAMILY EVERYTHING’S GOING TO BE OKAY.”

DR. JOHNATHAN PRENNER (RES '02)

When Dr. Brucker was in training, several novel studies on diabetes and laser surgery were coming out. Before the 1970s, there was no treatment for diabetic retinopathy. “Then laser came along and it changed everything. Patients who were going blind prior to laser surgery were no longer going blind. It was really an absolute phenomenon that laser surgery was able to prevent blindness,” said Dr. Brucker. “Shining a light in the eye could treat diseases and prevent patients from losing their vision.” In the 1980s, laser surgery became a leading treatment for diabetic retinopathy, age related macular degeneration (AMD), macular edema, and other proliferative diseases such as sickle cell retinopathy. More recently, pharmaceutical companies have developed an alternative to laser surgery, which uses antibodies to block VEGF, a protein that promotes growth of new blood vessels that can be harmful to the eye and vision.

In the 1980s, Dr. Brucker was actively involved in the development of new instruments for the surgical treatment of retinal and vitreous diseases. He helped design and develop one of the most frequently used needles for retinal detachment surgery, a CyroProbe for the treatment of retinal tears and detachments, the use of a pump to inflate the eye with air during vitreous surgery, and a venting technique that helped prevent the collapsing of the eye during vitreous surgery. He served for several years on the Executive Committee of the Diabetic Retinopathy Clinical Research Network, a consortium sponsored by the National Eye Institute. Furthermore, he was on the Federal Drug Administration panel that approved new agents for glaucoma and other innovative changes, including the use of heavy liquids for the repair of retinal detachments. From development to implementation, Dr. Brucker has been involved in most of the surgical techniques used in the field today.



Dr. Brucker is actively involved in clinical trials. “Much of my career has been committed to doing randomized clinical trials, which are critical for the development of new technology and treatment modalities both for the logic range areas as well as in the surgical areas,” he explained. Dr. Brucker has recently participated in trials testing injectable compounds for age-related macular degeneration, diabetic retinopathy, macular pucker, vitreomacular traction, macular holes, and other disorders. He has served as Principal Investigator of Diabetes Control and Complications Trial (DCCT), the Age-Related Eye Disease Study II, the MacTel Study, the Diabetic Retinopathy Clinical Research network (DRCRnet) and other randomized controlled trials of retinal and vitreous diseases.

“SANDY BRUCKER HAS THE BIGGEST HEART OF ANYONE I’VE EVER KNOWN... WE’RE ALL IMMENSELY FORTUNATE TO KNOW SANDY BRUCKER.”

DR. HOWARD SCHATZ
colleague and
longtime friend

Through conducting randomized clinical trials, Dr. Brucker has realized the importance of creating a forum for physicians in the retina and vitreous field to discuss clinical and research developments.

In 1977, he was a founding member of the Macula Society, of which he later became president. The Macula Society organizes meetings to discuss retinal and vitreous diseases and their treatments. It is presently considered by most retinal specialists as the preeminent retinal specialty society in the world today. In 1981, Dr. Brucker founded *The Journal of Retinal and Vitreous Diseases*, which has become the world’s leading journal for retinal and vitreous diseases. “We are an international journal with subscribers and authors as well as an editorial board from all over the world,” said Dr. Brucker. Dr. Brucker continues to serve as *Retina’s* Editor-in-Chief.

“DR. BRUCKER’S IMPRINTED AN INCREDIBLE NUMBER OF TRAINEES.... HE’S A FORCE OF GUIDANCE, KNOWLEDGE, AND LOVE.... HE HAS BECOME ONE OF THOSE MENTORS WHO I CAN TRUST TO TELL ME THE HARD UNCOATED TRUTH BUT ALSO TO SUPPORT AND ENCOURAGE ME WITH ABSOLUTE SINCERITY.”

TUSHAR RANCHOD (RES '08)

In addition to facilitating a dialogue between physicians on treatment modalities and research, Dr. Brucker has also been involved with communicating advancements to patients. Dr. Brucker, along with Scheie’s own Lea Bramnick and the late Herb Lotman, the founder of the Macular Vision Research Foundation, started a national patient support group which was known nationally as “Support Sight”. They served 23 centers throughout the United States and had 35,000 registered participants. These chapters held meetings every few months to offer support to patients and their caregivers and to communicate advances in research and treatments of conditions that cause visual impairment.

During his time at Scheie, Dr. Brucker has been unwavering in his devotion to his patients. He is not only an outstanding physician; he is committed to providing support to the broader patient community and to continuing to develop novel therapies and surgical techniques.

In addition to his clinical work, Dr. Brucker has served as a role model for generations of Scheie medical students, residents, fellows, and colleagues. He is well-recognized for his excellence in teaching and mentoring and remains in contact with many of his past residents, fellows and students. Dr. Brucker was recently honored at Scheie’s 143rd Annual Alumni Meeting as the 12th Annual David M. Kozart Memorial Lecturer.

