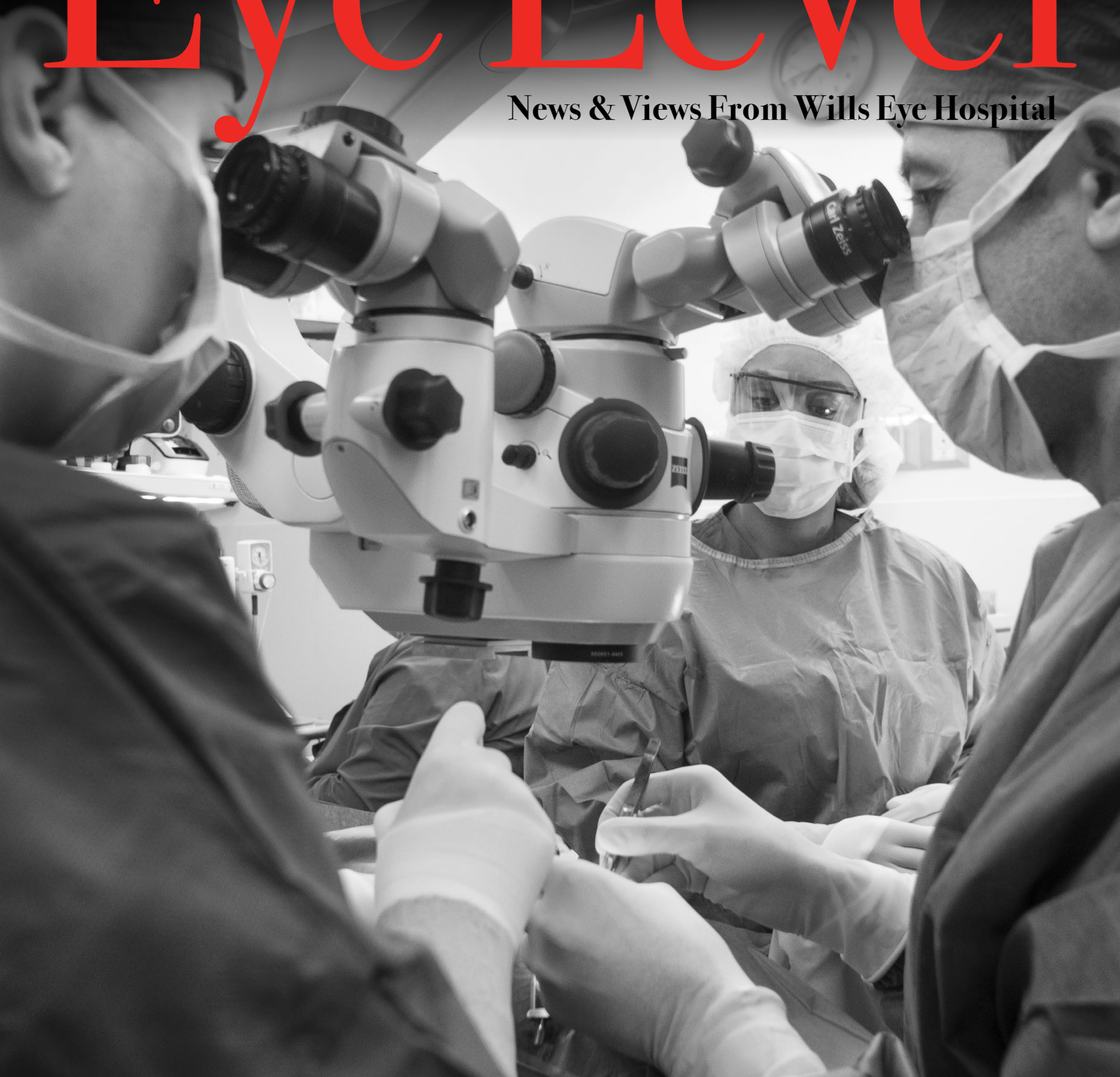


Eye Level

WINTER 2021

News & Views From Wills Eye Hospital



COMPLEX CARE: EMPOWERING PATIENTS TO RECLAIM THEIR PASSIONS

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**MEET THE NEW
CHIEF OF CPEC**
DOUGLAS M. WISNER, MD

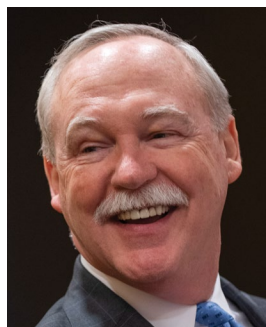
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MEDICINE & MUSIC
JOSEPH MARKOFF, PHD, MD
ESTABLISHES MARKOFF
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From Our Leaders



JOSEPH P. BILSON
Chief Executive Officer



JULIA A. HALLER, MD
Ophthalmologist-in-Chief

As we look back at 2021, we are reminded not only of the unprecedented challenges we have faced and overcome during the global pandemic, but of the positive impact Wills Eye continues to have on countless lives—locally and around the world.

