DEPARTMENT OF
Ophthalmology and
Visual Sciences

BREAKING BOUNDARIES
TOGETHER

FISCAL YEAR 2019

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM
Partnerships Make Our Progress Possible

Looking back on the past year, the UAB Department of Ophthalmology and Visual Sciences and Callahan Eye Hospital has seen significant growth across all aspects of our mission, including our key areas of focus on providing high-quality patient care, developing innovative translational research, and developing the next generation of clinicians and scientists. We wouldn’t be where we are without the hard work and dedication of our researchers, educators, and clinicians. However, our faculty’s success was only possible through the support of our collaborators and philanthropic partners. Our ability to continue to grow into the future remains critically dependent on our efforts to create new connections and establish robust partnerships.

Over half a century ago, Dr. Alston Callahan established what would become UAB Callahan Eye Hospital. His dream of building a world-renowned eye care facility was catalyzed by philanthropic partners and the relationships he was able to establish. Dr. Callahan is credited with raising more than $40 million in his lifetime toward providing eye care to Alabamians in need. We have been privileged to witness the remarkable growth of our hospital and department over the past 55 years, and we will continue to invest in Dr. Callahan’s legacy of creating lasting partnerships. Partnerships enable us to leverage our strengths while embracing the talents of our trusted collaborators in order to deliver excellence across all our mission areas. On the following pages, you’ll see examples of the power of partnerships—between clinicians and patients, researchers and collaborators, and our department and the philanthropic community. You’ll also meet some of our essential partners who help us produce a diverse department full of knowledge, insight, and advancement.

Above, left to right: Brian Samuels, M.D., Ph.D., Dan Thorougham, and Rafael Grütz, Ph.D., discuss partnerships in action. Thorougham supports both Samuels’ and Grütz’s research and discovers treatments that could alleviate blinding eye diseases have been catalyzed by community support. Through our newly established 20/20 Initiative, we will take advancements in vision care to the next level and propel Dr. Callahan’s vision for the hospital into the future. We thank you all for your role in helping us accomplish so much in 2019, and we cannot wait to see what 2020 holds for our department and hospital. Thanks to our dedicated team of researchers, clinicians, and staff, we are positioned for more great accomplishments in the year to come.

Sincerely,

Christopher A. Girkin, M.D., MSPH, FACS
EyeSight Foundation of Alabama Chair, UAB Department of Ophthalmology and Visual Sciences, UAB School of Medicine, University of Alabama at Birmingham
NIH Ranking

A 459% increase since 2012, and ranked 5th in the nation in 2018

UAB Callahan Eye Hospital:
The only freestanding Level 1 Ocular Trauma Center in the Country

Number of patients treated in the Emergency Department: 7,176

Surgeries by Type

- Cataract: 5,598
- Retina: 3,055
- Plastics: 1,713
- Glaucoma: 904
- Cornea: 527
- Other: 2,507

Ambulatory Clinic Volume

More than 160,000 visits in FY 2019

UAB Campus-Wide National Eye Institute Grant Funding

- UAB Department of Ophthalmology and Visual Sciences: $9,791,218
- UAB School of Optometry: $3,121,238
- Department of Neurobiology: $622,356
- P30: $736,500

Total: $14,271,312

More than 160,000 visits in FY 2019

14,304 Surgical Procedures

*Data range October 1, 2018 – September 30, 2019. This report was sent to publication prior to having final numbers for August and September, so these numbers are based on projected and annualized figures.
Thanks to the collaborative care he received at UAB, the teenager from Panama City, Fla., went from near blindness to driving in an auto competition less than a year later. “I’ve never seen doctors work together the way they did with Cooper,” says Somartha Jackson, Cooper’s mother. “Every visit we had at UAB, they’d get together and offer different suggestions and options, then figure out a game plan. It was really amazing to watch.”

This amazing journey began in a most ordinary way. In 2017, Cooper started experiencing eye irritation that initially was diagnosed by a local eye care specialist as recurrent conjunctivitis, more commonly known as pink eye. The condition would dissipate with antibiotics, so even when he experienced flare-ups it still was dismissed as being nothing serious. After all, Cooper was a young kid who liked to be outdoors in the Florida Panhandle. Things like this are going to happen on occasion. Or, as Somartha recalls people saying, “Boys will be boys.”

Eventually, however, the boy himself became worried that something was seriously wrong. His eyes hurt and his vision worsened. As he approached his 16th birthday, Cooper fretted that he might not be able to see well enough to pass his driver’s license test. So he finally asked his mother about the possibility of getting glasses. “He never, ever wanted glasses, so it took a lot for him to even admit that he needed them. That’s when I realized how bad it must be,” Somartha says. “We took him to get an eye exam, and they told me immediately that it was definitely far worse than just pink eye.”