The Scheie Eye Institute, its residents, fellows, students, patients, and colleagues, congratulate Dr. Brucker for his achievements and are grateful that his stopover has turned into a forty year career.



GIL BINENBAUM

A Clinician Scientist Caring for Eyes of All Sizes

By Rebecca Salowe and Marquis Vaughn



On any given day, you may find Gil Binenbaum treating babies in the neonatal intensive care unit at The Children’s Hospital of Philadelphia (CHOP), figuring out a clever way to examine a preschooler’s eyes in clinic, operating on the eyes of a grade-schooler, or performing eye muscle surgery on adults at the Scheie Eye Institute. You are equally likely to find him participating in a research conference call, working on a draft of a scientific publication, or helping a medical student or colleague design a study to answer an important ophthalmology research question. It’s hard to get him to pick the one thing he likes best—though, taking care of babies may win by a hair.

Dr. Binenbaum credits many mentors at the University of Pennsylvania who helped prepare him for such a multifaceted career. After attending the Perelman School of Medicine, he completed his residency in Ophthalmology at the Scheie Eye Institute and his fellowship in Pediatric Ophthalmology and Strabismus at CHOP. He then earned a Master’s degree in Clinical Epidemiology, also from Penn, while working as a new attending physician at CHOP and Scheie. A decade later, Dr. Binenbaum is now Director of Research in Pediatric Ophthalmology and has just received the Richard Shaffritz endowed Chair in Pediatric Ophthalmology research.

Much of his research centers on diseases affecting very young children. Dr. Binenbaum is an international expert on the ocular manifestations of child abuse. His team studies

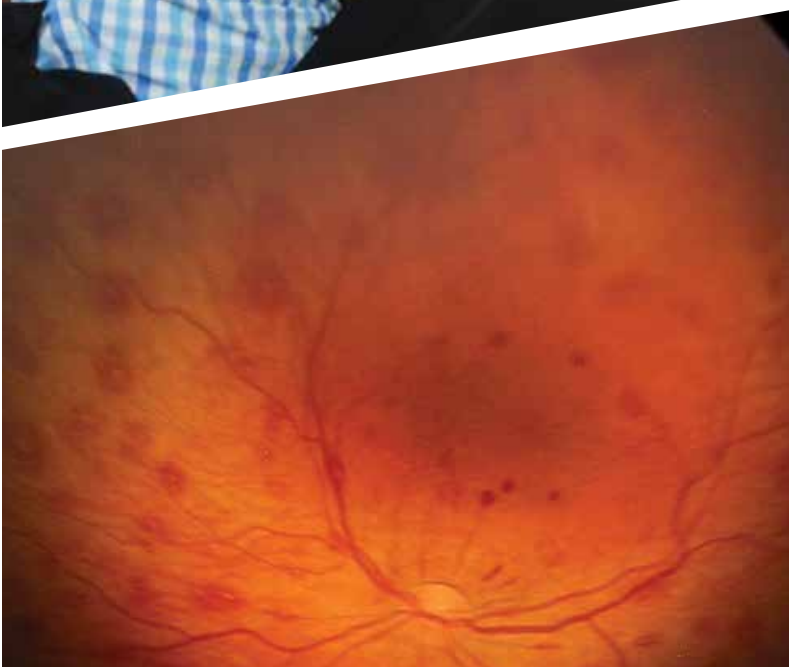
the patterns and causes of retinal hemorrhage in infants, so that abusive head trauma can be better distinguished from accidental and non-traumatic causes. “The specific pattern, not just the severity, matters when trying to identify the cause of retinal hemorrhage in young children,” he explains. He stresses, though, that child abuse is a “multidisciplinary diagnosis,” which requires collaboration of a team of experienced providers to make that decision.

Dr. Binenbaum also specializes in the care of the smallest and most fragile of patients: premature infants. He leads a large, multicenter research team that is developing a way to better predict which babies will develop retinopathy of prematurity (ROP), an eye disorder that can cause blindness in severe cases. Stevie Wonder, for example, was blinded by ROP as an infant. Tens of thousands of infants

in the United States undergo repeated resource-intensive, sometimes physically stressful, retinal examinations in order to identify the less than 10% of infants who may require treatment to prevent progression to retinal detachment and blindness.

Dr. Binenbaum is the Principal Investigator for the Postnatal Growth and Retinopathy of Prematurity (G-ROP) Study Group. The goal of this NIH-funded study is to develop an algorithm to distinguish the highest risk infants, so that other infants can be spared examinations. He explains, “Our current screening model uses just birth weight and gestational age at birth to

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Retinal hemorrhage in a young child

predict which infants need examinations. While these are the strongest risk factors, when we try to tighten these levels to examine fewer children, we begin to miss some infants who need treatment. We need to consider a third factor to capture those few bigger babies who develop severe ROP.”