The mission of Wills Eye Hospital — set in motion nearly 200 years ago when our institution was founded in 1832 — to care for those in need, improve quality of life and serve our Philadelphia community and beyond—fuels us every day.

Our annual Give Kids Sight Day (GKSD), held in a hybrid format this past October, provided free vision screening — virtually to over 460 children, ages 6 to 17, and in person to more than 250—reinforced this perpetual mission and commitment to excellence. We were uplifted and inspired by the joy sparked in the eyes of so many children through the simple act of trying on a pair of glasses. Finally, their once blurry world came into focus. The bubbling over of enthusiasm could be felt throughout the room by the volunteers, physicians, and family members.

Some of the children will return to Wills in December to pick up their prescription glasses, included in this community service program. Others have appointments for follow-up care with our specialists. We are so grateful for this initiative—at the heart of the Wills Eye mission.

With 2022 just around the corner, we cannot help but look ahead with great pride in all we have achieved in multiple areas, the pillars of our institution: clinical innovation, research, education. Wills Eye continues to be on the cutting edge with technology in treating patients with rare diagnoses and challenging medical conditions. Even with all the COVID restrictions and protocols in place, Wills Eye has flourished. We never stopped taking care of

patients—from routine exams to complex surgeries. In fact, we saw more patients this past year than ever before.

We have acquired new practices, welcomed outstanding physicians to our Wills family and expanded our reach in the suburbs. In addition, over the past academic year, a record number—249 research papers—were published by our faculty.

In this newsletter issue, our cover story highlights Complex Care, an area of expertise that Wills Eye is recognized for around the world. Physicians from various specialties collaborate as a team to treat challenging medical conditions. You'll read the remarkable comeback story of Philadelphia Phillies public address announcer, Dan Baker. And you'll get an inside view of how our subspecialists helped Jake Lucash, a 15-year-old with multiple eye conditions, return to the baseball field. You'll read patient success stories, such as one about Karen Barbarese, grateful for the lifesaving care she received from the world-renowned Carol Shields, MD, Director of our Ocular Oncology Service. Dr. Shields was one of four Wills physicians named to Newsweek's 2021 list of *America's Best Ophthalmologists*.

Yet, there's even more to feel proud about as we steer our focus toward the future. Joseph Markoff, PhD, MD, who served as Director of the Visual Physiology Service at Wills for three decades, recently made a generous gift to establish the *Markoff Family Fellowship*. His keen foresight will enable Wills to hire a fellow to explore artificial intelligence and artificial sight.

We have never felt more optimistic about the future of eye care.

Wishing you the best of health in 2022. ■■■

Eye Level

NEWS & VIEWS FROM
WILLS EYE HOSPITAL
WINTER 2021
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ON THE COVER: Collaborating on a pediatric glaucoma case are (clockwise from left) Jade Minor, MD, pediatric ophthalmologist; Nicole Pompey, RN, operating room nurse; and Reza Razeghinejad, MD, glaucoma specialist.

A SIT-DOWN WITH DOUGLAS M. WISNER, MD

Meet the new Chief of the Wills Eye Cataract and Primary Eye Care Service (CPEC)

Wills Eye begins a wonderful new era, building on the legacy of the remarkable leadership of Drs. Robert S. Bailey Jr., Mark H. Blecher and their team.

Q: What does this newly appointed role mean to you?

A: It's honestly a dream come true and a huge honor. I've had the privilege of training under some great mentors at Wills. Their dedication, compassion and service to their patients, trainees and colleagues has been an example for me. I hope I can nurture the same in others.

Q: Tell us about your relationship with Wills Eye Hospital?

A: I was a resident and co-chief resident at Wills, graduating in 2012. I was fortunate to join Drs. Rob Bailey and Amy Weber, loyal Wills supporters for years, who have grown a complex cataract and anterior segment practice. I stayed involved in resident education, staffing surgical cases, serving on committees and helping out wherever I could. I've been fortunate to be involved in the growth of the service and numerous educational opportunities for the residency.

Q: Your leadership team includes two colleagues: Janine Tabas (Co-Director) and Christina McGowan (Co-Director and Medical Director). How will your strengths complement one another and add a new dimension to the service?

A: Janine and Christina are both amazing people and physicians. I am thrilled to work with them. Janine is an experienced, level-headed surgeon who has staffed cases with the residents for years and grown a very successful practice with her partners. I value her expertise to further develop surgical education for residents and as a point person for the phenomenal volunteer faculty at CPEC. She's also a sought-after actor in resident skits; she brings swagger to the CPEC leadership.