Cooper visited three eye specialists in the panhandle area, and the consensus was that he had severe uveitis, an inflammation on the inside of the eye that can lead to glaucoma or other eye problems. Because the condition had basically been smoldering for nearly a year, significant damage had already occurred to Cooper’s vision and it was feared that without surgery he would go blind. The doctors recommended that Cooper be admitted to UAB Callahan Eye Hospital.

“Callahan’s Team Approach Prevents Young Patient from Going Blind

BY CARY ESTES

While there is no ‘I’ in team, you certainly can have a team for the eye. Cooper Jackson and his family discovered the benefits of such a partnership during recent visits to the UAB Callahan Eye Hospital.

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TEAM APPROACH IN ACTION

This is when the team approach to Cooper’s care truly kicked in. Samuels consulted with Russell Read, M.D., Ph.D. – professor with the UAB Department of Ophthalmology and Visual Sciences, who specializes in uveitis/ocular inflammatory disease—and Jason Crosson, M.D., a physician with Retina Consultants of Alabama. Since each doctor has a different area of expertise, they combined forces in order to tackle the multiple issues facing Cooper.

“With what we were able to do here is bring together experts in a lot of different areas to treat one individual,” Samuels says. “One of the critical things that makes for a great clinician is knowing what you don’t know, and having the confidence to say, ‘that’s not my area of expertise, but I have a colleague who is an expert in that area, and we’re going to get that doctor involved in your care also.’ Being willing to say that you don’t have all the answers is critical to good patient care. ‘It says a lot when a physician admits there are other people who probably know more than they do in a certain area, and are still comfortable with that. That’s what we have here. We have a full team of people throughout the hospital who are exceptional at the job they do, but who also know the limitations of their expertise and are willing to bring in additional experts when it’s required. That really is what sets us apart and allows us to provide the highest quality of patient care.”

Cooper, who turned 16 in September, has gradually improved since those initial surgical procedures. The use of glaucoma drops is keeping the pressure on the eye low and stable, and Read’s treatment has the vitreous under much better control. As of August, Cooper’s eyesight had strengthened to around 20/70.

“He had one underlying baseline problem, inflammation, but that problem impacted almost every function in his eye,” Read says. “The inflammation led to glaucoma, which led to cataracts. One problem expanded out to touch multiple different systems in the eye.

“It surprises people when they learn that this one tiny organ – the eye – is actually divided into a dozen different sub-specialties, and we all take care of different parts. Some people focus on the cornea, some on the retina, some on the optic nerve. I handle inflammatory disease. There are quite a few different areas, and no one person can be an expert at all those things.”

That is why collaborations and partnerships can make all the difference when it comes to patient care. It is similar to football, where numerous players must work in sync in order to be successful. In Cooper’s case, Samuels initially acted as the quarterback calling a play where an offensive lineman (Crosson) cleared a path for the running back (Read), with both doctors coming together to form such a great team,” Samantha says. “It wasn’t like I had to make an appointment with each of them weeks in advance. They didn’t wait on anything. They all came together immediately. They didn’t wait on anything. Everyone came together immediately. They didn’t wait on anything. They were taking care of the issue right away.

“Every visit that we went to was very team-oriented. They were willing to go above and beyond, and our whole family is so thankful. It was very reassuring that Cooper was in the best hands he could be,”

Glaucoma is a disease that can be treated but not yet cured, so Cooper will need to continue regular visits with a glaucoma specialist probably for the rest of his life. In addition, the vitreous likely will flare up on occasion and will need a lifetime of management.

“He has gotten better, but we hope there is still more improvement to come,” Samuels says. “We’re happy with the vision he’s gotten back, but we’re not yet satisfied. So the goal is to keep pushing and trying to optimize his care to get back as much vision as possible, and then maintain everything.”

No matter what happens moving forward, Cooper already has experienced several surgeries for treatment he received at UAB Callahan Eye Hospital. In particular, he was able to drive in an auto demo derby this past summer, something he desperately wanted to do but seemed unlikely just a few months earlier.

Cooper showed his appreciation by painting a thank you message to the hospital on the side of his demo derby car. The message included the names of Samuels, Read and Crosson, along with two watchful eyeballs.

“I’m still absolutely amazed at how all of them came together to form such a great team,” Samantha says. “It wasn’t like I had to make an appointment with each of them weeks in advance. It was like, ‘I’m here, they were right there. Everyone came together immediately. They didn’t wait on anything. They were taking care of the issue right away.

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Aaron Moncrief, a pastor from Oak Park, Ga., was shooting fireworks at a summer youth camp in 2018 when he noticed an unexploded mortar on the ground. As he attempted to discard the tube, it erupted.