That additional factor is slow growth, which is an indirect way of measuring a growth hormone in the body called IGF-1. Low blood levels of IGF-1 lead to poor growth of retinal blood vessels during the first weeks of life after premature birth. The retina becomes oxygen starved, and eventually, when IGF-1 levels finally begin to rise, new retinal blood vessels begin to grow out of control, which is the process that we call ROP. “So low IGF-1 early in life can be used to predict who will develop severe ROP later,” explains Dr. Binenbaum. “Slow postnatal weight gain, a surrogate sign of low IGF-1, is a less invasive measure for predicting which babies will have severe ROP.”

The first G-ROP Study enrolled over 7400 infants from 30 different hospitals in the U.S. and Canada. CHOP was the Study Headquarters, and Penn was the central Data Center. With data from these babies, the group has developed new screening criteria, which have tighter birth weight and gestational levels combined with postnatal weight gain thresholds for slow growth. This new model was able to identify all of the infants that needed to be treated, while cutting the number of infants that would have needed to be examined by almost a third.

The next stage for G-ROP is to validate the model in a new group of 4000 infants before it is used in practice. Ultimately, Dr. Binenbaum and colleagues hope to propose changes to the national screening guidelines for ROP, but only if the model does well when it is tested in this second study, which is already underway. “We need to have confidence that we won’t miss babies who need treatment, and we need a system that is simple enough that people will use it,” he said.

In addition to his research, Dr. Binenbaum is a passionate clinician. We asked him for some final words of advice about examining the eyes of children. He said the keys are “speed, which just takes practice, and distraction, which you have to think about a little. Never tell the child that you are examining his or her eyes. Just keep calm, quietly take out a small plastic Lego figurine, and with no instruction at all, a kid will look right at it and follow it as you move it around. In no time, you’ll have finished your examination. Videos on your cell phone work wonders too!”

Faces of Scheie: Patient Service Associates

By Marquis Vaughn



The Scheie Eye Institute is a high volume department, having seen nearly 118,000 patients last year alone. The Department is committed to cultivating a culture of compassionate and informative interactions with patients throughout every step of the care process. In this edition of *Scheie Vision*, we turn the spotlight to our staff of Patient Service Associates (PSAs).

WHAT ARE PATIENT SERVICE ASSOCIATES?

PSAs are staff members that typically work at the front desk of an outpatient or hospital clinic. They are often the first point of contact between patients and the healthcare institution. PSAs are responsible for greeting patients; checking patients in while verifying demographic information, insurance, and healthcare regulatory data; collecting co-payments; scheduling appointments; checking patients out at the end of visits; and ensuring the patient experience is as seamless and pleasant as possible.

WHAT SKILLS AND TRAINING ARE REQUIRED TO BECOME A PSA?

Job requirements may vary depending on the health care establishment, but most PSAs have a high school diploma or equivalent and/or experience in delivering customer service in a health care environment. Penn Medicine hires some PSAs directly into one hospital department and others into a “float pool.” PSAs who immediately join a department

receive a 1-week Electronic Patient Information Chart (EPIC) training, as well as a “Patient Experience” prep course. For new PSAs who enter the float pool, there is a 5-week paid training called “The Penn Medicine Patient Service Associate Excellence Academy”. This program was developed to enhance customer service skills, in-depth knowledge about proper use of Electronic Health Records (EMR/EHR), and other technical skills tailored to each department. Float pool PSAs work in several departments, shadowing and interacting with more experienced PSAs, before becoming permanent members of one department.

BEYOND THE FRONT DESK

In addition to directly interacting with visiting patients, many PSAs collaborate with other hospital staff members behind the scenes. PSAs work with Financial Service Representatives (FSRs), who help to provide in-house financial services to ensure monetary accuracy for the patients and the organization. PSAs assist Medical Records Clerks in creating, gathering, and maintaining patient health information. They collaborate with the Pre-Certification and Pre-Registration staff, which obtains required authorizations and monitors the “before” process of a patient’s healthcare visit, limiting the risk of high out-of-pocket costs and ensuring access to health care services. PSAs also work closely with Practice Coordinators, who help to coordinate appointment scheduling and assess staff and personnel job performance.

Tyrik Scott is the Practice Manager at Scheie's Penn Presbyterian Campus. He oversees the day to day operations, including supervising the activities of the PSAs, FSRs, and the Pre-Reg/Pre-Cert team. "They are the face of the practice," said Tyrik. "They make sure we have captured the correct information in order to ensure a favorable reimbursement. They are very professional, enthusiastic, and accommodating. Our team goes above and beyond both mine and the patients' expectations."

MEET THE TEAM

WHAT IS YOUR FAVORITE PATIENT STORY?

My favorite patient story was when a patient and I somehow got into a long conversation about dogs. I was checking the patient out and she was telling me that she was going to need a sitter. So, I asked her what kind of dog she had. Then one topic led to another, and I found out that we both adopted our dogs from the same animal shelter. We basically talked about how it's better to adopt than to buy a pet. It's always better to save lives.