Christina is the boots-on-the-ground person, leading day-to-day operations. I can't count the number of extra hours she has given on behalf of

residents and the service. She has also implemented changes to optimize patient care and the resident experience. She is detail-oriented and an excellent problem solver, helping navigate the forest through the trees. Her optimism balances my slight tendency towards sarcasm.

Q: What are some of the exciting plans for the service?

A: We hope to build on a great foundation. We are expanding our partnership with optometry and enhancing operations to serve more patients at 840 Walnut Street and our satellite locations. We will continue to emphasize the role of volunteer faculty in surgical education of residents and add faculty to round out patient care and the teaching experience. I have been involved in developing our resident education curriculum (along with others in our service) and plan to deepen this commitment over time. We have a wealth of research opportunities at our fingertips and aspire to develop this further.

Q: Summarize what makes CPEC so special at Wills?

A: If Wills were a house, CPEC would be the kitchen. It's the hub of things. Everyone intersects with it; all trainees and patients flow in and out of there at some point. It is staffed by wonderful volunteer and staff doctors, who teach the art and science of comprehensive medical and surgical ophthalmology. Our bread is the gift of sight, delivered every day in the form of cataract surgery to our grateful patients. CPEC feeds the residency and subspecialties. It's the place where the everyday happens, as well as the special, spontaneous moments that define the "Wills family." ■■■



FAST FACTS

Douglas A. Wisner, MD

Age: 39

Wife: Mia

Children: Lucas, 8; Joachim, 6

Favorite music: Anything with a good bass line

Favorite hometown food: Steamed Crabs! (born and raised in Maryland)

Career highlights (so far): Helping to launch the WIRE (Wills International Resident Experience) program and the MOST (Measey Ophthalmic Surgical Training) Lab

Favorite pastime: Gardening and home renovations

Favorite rituals: Takeout date night with my wife, playing video games with my boys, Sunday church services



Wills Physicians Are Experts at Complex Care

Empower Patients to Reclaim What They Love



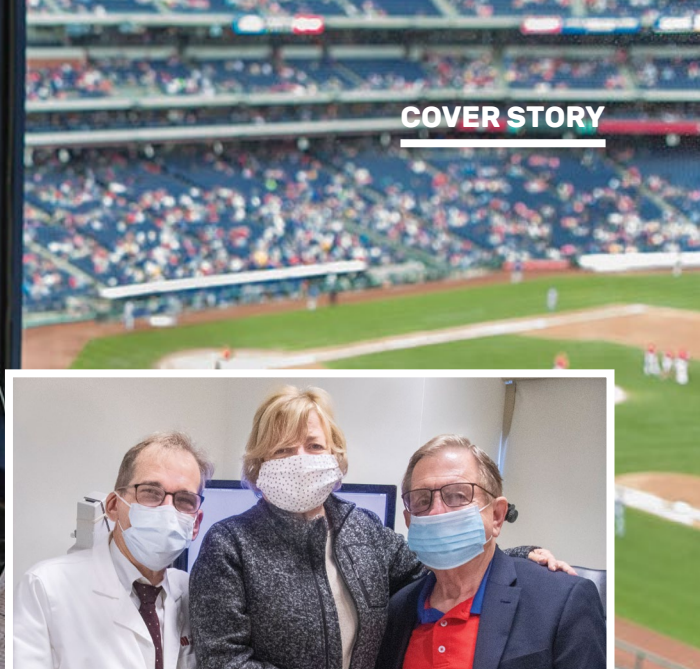
Top: Jurij Bilyk, MD, FACS, oculoplastic and orbital surgeon, at a post-operative visit with Dan Baker.

Bottom Left: Yoshihiro Yonekawa, MD, adult and pediatric retina specialist (right), performs a scleral buckling surgery to repair a retinal detachment. Assisting him is former Wills vitreoretinal surgery fellow Ravi Pandit, MD.

Bottom Right: Jade Minor, MD, right, and Reza Razeghinejad, MD, work to surgically revise a patient's glaucoma drainage tube.

SUCCESSFULLY TACKLING CHALLENGES – IT'S WHAT WE DO AT WILLS

Combined procedures – where physicians from different specialties collaborate – are all in a day's work at Wills Eye Hospital. "We care for patients who need routine eye care and cataract surgery as well as those with complex medical issues and challenging diagnoses," said Wills Ophthalmologist-in-Chief Julia A. Haller, MD, who compared the teamwork at Wills to a finely tuned orchestral piece where every musician is at the top of their game. "And if a physician encounters a complication or an unexpected finding during a surgery – which isn't unusual – they can run down the hall and confer with one of the top subspecialists in the world. Everything is right here under one roof."