“The firework mortar misfired,” says Moncrief, “and I took a direct hit to my left eye.”

The force of the blast shattered the bones in his face and ruptured his left eye. A rescue crew loaded him onto emergency transport, which flew him to Birmingham. Once there, EENT surgeons at UAB Medical Center worked to repair his facial fractures. Then a surgical team at the UAB Callahan Eye Hospital made an effort to repair his eye. “It’s always worth trying to repair a ruptured eye when possible,” says Sarah Jacobs, MD., ophthalmic plastic and reconstructive surgeon at UAB. “Even when the injuries seem devastating, because there are many traumas that the eye can potentially recover from.”

Two weeks later, Moncrief visited Jacobs and he asked her if he would ever regain sight in his eye. Unfortunately, Moncrief’s eye had become phthisical, says Jacobs, meaning the internal physiology of the eye had shut down so that it could not maintain pressure or regain vision. But, to improve his comfort level and appearance, Jacobs decided on a plan for a series of three complex reconstructive surgeries over the course of several months.

In the first operation, she removed remnants of his left eye, a procedure called enucleation. She also repaired the large fracture along the floor of his eye socket. “That turned out to be unusually challenging because of the amount of bone that he had lost in the explosion,” says Jacobs. “But we managed to place a 3D titanium and porous polymer implant into his socket to reconstruct his fractures.” In addition, she also revised the large scar across his lower lid and cheek, which had remained chronically inelastic since his injury.

The second operation involved reconstructing Moncrief’s lower eye lid and the middle corner of his eyelid to improve lid retraction, in order to enable the fitting of his ocular prosthesis—a plastic shell which is custom-made to give the appearance of a normal eye. The goal of Moncrief’s third surgery was reconstruction of his tear drainage system, which had been irreparably injured. Jacobs says she and her team formed a new tract through the bone and inserted a small Pyrex glass tube to create a bypass system restoring tear drainage into his nose.

For each surgery, Moncrief and his wife, Misty, drove more than five hours from their home in Oak Park to Birmingham. When the time came to have Moncrief fitted for an ocular prosthesis, Jacobs reached out to a colleague in Seattle who recommended an ocularist in Georgia whose office was closer to Moncrief’s home.

Today, Moncrief says he is happy with the results. “It looks good,” he says. “I’ve been pleased with the healing process, and I’ve raved about Dr. Jacobs and her team.”

Jacobs says that for patients like Moncrief with complex traumas, the value of collaborations between a broad range of specialists—from ophthalmologists and ENT surgeons to ocularists—“is incalculable.”

“She proved her commitment to her patients,” says Jacobs. “It is a superpower to bear on the situation—we can bring their own unique skill set—one another to bear on the situation—we can bring their own unique skill set—our own superpower to bear on the situation—we can get better outcomes.”

Teamwork Gives Injured Patient a New Start

BY GABRIEL BRIEGER

Patient a New Start

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CLINICAL PRACTICE

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Lolley Named First Female Chief of Staff

Virginia Lolley, M.D., assistant professor in the UAB Department of Ophthalmology and Visual Sciences, has been named the first female chief of staff for Callahan Eye Hospital. In this role, Lolley will provide leadership, guidance and a voice for the medical staff while promoting effective communication between medical staff and hospital administration.

“Dr. Lolley is an exceptional surgeon and highly-regarded leader within our medical staff,” says Ret B. Grover, MSHA, MBA, chief executive officer of Callahan Eye Hospital. “With more than two decades of high-quality clinical service in central Alabama, she is an asset to the Birmingham community and Callahan Eye Hospital. We are thrilled to welcome Dr. Lolley to our leadership team.”

Lolley has worked as a comprehensive ophthalmologist at Callahan Eye Hospital for more than 20 years, and she is a Top 5 surgeon based on Callahan Eye Hospital volume. She served as Callahan Eye Hospital president from 2013 to 2015 and is the former director of Undergraduate Medical Education for the department. She is board-certified by the American Board of Ophthalmology, and she is a member of the American Academy of Ophthalmology, the American Society of Cataract and Refractive Surgeons, the Alabama Academy of Ophthalmology, and the American College of Surgeons.

Lolley has been selected as one of the “Best Doctors in America” yearly since 2007 and was one of Birmingham Magazine’s “Best of Birmingham” in 2016.

“As Callahan Eye Hospital evolves, it is important that we maintain our traditions and identity as an eye hospital while integrating our new traditions and identity as an eye hospital while integrating our new

Below: An image of the UAB Gardendale clinic and Virginia Lolley, M.D.

“Dr. Lolley is an exceptional surgeon and highly-regarded leader within our medical staff.”