— **Melissa Nguyen** (Scheie Radnor Team)

There was a patient that came from another country to see Dr. Orlin because he heard he was one of the top Cornea specialists in the US. After seeing multiple ophthalmologists,

the patient was able to see again under his care.
— **Gina Brown** (Scheie Penn Presbyterian Team)

My favorite patient story is not limited to just one. I really enjoy success stories when patients come in with limited sight or an eye disease that is treated successfully. I love it when the patient regains better vision. Seeing those patients improve is the best story that I can tell.

— **Melony Cooper** (Scheie Penn Presbyterian Team)

I helped a patient get an earlier appointment because she was having some medical issues with her eyes, and she was so grateful she came back to the office with a card. When I opened the card there was a long handwritten note about how wonderful I am as well as a Wawa gift card inside. I couldn't believe how incredibly sweet it was.

— **Michelle Cardullo** (Scheie Radnor Team)

A completely new patient to Scheie was scheduled to have surgery with Dr. Kim. She was very concerned and uneasy about the procedure. I assured her that she was in great hands, and would be well looked after. After 3 months went by, I saw the patient again. She thanked me for the encouragement and kind words. "You were right, you guys really took good care of me," she said.

— **Vanese Bradley** (Scheie Penn Presbyterian Team)





We're looking at potential relationships between the eye and the brain in frontotemporal degeneration

RETINA RESEARCH: A SPIRIT OF COLLABORATION

By Ava Kikut

The Scheie Eye Institute's Retina Service is engaged in multiple innovative research programs. Scheie's retina researchers collaborate with other departments and institutions in cutting-edge studies, seeking to improve diagnostic methods and treatments for a variety of diseases. Dr. Benjamin Kim, who joined Scheie's retina and vitreous service five years ago, has been involved in an impressive number of research initiatives. "I was always very interested in retina because it's such a remarkably dynamic field," he said. Dr. Kim is currently leading two potentially groundbreaking projects: a study using retinal imaging to diagnose frontotemporal degeneration and a clinical trial to test a treatment for age-related macular degeneration (AMD).

RETINAL IMAGING AND DIAGNOSING FRONTO-TEMPORAL DEGENERATION

Dr. Kim has been collaborating with UPenn neurologists, Drs. Murray Grossman and David Irwin. "We're looking at potential relationships between the eye and the brain in frontotemporal degeneration (FTD)," Dr. Kim explained. FTD is a neurodegenerative condition that can cause a progressive decline in behavior, speech, and/or motor difficulties.

Dr. Kim is exploring the potential of retinal imaging to aid in identifying and categorizing FTD. His

research involves the use of ocular coherence tomography (OCT) to investigate retinal changes in FTD patients. "We have been using software to perform detailed measurements of the different layers of the retina in the OCT images of patients with FTD and then comparing those to control patients," said Dr. Kim. "The field needs highly reliable, and easy to test biomarkers, and OCT is a simple way to image a patient. Finding a retinal abnormality on OCT would open the door to other ways in which the retina can be studied to learn about FTD. This has been a stimulating collaboration as new knowledge often develops at the intersection of two fields."

One objective of the study is to find a biomarker for patients with FTD that can subcategorize them based on their underlying molecular pathology. Usually, the disease results from the abnormal accumulation of either the tau protein or the TDP-43 protein. It is often difficult to clinically determine which underlying protein problem is affecting a patient. The discovery of a biomarker for FTD subtypes, such as a retinal abnormality, would potentially allow patients to be diagnosed earlier and then enroll in clinical trials testing treatments targeting the appropriate protein.

Another goal of the study is to investigate the potential of retinal imaging to more effectively differentiate between FTD and Alzheimer's Disease. Memory loss in Alzheimer's patients is often confused with the behavioral symptoms of FTD. Postmortem neuropathology testing has shown that up to 30% of patients thought to have FTD while alive turned out to have Alzheimer's Disease. "It's critical to develop biomarkers to help differentiate FTD from Alzheimer's disease," stated Dr. Kim.

This study has enrolled over 40 FTD patients and enrollment is ongoing.

TESTING A TREATMENT FOR GEOGRAPHIC ATROPHY

Dr. Kim is also involved in the Geographic Atrophy Lipoic Acid (GALA) Study, along with Drs. Josh Dunaief, Maureen Maguire, and Alexander Brucker. This clinical trial is testing alpha lipoic acid as a treatment for geographic atrophy.

Geographic atrophy is an advanced form of AMD that causes the outer retina to develop atrophic lesions, which manifest as blind spots in the patient's central vision. Over time, atrophic lesions grow and these blind spots enlarge. "Many patients have difficulty seeing the faces of their grandchildren or reading because of these lesions," explained Dr. Kim. Geographic atrophy causes approximately 20% of the legal blindness in the United States, and there is no existing treatment. "As a major cause of blindness, geographic atrophy is a focus of a tremendous amount of research right now...there is a race to find a treatment," said Dr. Kim.

While age-related eye disease study (AREDS) vitamins are used to reduce the progression to advanced stages of AMD, they have not proven effective as a treatment for geographic atrophy. Unlike the antioxidants in AREDS vitamins, alpha lipoic acid affects glutathione, an important enzyme for cellular oxidation control. Alpha lipoic acid also has the potential to remove excess iron, which may contribute to geographic atrophy. Dr. Kim believes the potent antioxidant and iron chelating functions of alpha lipoic acid could slow down the growth of geographic atrophy lesions.