DAN BAKER – THANKFUL FOR THE CARE HE RECEIVED

It was baseball's opening day—April 1, 2021—and Dan Baker was announcing the starting lineup for his hometown team, the Philadelphia Phillies. It was pretty much the same cherished routine he'd been accustomed to since 1972. But this Citizens Bank Park home opener was different from all the others.

The team's public address announcer wasn't certain he'd ever make it back to the microphone. A health odyssey had threatened to take it all away.

In late 2018, an abscess was discovered on Dan's gum, just above his back right molar. The West Deptford, New Jersey resident visited a periodontist, endodontist and oral surgeon. He was treated with antibiotics for an extensive infection in his sinuses. But still, the infection persisted. Dan sought answers.

Over a year later, after a battery of tests at Thomas Jefferson University Hospital, including PET scans, CT scans and MRIs, doctors discovered a 5 ½ centimeter squamous carcinoma—cancer—lodged in his sinus. "I was very concerned about the diagnosis, but I was also somewhat relieved to learn what I was facing and anxious to get it resolved as soon as possible," said Dan, who recently celebrated his 75th birthday.

On August 14, 2020, Dan underwent a 24-hour surgery to remove the tumor.

The complex surgery was a collaborative effort between physicians from Thomas Jefferson University Hospital's Department of Otolaryngology: David Cognetti, MD; Adam Luginbuhl, MD; and Howard Krein, PhD, MD; and Wills Eye Hospital's Jurij Bilyk, MD, FACS, an oculoplastic and orbital surgeon.

"It's a very meticulous, risky surgery," said Dr. Bilyk. "One of the challenges is that there are a lot of critical structures—such as the carotid artery—in the area known as the skull base, where the face is attached to the skull."

A portion of Dan's cheekbone and upper gum needed to be removed along with two walls of his right eye socket. "Bone and tissue were taken from my leg and placed in my cheek and eye socket," recalled Dan, adding that the tumor was very close to his sight line. The surgery was tricky, and timing was critical. The doctors removed the entire tumor and achieved clean margins.

Yet for Dan, getting back to the green grass, cracking sound of the bats and cheering fans wasn't that simple. "Would you believe, of all things it affected my speech," said Dan, who remained in the hospital for six weeks,

"I was very concerned about the diagnosis, but I was also somewhat relieved to learn what I was facing and anxious to get it resolved as soon as possible."

— Dan Baker

followed by 30 radiation treatments and speech therapy.

"Despite the fact that we had to remove part of Dan's hard palate and jaw during surgery, he was still able to return to what he loves," said Dr. Bilyk. "Truly, an amazing feat."

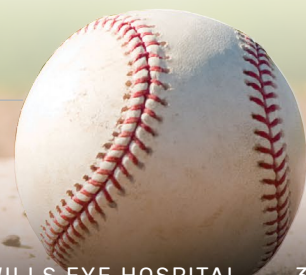
"There aren't too many places in the country that have such a close collaboration between Ophthalmology and ENT as we have at Wills and Jefferson. We learn from each other, which enables us to manage complex cases like this."

"I'm very grateful to the doctors at Wills Eye and Jefferson," said Dan. "I still have some hurdles to overcome, but I'm very fortunate to have pulled through it."

Note: More than a year after the surgery, there is no evidence of cancer recurrence.

Top Left: Philadelphia Phillies Public Address Announcer Dan Baker at Citizens Bank Park.

Top Right: (From left) Jurij Bilyk, MD, FACS, Cathy Baker (Dan's wife), and Dan Baker at a post-operative visit.





◀ Yoshihiro Yonekawa, MD, at a Wills Residency Lecture.

JAKE LUCASH AND FAMILY — GRATEFUL TO BE IN THE RIGHT PLACE

When 15-year-old Jake Lucash was given the green light earlier this year to return to baseball by Yoshihiro Yonekawa, MD, a Wills adult and pediatric retina specialist, it was music to his ears. The high school sophomore from Old Bridge, New Jersey, along with his parents, Mary and Luke Lucash, had made the request multiple times. Finally, the answer was “yes” — provided he wear protective eye gear.

For Jake, an athlete and Philadelphia sports fan, being sidelined with health challenges, surgeries and hospital stays have been an integral theme throughout his life. Yet the obstacles he has faced never stopped him from his passions,

including baseball (he plays second base), basketball, soccer and football. Some of the contact sports are riskier than others, noted Dr. Yonekawa.