GALA will administer oral supplements of alpha lipoic acid to patients with geographic atrophy. After eighteen months, the outcomes of patients taking the study drug will be compared to patients taking a placebo.

"The trial has been a collaborative effort based on data from Josh Dunaief's lab," explained Dr. Kim. "What's especially exciting about this study is that it is very much a home grown multicenter clinical trial." Of the principal investigators (PI) for the project's four external sites, three are alumni of the Scheie Eye Institute. These PIs include: Paul Hahn (res '10) at New Jersey Retina, Apurva Patel (res '11) at Retina Northwest, and Allan Hunter (fel '11) at Oregon Retina. The fourth PI is Karen Gehrs, Professor of Clinical Ophthalmology at the highly regarded University of Iowa Department of Ophthalmology. This study is funded by several foundations, including BrightFocus, Cures Within Reach, and the Pennsylvania Lions.

Dr. Kim has enjoyed working with a range of physicians, departments, and organizations since coming to Scheie. "These are collaborative research efforts and I don't think that you can easily get this level of collaboration at all institutions," he said. "Something I found that distinguishes Scheie is the overall friendly and cooperative attitude of people, which is also true for the University of Pennsylvania and its medical school."

If you are a patient with geographic atrophy and would like to learn more about the GALA Trial, please contact Joan Dupont at 215.662.8038.



Examples of geographic atrophy lesions with visible choroidal blood vessels (yellow spots). These lesions correspond to blind spots in the patient's vision.

GALA TRIAL CLINICAL SITES

Clinical Site	Location	Principal Investigator
Scheie Eye Institute/UPenn	Philadelphia, PA	Dr. Benjamin Kim
New Jersey Retina	Teaneck, NJ	Dr. Paul Hahn
University of Iowa	Iowa City, IA	Dr. Karen Gehrs
Oregon Retina	Eugene, OR	Dr. Allan Hunter
Retina Northwest	Portland, OR	Dr. Apurva Patel

LOST IN TRANSLATION

MEDICAL INTERPRETERS ON THE RISE

by Rebecca Salowe



nearly 9% of the US population is at risk for an adverse event because of language barriers

It may seem unusual for four different languages to be spoken during a single patient appointment. However, this was the situation that Dr. Jane Portnoy, an Associate Professor of Ophthalmology, found herself in a few months ago. The patient and her father-in-law, both from the Republic of Guinea, spoke two different dialects of Fulani, while Dr. Portnoy spoke French (which both patients could understand) and English (which an interpreter could translate). For Dr. Portnoy, this appointment represented a typical day at Mercy Fitzgerald Hospital, one of Scheie Eye Institute's satellite locations.

"Philadelphia is a melting pot and it is especially represented at Mercy Fitzgerald," she said. "There's a huge West African community as well as patients from South America, Mexico, India, Pakistan, Afghanistan, Cambodia, Vietnam, and more. The languages are so diverse, so we often encounter communication issues."

Interpretation services for the growing number of non-English speaking patients are crucial. Patients with limited English have historically experienced greater health disparities, including poorer quality of care, longer hospital stays, and greater risk of infection or hospital readmission. The Agency for Healthcare Research and Quality estimates that nearly 9% of the US population is at risk for an adverse event because of language barriers.

Free medical interpretation services at Penn help to bridge this language divide and provide high-quality care to all patients. Non-English speaking patients can request an interpreter when making an appointment, with over 140 choices of languages. Penn Language Link, an organization of medical, nursing, and pre-health students that provide volunteer interpretation services, is another viable option for patients. The interpreter attends the patient's appointment and translates the physician's words.

"We speak directly to the patient as if there is no one else in the room," Dr. Portnoy said. "As I am speaking, the interpreter will say exactly what I say. I want to establish a doctor-patient relationship."

"I see generations of families come in and need interpreters," added Carly Breen, a Clinical Research Coordinator who often recruits at Mercy Fitzgerald. "The physicians then get to know the whole family. It really creates a sense of community and a friendly atmosphere."

While interpreter services used to be optional, with many non-English speaking patients opting for bilingual family members to translate, hospitals now require the use of an official interpreter service. Studies found that reliance on family members to translate often had unintended negative consequences. In fact, the use of a trained interpreter versus a family member was associated with fewer medical errors and greater patient satisfaction. "Sometimes the family members take on an 'editor' role," explained Dr. Portnoy. "I go through a five minute explanation and then they say five words to the patient. I'm like, wait a minute – I just spoke for five minutes!"

The University of Pennsylvania also recently became a paying client of the Canopy App, which contains a library of translated medical phrases. The user can scroll through this library to find the appropriate medical phrase, which is then read out loud by a digitally recorded voice. The app also connects to an on-call interpretation service. At this point in its development, Canopy is mainly appropriate for quick, rudimentary conversations where the physician speaks a second language, but may need to look up the equivalent of a specific medical term.