Jake was born with cystic fibrosis, a genetic disease that impacts the lungs and digestive system. At age 4, he was diagnosed with an unrelated condition—juvenile rheumatoid arthritis (JRA). “The RA had a bad effect on his joints, his knees,” said Luke, who recalled watching his son on the soccer field as a little boy. “He couldn’t straighten his legs.”

JRA often causes inflammation of the eyes (uveitis). In Jake’s case, the inflammation was more severe in the left eye. Mary and Luke brought their son to a local pediatric



▲ Luke Lucash, right, with his son, Jake Lucash, after a recent surgery.

◀ Jake Lucash, 15, will try out for his high school baseball team in the spring. He has undergone multiple eye surgeries over several years at Wills Eye Hospital; most recently, a successful retinal detachment repair and a revision of a glaucoma drainage tube.



▲ Jade Minor, MD, adjusts the ophthalmic surgical microscope in preparation for a surgery. Assisting her is Nicole Pompey, RN, operating room nurse.



▲ Jake Lucash with Jade Minor, MD, in the pre-op area.

ophthalmologist to keep close tabs on his condition. Jake was treated with several medications, which were effective for his joints but not his eyes. “Once he developed eye issues, we had to stop the medication,” said Mary. They also tried a drug that required monthly infusions. Ultimately, steroid eye drops and creams were used to treat the inflammation. But the medications had side effects, explained Mary. Jake developed cataracts and glaucoma.

At age 8, Jake had cataract surgery at Robert Wood Johnson University Hospital in New Brunswick, New Jersey. In adult patients and those with less complex medical histories, after the cataract is removed, a new artificial lens is placed in the eye. However, due to the increased risks, the lens in his left eye was not replaced. Fortunately, vision is good in his right eye.

As if that weren’t enough, when Jake was 10, he was diagnosed with non-Hodgkin’s lymphoma and underwent chemotherapy. The treatment was effective and he is in remission.

And although the cataract surgery was successful, there were ongoing drainage issues caused by the glaucoma. In 2018, Jake’s physician referred the family to Wills Eye Hospital, where his medical conditions could be best addressed.

At Wills, Jake had multiple surgeries to treat glaucoma and prevent blindness. One of the procedures involved

inserting a tube to relieve the high eye pressure and create a new pathway for the fluid drainage. In early 2020, Jade Minor, MD, Jake’s pediatric ophthalmologist at Wills, noticed significant fluid buildup in the back of his left eye, which was a detached retina.

That’s when team member Dr. Yonekawa came onboard. “The approach to surgery for pediatric retinal detachment is different from that of an adult,” he explained. “In addition, since Jake had many other eye conditions, the procedure needed to be further modified.” Dr. Yonekawa inserted a customized scleral buckle (a silicone implant) to bring the wall of the eye closer to the retina where there was a small hole causing the detachment. This resulted in complete reattachment of the entire retina. “The outcome was fantastic,” he said. “The retina reattached with one surgery. Jake is doing beautifully.”

No matter the obstacles, Jake has always pushed forward, taking it all in stride. In fact, he speaks candidly and is well-versed on his medical conditions. “It’s all he’s ever known,” said Mary.

Dr. Minor is inspired by Jake’s resilience. “I’ve never met anyone quite like him,” she said. “He’s been through so much, yet he’s so confident and well-adjusted.”

Said Luke: “It’s very comforting to know that we’re in the best hands possible. At Wills, we immediately felt like we were in the right place.” ■■■

“It’s very comforting to know that we’re in the best hands possible.”

— Luke Lucash

Our Patients' View

REGAINING HER SIGHT— AND HER INDEPENDENCE

In early 2021, Emily Sobah Kpargai of Folsom, Pennsylvania received a frantic late-night call from her niece in nearby Darby where her sister, Elizabeth, lives. Elizabeth had suddenly lost her eyesight and the family wasn't sure what to do. "She had mentioned before that she sometimes felt a cloudiness in her eyes," Emily said. "But now she was completely blind."

The sisters are part of a large extended family that has gradually emigrated to Southeastern Pennsylvania from Liberia over the past three decades, fleeing war and civil unrest. Emily, 54, had been living in Europe since 1990 with her family and settled here in 2006. Elizabeth, 65, came to the U.S. three years ago. Feeling helpless and depressed after her vision loss, Elizabeth relied on Emily. Local relatives also rallied to help as Elizabeth could no longer safely navigate stairs, prepare meals or even shower without guidance.

Over the next four months, Emily led her sister on a search for medical answers—but it was complicated by Elizabeth's lack of health insurance. The sisters visited an urgent care center, an optometry and eyeglass center, two hospital Emergency Departments and a local ophthalmology practice. At that final stop, the staff recommended they go to the Wills Eye Emergency Department.

When they arrived, ER staff quickly determined that Elizabeth had dense cataracts that could be remedied with surgery. The social work team helped her secure short-term health insurance through Medicaid. In April, they visited Wills Eye cataract specialist Walter P. Harris Jr., MD.

"Elizabeth's sister literally guided her into the office for that first evaluation," Dr. Harris recalled. "She could not even see the consent forms, so we just pointed to where she should sign. All she could write was an 'X'."

"I suspect that what happened, which is very common, is that the lens in one of her eyes clouded, but she could still see out of the other eye," he said. "When the other lens gets clouded, your vision just goes. By this point, her cataracts were very dense and white. Those

can be tough to take out: You open the capsule, almost like an M&M, break it up with a phacoemulsifier [a device that sends ultrasonic vibrations through a tiny probe] and leave behind a clear bag to slip in an artificial lens."

A few weeks later, Elizabeth had cataract surgery on one eye at Wills Eye Hospital. "She noticed a big difference right away, saying 'I can see clearly in this eye now!'" Emily said. "When she went to have the second eye done, she was so amazed that she could see the surgical techs and the team gathered around her."

Dr. Harris noticed the change in Elizabeth's demeanor as soon as she arrived for that second surgery. "She was ecstatic that she could see colors, and she told my wife, Nicole, who is my practice manager and surgical coordinator, how happy she was to be able to see her beautiful face. The surgery had a major impact on her quality of life. She no longer needed someone to guide her around. And fortunately, everything else in her eyes was normal and healthy.

"Worldwide, cataracts are one of the most common causes of blindness," Harris added. "The good news is that the condition is totally reversible once they are removed." Dr. Harris noted that physicians who travel to developing nations with the Wills Eye Center for Academic Global Ophthalmology often operate on 20 to 30 people a day who otherwise would not have access to cataract surgery.

By mid-summer, both of Elizabeth's cataracts had been removed and her vision was completely restored. "It was a long wait, but we had a happy ending," Emily said. "I really thought she was going to remain blind forever. But once Dr. Harris explained the situation and did his job, we had real hope." ■■■



▲ Elizabeth Sobah (left) with her sister, Emily Sobah Kpargai.



"She was so amazed that she could see the surgical techs and the team gathered around her."

— Emily Sobah Kpargai

◀ Walter P. Harris Jr., MD, cataract specialist.

EVERY MOMENT IS A GIFT

When Karen Barbarese of Chestnut Hill, Pennsylvania rang the large bell in the waiting room in the office of Carol Shields, MD, this past July, she felt a spark of victory. The symbolic act marked more than 13 years since Dr. Shields, Director of Wills Eye Hospital's Ocular Oncology Service, had successfully treated her for choroid melanoma, a rare form of eye cancer.

Many people have heard of melanoma of the skin but may not be aware that the disease—though an entirely different form—can also occur in the eye.

The words on the bell: “For life...For eye...For vision...” are engrained in Karen’s mind. They represent the mantra that Dr. Shields communicated to Karen the day they met in 2008. The world-renowned physician, who recently added the bell to her practice—representing freedom from cancer—treated Karen’s ocular melanoma with three distinct priorities: to save her life, to save her eye, to protect her vision.

Karen recalled the early signs of her life-altering journey: “I noticed there was a black dot in my line of sight in my left eye. It was tiny at first, but then it became a little more pronounced.” Initially, she didn’t think anything of it and delayed visiting an eye doctor. She soon realized something was amiss.

When Amy Weber, MD, a Wills cataract and primary care ophthalmologist, examined Karen in her suburban Philadelphia office, she immediately knew the black dot was a tumor. The doctor arranged for her to be seen the following week at Wills Eye Hospital.

Dr. Shields treated Karen with plaque radiotherapy—tiny, 3 mm radioactive seeds targeting the tumor that are attached to a gold plate to protect the ocular structures and sewn directly to the wall of the eye to secure the radiation field. “This therapy zaps the tumor and causes it to shrink away,” explained Dr. Shields of the highly successful technique, individually tailored for each patient. “It’s very focal radiation and the gold standard of care.”

Dr. Shields and her husband, Jerry Shields, MD (Co-founder and Director Emeritus of Wills Ocular Oncology Service), are known worldwide for their groundbreaking work treating ocular cancer. “My husband worked with the late Luther Brady, MD, the godfather of radiation oncology,” said Dr. Shields. “Luther was the number one person in the world and was here in Philadelphia. Jerry and Luther wanted to find a way to treat intraocular tumors with plaque radiation.”