Dr. Portnoy loves to see the patients' reactions when she starts speaking French or the interpreter begins translating. "They just light up," she said. "The whole doctor-patient relationship improves."

GRAND ROUNDS SCHEDULE

2017-2018

Join us every Thursday at Grand Rounds for presentations by guest speakers, faculty, and Scheie alumni. Presentations begin at 7:00AM in the Kozart Auditorium and coffee and pastries will be provided. Keep an eye out for emails as more dates are announced.

<p>September 7, 2017 Faculty Meeting</p>	<p>Ophthalmology, & Chief of Division of Oculofacial Plastic and Reconstructive Surgery, Shiley Eye Institute, UC San Diego</p>
<p>September 14, 2017 Berger Lecture</p>	
<p>September 21, 2017 Rosh Hashanah</p>	<p>December 14, 2017 John Y.K. Lee, MD, MSCE Associate Professor of Neurosurgery, Pennsylvania Hospital; Associate Professor of Otorhinolaryngology: Head and Neck Surgery, Perelman School of Medicine; Medical Director, Penn Gamma Knife at Pennsylvania Hospital</p>
<p>September 28, 2017 Rishi P. Singh, MD Staff Surgeon, Cole Eye Institute; Associate Professor of Ophthalmology, Lerner College of Medicine; Medical Director, Clinical Systems Office</p>	<p>December 28, 2017 UNIVERSITY CLOSED</p>
<p>October 12, 2017 Antoine G. Sreih, MD Assistant Professor of Clinical Medicine, Perelman School of Medicine</p>	<p>January 4, 2018 Lama A. Al-Aswad, MD, MPH Associate Professor of Ophthalmology, Columbia University Medical Center</p>
<p>November 2, 2017 Faculty Meeting</p>	<p>January 11, 2018 Faculty Meeting</p>
<p>November 9, 2017 American Academy of Ophthalmology</p>	<p>March 1, 2018 William Freeman, MD Distinguished Professor of Ophthalmology, Vice-Chairman of Department of Ophthalmology, Director of Jacobs Retina Center, & Co-Director of Retina Division, Department of Ophthalmology, UC San Diego</p>
<p>November 16, 2017 Geoffrey Tabin, MD Professor of Ophthalmology and Visual Sciences & Co-Director of the Outreach Division, John A. Moran Eye Center, University of Utah</p>	<p>March 8, 2018 Faculty Meeting</p>
<p>November 23, 2017 Thanksgiving Day</p>	<p>March 15, 2018 Billing Compliance</p>
<p>December 7, 2017 Don O. Kikkawa, MD Professor of Clinical Ophthalmology, Vice-Chairman of Department of</p>	<p>May 10, 2018 Faculty Meeting</p>

If you would like to add/remove your name from this mailing list, or have any questions or comments, please email Rebecca.Salowe@uphs.upenn.edu or call 215.662.8015

25% of patients
with vision loss
have some
form of
depression



Scheie Launches Vision Loss Support Group

By Rebecca Salowe

The Scheie Eye Institute recently created a support group for patients with low vision or blindness.

The group will supplement the services offered by the Penn Center for Low Vision Rehabilitation at the Ralston House. This center, led by Ranjoo Prasad, OD, provides care and support to patients with no remaining surgical or medical options to improve their declining vision.

“We assess their functional difficulties and determine how we can help them optimize their remaining vision by using optical devices such as magnifiers or telescopes,” explained Dr. Prasad. “We also explore non-optical methods, such as auditory or adaptive strategies, and refer patients to other services for the visually impaired, such as low vision and occupational therapists.”

Though these tools are helpful, many patients with low vision continue to struggle with depression and anxiety. One study found that up to 25% of patients at a vision loss clinic have mild to moderate depression.

“These patients are grieving,” said Dr. Prasad. “They are experiencing a major loss and want to know that they are not alone.” Sheri Drossner, a Clinical Research Coordinator at the Scheie Eye Institute with a Master’s in Social Work, added: “Low vision affects so many aspects of their lives.

And many of those patients struggle in dealing with their vision loss—emotionally, physically, and economically.”

Though the experiences of each patient vary on an individual basis, almost all share a common need for emotional support. This need was the impetus behind the creation of the low vision support group.

“A support group enables patients to connect and learn from one another, realize they are not alone, and find information about services and/or devices that are helpful,” said Sheri.

The Scheie Vision Loss Support Group welcomes patients with all eye conditions, such as diabetic retinopathy, age-related macular degeneration, and glaucoma. The group, which meets monthly, is led by Monica Hanza, a social work student from the School of Social Policy and Practice at UPenn.

“Each meeting is designed to allow time for both planned topics and unplanned topics,” Monica explained. “Some topics will be suggested by participants who would like immediate feedback and ideas from the group, while others will be planned in advance, so we can bring in experts to share their knowledge on a certain topic.”