◀ *Carol Shields, MD, Director of Wills Eye Hospital's Ocular Oncology Service.*



▲ *Karen Barbarese outside Germantown Friends School in Philadelphia where she works as an administrative assistant.*

“Dr. Shields is amazing. Wills Eye has always been — for me — one of the greatest gifts that Philadelphia has to offer”

— Karen Barbarese

Before the physicians collaborated, patients undergoing treatment had their eye removed, explained Dr. Shields. “Jerry pivotally swung the pendulum back towards saving the eye with radiation,” she said. “In the United States, the eye is now saved in 85 percent of patients with ocular melanoma.”

Dr. Shields noted that 50 years ago, there were only three centers in the world using plaque radiotherapy: one in New York, one in London, and the other at Wills Eye Hospital. In 1985, the therapy became the gold standard of care. Today, medical fellows from around the country and the world travel to Wills to train with Dr. Shields.

“Ocular melanoma occurs in about six of every million persons,” said Dr. Shields. “In the United States, there are about 2,500 to 3,000 cases each year, mostly in light skinned Caucasians.” Karen is Caucasian with an olive complexion, but her eyes are light hazel. “The less pigment in the eyes—blue or green—the greater the risk for melanoma,” said Dr. Shields.

Today, Karen never leaves the house without glasses, made with polycarbonate lenses. “It’s the safest lens for the eye,” said Karen. “Dr. Shields stressed the importance of always protecting my good eye.”

According to Dr. Shields, there have been significant advances in treating rare forms of ocular melanoma. Medicines can now be injected in the patient’s eye that help to save sight.

“Dr. Shields is amazing,” said Karen. “Wills Eye has always been—for me—one of the greatest gifts that Philadelphia has to offer.” Karen shared that as a little girl, she often accompanied her mother to Wills. “She had glaucoma and horrible eye issues,” said Karen. “They saved her sight. Like mother, like daughter. I am so grateful for each moment I have.”

Do you have a Wills Eye patient success story to share? We’d love to hear from you!

Please reach us at japple@willseye.org

To read more success stories, visit willseye.org

Retina Research Plays Pivotal Role in FDA Approval of Genentech's Susvimo

Dr. Carl Regillo was the principal investigator in clinical trials on an implant that will revolutionize care for neovascular age-related macular degeneration.

In October, the U.S. Food and Drug Administration (FDA) announced the approval of Genentech's Susvimo for the treatment of neovascular or "wet" age-related macular degeneration (nAMD). Carl D. Regillo, MD, Wills Chief of Retina Service, played a key role in the research and clinical trials as principal investigator for both the Ladder phase 2 and Archway phase 3 studies on Susvimo.

Neovascular AMD is a leading cause of blindness for individuals over 60 and affects 1.1 million people in the United States. The disease impacts the eye's ability to provide sharp, central vision and can cause rapid and severe vision loss; the cause is unknown. Currently, the treatment for nAMD involves monthly drug injections directly into the eye. Susvimo is a permanent and refillable eye implant that measures about the size of a grain of rice and is placed in the eye wall.

"Susvimo is going to be a game changer for the care of patients with retinal disease," said Dr. Regillo. "The device not only decreases the treatment burden for patients but helps maintain positive vision gains and optimizes desired vision outcomes. We know that the anti-VEGF drugs work very well but we needed a more durable form of therapy. Susvimo gives us that option. We're taking a highly effective drug and delivering it to the eye in a sustained release fashion.

"This research was a team effort and I want to thank my fellow Wills Eye investigators and colleagues along with the patients who trusted us to help them." ■■■



Carl D. Regillo, MD, FACS, Wills Chief of Retina Service, performs a procedure with the FDA-approved Genentech Susvimo device.



Wills Eye Ball

JUNE 25, 2022
THE UNION LEAGUE OF PHILADELPHIA

HONORING
Robert S. Bailey Jr., MD and Mark H. Blecher, MD

Net proceeds will benefit the
Cataract & Primary Eye Care Service

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2022 WILLS EYE GOLF CLASSIC
41st
ANNUAL

Swing for the Gift of Sight

SEPTEMBER 12, 2022

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When Medicine & Music Merge

Joseph Markoff, PhD, MD, makes a gift to establish the *Markoff Family Fellowship* with the goal of studying artificial intelligence.

It's not every day that your surgeon talks about the jazz club or orchestra he played in the night before. But if you were a patient of Joe Markoff, PhD, MD, this may have been a regular occurrence.

Simultaneous careers in medicine and music might seem like an impossible feat, but not for Joe. "They are surprisingly similar in that they both require four key characteristics," he said, "knowledge of your discipline, ability to communicate, confidence in your skills and the ability to relax under pressure, whether in the operating room or on stage."

Joe Markoff had every intention of pursuing a musical career. He enrolled at Oberlin College to perfect his art—the trumpet. "I loved the sound of the trumpet; it was in my DNA," he said. "But I realized that being a musician has challenges, and changed majors to neuroscience where I received an NSF research grant to study color vision." He earned a PhD from Syracuse University in the visual sciences.

Dr. Markoff began his career as a Principal Research Scientist at Honeywell, with a concentration in electrophysiology. Eventually, he enrolled at The University of Minnesota Medical School but kept one foot in the music world by performing with The Saint Paul Chamber and Minnesota Orchestras. "My music gigs paid for medical school," he said. The young physician then made his way to Wills Eye, completing his residency in 1978. "It was the best three years of my life," he said. "No other institution provides what Wills does: mentorship, complex cases, and resident and staff camaraderie. It's really a special place."

Dr. Markoff built a successful practice, Philadelphia Eye Associates, and served as Director of the Visual Physiology Service at Wills for three decades. In 2010, he became



▲ Joseph Markoff, PhD, MD, in his Center City Philadelphia home.

the use of intraocular lens implants as a secondary procedure. This began a lifelong friendship built on their shared dedication to medicine and music.

Throughout his four-decade ophthalmology career, Dr. Markoff stayed true to his passion for the trumpet. He was a guest musician with The Philadelphia Orchestra and principal trumpet in the World Doctors Orchestra. He performed with Sammy Davis Jr., Tony Bennett and Ella Fitzgerald, to name a few. "The trumpet allowed me to experience a whole other world and I'm grateful for all of it," he said. "It made me a better doctor."

Recently, Dr. Markoff has refocused his energies on consulting, music, golf and reading fine literature. "I will never truly retire," he said. In fact, his commitment to innovation and ophthalmology will continue in the form of a recent gift to Wills Eye to establish the *Markoff Family Fellowship*. The purpose: To recruit a brilliant mind to study artificial intelligence (AI) and its use in artificial sight. "The community's understanding of the retina has advanced in recent years and I believe this is an area worth investigating."

The gift is a welcome infusion for the Vickie and Jack Farber Vision Research Center, where researchers had already been exploring AI. "Joe's gift will enable us to recruit a fellow who can acquire unparalleled clinical experiences while developing a unique skill set," shared Julia A. Haller, MD, Ophthalmologist-in-Chief. "We are excited to have this jet fuel to jumpstart the careers of our trainees and to uncover strategies that could revolutionize patient care. Joe's accomplishments are vast, but what makes him unique is his ability to imagine our future. I'm so grateful to him for giving Wills Eye this opportunity." ■■■

“No other institution provides what Wills does: mentorship, complex cases, and resident and staff camaraderie.”

— Joseph Markoff, PhD, MD

the Global Director of Ophthalmology at Merck where he helped develop drugs for glaucoma. He attributes his success to staying on top of advancing technology and a willingness to try innovative procedures.

"I didn't do this alone," he said. "If it wasn't for the support and devotion of my wife, Phyllis, and our children, Melissa, Noah and Nicole, the success I have enjoyed would not have been possible."

At one point, he teamed with renowned ophthalmologist, musician and fellow Wills alum, Charles Kelman, MD, on

For more information about the *Markoff Family Fellowship* or to learn how you can support Wills Eye Hospital, contact John Zabinski, Chief Development Officer, at jzabinski@willseye.org or 215-440-3153.



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GIVE KIDS SIGHT DAY 2021

HUNDREDS OF PHILADELPHIA CHILDREN RECEIVE FREE VISION SCREENING

In October, Wills Eye Hospital hosted the 12th annual Give Kids Sight Day (GKSD), in partnership with Children First and the Essilor Vision Foundation. The initiative provides free vision screening to uninsured and underinsured children throughout the Greater Philadelphia region.



Due to the pandemic, Wills Eye and Children First pivoted their efforts by first conducting remote vision screenings. Children who did not pass the screening were scheduled for an eye exam on October 16, where they were also given a prescription and picked out two free pairs of glasses.

“Without access to vision care, children are at a high risk for failing to thrive in school and life,” said Wills Ophthalmologist-in-Chief Julia A. Haller, MD. “We are proud to do our part in helping hundreds of kids every year. COVID-19 has presented many barriers, but our team has surmounted them – innovating to provide excellent, empathetic care. Over 200 volunteers worked tirelessly, resulting in the virtual screening of more than 460 children and in-person exams for over 250. I am so thankful for their generosity.”

HELP PRESERVE AND RESTORE VISION!

Please consider making your gift before December 31, 2021.

It is our loyal donors who help advance the Wills Eye mission. Your gift to the *Fund for Vision* provides the financial resources to train the next generation of ophthalmologists, uncover groundbreaking discoveries and provide superior patient care. Thank you for partnering with us to preserve and restore vision.

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