The first meeting, which took place in January 2017, was attended by eight patients. Topics included adaptive products and what patients liked or didn't like about them; resources to obtain news, magazines, and books in audio; the use of canes; and how challenging it can be to ask for help. “I thought the first meeting was very successful as the participants were very open about their challenges and successes and were very supportive of each other,” said Monica. “There was vulnerability, laughter, and a sense of connection.” The following meetings have been similarly productive.

Since the support group is so new, a follow-up questionnaire is being conducted to gather feedback. Nekisha Ammons, who recently completed her Bachelors of Social Work, is leading this effort.

“The goal of the questionnaire is to have the participants open up more outside of the group about their experiences,” she said. “Some participants may feel self-conscious in speaking during group sessions, so this gives them the opportunity to speak freely.”

Looking forward, the group will continue to meet on a monthly basis. If its size becomes too large, it will likely split into two or more groups, perhaps separated by disease type. Dr. Prasad also plans to incorporate caregivers into future meetings.

Meetings are held on the last Tuesday of each month at the Ralston House from 3-4PM. Interested patients can contact Sheri at 215.662.8177 for more information.



Left to Right: Monica Hanza, Ranjoo Prasad, Sheri Drossner, Nekisha Ammons



The care team with two young brothers, ages 2 and 5, who were diagnosed with accommodative esotropia. Their mother previously thought there was no hope for her sons' vision. Both boys were fit with corrective lens, which Dr. Briceño hopes will prevent them from developing amblyopia in the future.

EXPANDING EYE CARE IN COLOMBIA

by Rebecca Salowe

Dr. César Briceño recently returned from a mission trip in the southernmost region of Colombia, an area in the Amazon rainforest with poor access to healthcare resources.

He began the trip with attendance at the annual meeting of the Colombian Pediatric Ophthalmology Society, where he gave a lecture on the medical management of infantile hemangiomas.

Over the following days, Dr. Briceño and colleagues provided comprehensive ophthalmic examinations and free glasses to children at local schools. MiraFlex, a company that designs flexible and plastic glasses, donated the frames and lenses. "We discovered a large number of children who

are highly myopic and never had glasses before," said Dr. Briceño. "That's a big deal in terms of their ability to function well in school."

Another goal of the trip was to link children with more serious eye conditions, such as strabismus, to the appropriate resources within Colombia. "Colombia does have a national health system, but subspecialty care can be difficult to access in the Amazonian region," Dr. Briceño explained. "We were able to provide appropriate triage to link patients with more specialized needs to their respective national resources."

Dr. Briceño is one of many Scheie faculty members who strive to provide eye care internationally.

Left: Two siblings disembarking from their canoe on the Amazon River. *Center:* Dr. Briceño with a seamstress who was slowly losing her vision. The woman worried about losing her livelihood as her vision declined. After being diagnosed with presbyopia, she was given a pair of reading glasses. "She almost cried, she was so happy," said Dr. Briceño. *Right:* Dr. Briceño examining one of the brothers.



dear friends



Scott M. Goldstein, MD
Pediatrics & Adult
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If you have any questions or suggestions about the Scheie Alumni Society, please reach out to Scott Goldstein (scottygmd@comcast.net), Mary Tong (tongm@upenn.edu), or Lea Bramnick (Lea.Bramnick@uphs.upenn.edu).

It has been a great honor to serve as the Scheie Alumni President the past six years. I always enjoy spending time with everyone at the Anniversary Meeting, as well as the fall AAO gathering. Given that I was a varsity cheerleader at Cornell University for four years (a little known fact!), acting on behalf of the Department serving you, the alumni, seems similar in many ways.

Yet sharing cheer and thoughtful insight, while fun, only goes so far to keep you connected to Scheie. I thought it was high time to take my responsibility to the next level. If you happened to attend the Anniversary Meeting in April, this is already old news. However, since many of you could not attend, I would like to re-introduce you to the Scheie Alumni Society.

The Scheie Alumni Society has, until now, always been an informal group. Moving forward, we have decided to develop the society into a more formal organization that can bridge the old and new members of our beloved institution. The goal is to strengthen our bonds to Penn and Scheie, as well as to each other. There is a long, rich tradition that begs us to remember our roots and help the institute flourish in the future. As such, a multifaceted approach will be taken to:

- Formalize an alumni giving society to recognize those who have given back to Scheie and raise support for resident and fellow education
- Host an annual local alumni resident/fellow dinner each fall in Philadelphia
- Continue biannual gatherings in the spring and fall
- Continue the annual 50th reunion dinner that bring together past alumni and current residents
- Continue newsletters and email updates from the Department

With this broad initiative, we hope to build and strengthen our ties to Scheie Eye Institute and all those who passed through the halls of its buildings. Of course, this not only requires work on our end, but also depends on your participation. So as we move into this new era, building upon the cornerstones laid by Drs. Norris, DeSchweinitz, Adler, Scheie, and many others, I welcome you to embrace and support this ambitious endeavor.

THE DEPARTMENT OF OPHTHALMOLOGY CELEBRATES 143 YEARS

By Marquis Vaughn

The Department of Ophthalmology celebrated its 143rd Anniversary this past April with its largest-ever Scheie Alumni Meeting. Throughout the weekend, lectures and presentations were given by faculty, residents, alumni, and special guests on breakthroughs and improvements in the field of ophthalmology.

This year's 3rd Honored Alumni Lecturer was Dr. Donald Budenz, the Kittner Distinguished Professor and Chairman of Ophthalmology at the UNC Chapel Hill School of Medicine. Dr. Budenz delivered a captivating lecture on "New Developments in OCT for Glaucoma." Dr. Alexander Brucker, the Chief of the Retina and Vitreous Services at the Scheie Eye Institute, gave the 12th Annual David M. Kozart Memorial Lecture, titled "Past, Present and Future Treatments for Macular Degeneration."

The Department continued its tradition of hosting an evening of dinner and dancing at the Rittenhouse Hotel. This event offered an opportunity for alumni, faculty, residents, and staff to reunite with old friends and become acquainted with new ones. Heartfelt speeches were given in honor of Dr. Brucker's 40 years of service at the Scheie Eye Institute.

The Department also held the 2nd Annual Dinner for Scheie alumni celebrating their 50 year reunion. This event, hosted at the Union League by Dr. Joan O'Brien, was attended by the members of the residency class of 1967 and current residents.

A special thank you goes out to Course Director Dr. Stephen Orlin and Course Co-Directors, Drs. Alexander Brucker and Vatinee Bunya, as well as Lea Bramnick and Karen Cope-Scarfo for planning this CME accredited meeting. This was the largest Alumni Event in history, with close to 300 people in attendance.





ALUMNI SPOTLIGHT: RAYMOND DOUGLAS, MD, PHD

By Ava Kikut



Dr. Raymond Douglas is a Penn Quaker through and through. He studied biomedical engineering as an undergraduate at Penn, earned a PhD in immunology in Peter Nowel's cancer research lab, attended the Perelman School of Medicine, and completed his ophthalmology residency at the Scheie Eye Institute.

Dr. Douglas was drawn to ophthalmology because it allowed him to combine laboratory research and surgery. He has found interacting with patients to be the most rewarding part of his career in Oculoplastics. "When someone is in an auto accident and they've been deformed and in pain, and you're able to do something to return them to the way they were, they are really grateful. It's rewarding to see this transition occur," Dr. Douglas said.

Dr. Douglas completed a fellowship in Orbital Facial Plastic and Reconstructive Surgery at UCLA's Jules Stein Eye Institute. He joined the Jules Stein faculty for five years before becoming an adjunct professor at the University of Michigan's Kellogg Eye Center. After six years in Ann Arbor, Dr. Douglas recently returned to Los Angeles for a position at Cedars-Sinai Hospital.

At Cedar-Sinai's Stem Cell Institute, Dr. Douglas is continuing his research on stem cell regeneration for patients with facial paralysis. Many patients with facial paralysis are in constant discomfort because they are unable to blink, which causes their corneas to dry out. Dr. Douglas is working to use stem cell technology to return blinking function to tissues and nerve fibers.

In addition to facial paralysis, Dr. Douglas specializes in Grave's disease, an autoimmune disease that attacks the thyroid and can cause eye bulging. Dr. Douglas recently participated in a clinical trial testing teprotumumab treatment in patients with active thyroid disease. "This is the first trial that's ever used an antigen blocking technique," he explained. This technique involves a humanized antibody (teprotumumab) that binds to the IGF-1 receptor (IGF-1R) and prevents the immune system from recognizing that receptor. The Phase II study spans 18 American

and 6 European medical centers. Results will be published later this year.

As a leading researcher, Dr. Douglas continues to consider how his work can have broad impact on patient lives. "My PhD advisor always reminded me to look at the big picture, think about how my findings make a difference for people, and how to translate into that difference," he said.

Dr. Douglas fondly recalls his time at Penn. "The mentorship, especially at Scheie, from many of the faculty that I trained with, set the stage of how to treat people, how to treat patients, and how to investigate diseases...That's been incredibly important. It really shaped what I do," he said. Dr. Douglas has remained in close touch with many of his mentors and peers from Scheie. "I regard them as family," he added.

Outside of his clinical and research work, Dr. Douglas enjoys cycling and spending time with his two kids, Morgan and Raymond. The Scheie Eye Institute is honored to call Dr. Douglas one of our outstanding and inspirational alumni.





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SCHEIE EYE INSTITUTE

The Scheie Eye Institute is the Department of Ophthalmology at the University of Pennsylvania. Scheie has been a leader in the field of ophthalmic research, education, and patient care for 143 years. Many of our greatest advancements in vision saving therapy have been made possible by donations from individuals and organizations.

Will you join the Scheie Eye Institute?

For more information contact us at

215.662.8415

Or by email:

Rebecca.Salowe@uphs.upenn.edu

PennMedicine.org/supportscheie

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