Communication Helped UAB’s Dr. Vaphiades Uncover Rare Disease in Patient

I began with piercing headaches accompanied by glimpses of flashing light. Then came the memory issues. Parking lots couldn’t be found. The names of old friends couldn’t be remembered. It became difficult to swallow, then, to even speak. A cloud of depression began to form, and the sweet teenager from Hattiesburg, Miss., became irritable, confused, and agitated.

This was Kassidy Anderson’s deteriorating world during the first half of 2018. Her life became a series of medical tests and treatments. Doctors attempted to explain the symptoms as being caused by migraines, but in reality, nobody was quite sure what was going on. The situation steadily worsened, to the point that Anderson finally looked at her mother and sternly declared, “I’ll don’t get some help, I’m going to die.”

It turns out Anderson didn’t need another test as much as she simply needed somebody to truly listen to her. She found that person in Michael Vaphiades, D.O., chief of Neuro-Ophthalmology and Electrophysiology Services at UAB Callahan Eye Hospital. What Dr. Vaphiades heard when he met Anderson in June of 2018 eventually led him to diagnose her as having anti-NMDA receptor encephalitis, a rare autoimmune disease that attacks the brain. The condition was depicted in the 2016 movie Blindsight.

“The way she described her symptoms fit with an encephalitis even though the initial testing was negative,” Dr. Vaphiades says. “Kassidy said she was experiencing unusual episodes of cognitive disassociation and dysautonomia, and the way she described them didn’t sound epileptic nor psychiatric. She had headaches that couldn’t be accounted for by using the visual testing modalities like EEG, neuroimaging or cerebrospinal fluid testing.

“I knew Kassidy had a life-threatening disorder and my instincts and limited knowledge anti-NMDA receptor encephalitis led to the diagnosis, despite the negative laboratory testing. I can’t fully explain why I felt so certain it was NMDA, because these patients typically present to a psychiatrist at this stage of the illness and I had no real patient experience with the disorder.”

Kassidy had never heard of anti-NMDA receptor encephalitis, but once she researched the condition, she strongly agreed that it sounded exactly like what she was experiencing. Dr. Vaphiades began treating her with Intravenous Immune Globulin (IVIG), then started searching for the antibody. They tested 50% of cases are associated with an ovarian tumor called a teratoma.

It took several months and dozens of pelvic ultrasounds and other imaging until the tumor was finally detected. “I kept in close contact with Kassidy and her mother, monitoring her symptoms,” said Vaphiades. After several months, the ovarian teratoma was finally detected. Once the tumor was surgically removed, Kassidy’s symptoms rapidly improved.

“Dr. V really listened to what I had to say and never doubted what I was saying,” says Kassidy, who is now aspiring to be an ophthalmologist and unshakably Dr. Vaphiades in his clinic a few times. “That communication was vital. It was really important to me and made me trust him. When I told him (after the surgery) that I was doing better, he teared up. He had that much of a relationship with me. He really cared, and that mattered to me.” Without that level of commitment, Dr. Vaphiades wonders whether Kassidy’s condition ever would have been correctly diagnosed.

“You can’t let a negative test dissuade you from the diagnosis. You have to talk and really listen to your patients,” Dr. Vaphiades says. “And if you just have to be persistent until the real problem is revealed.”

BY CARY ESTES

Below: Kassidy Anderson and Michael Vaphiades, D.O.
Advancements, Accolades, and Awards

1. **UAB HOSTS 2ND ANNUAL SOUTHEASTERN VISION RESEARCH CONFERENCE**
   The UAB Department of Ophthalmology and Visual Sciences hosted the second annual Southeastern Vision Research Conference (SEVRC) to celebrate and share excellence in vision science in December 2018. The two-day seminar held at the Hilton Birmingham at UAB brought together vision scientists from Vanderbilt University Medical Center, The University of Alabama at Birmingham, and Emory University to foster collaboration among the groups, each with its own unique strengths.

2. **SYMPOSIUM WEEKEND/GRADUATION CELEBRATION**
   For the first time, UAB Ophthalmology has successfully combined their annual symposium with the department’s graduation banquet that made for a weekend of learning, insight, and celebration.

3. **CYNTHIA OWSLEY, PH.D., PROFESSOR, NATHAN E. MILES CHAIR IN OPHTHALMOLOGY**
   Owsley was named the Oberdorfer Award recipient in Low Vision Research for 2019.

   The Oberdorfer Award in Low Vision Research was created in 2012 by the Association for Research in Vision and Ophthalmology (ARVO) Foundation for Eye Research with support from Lighthouse Guild. The award recognizes an individual for his or her role in furthering low-vision research and rehabilitation.

   In addition, the organization Prevent Blindness, the nation’s oldest volunteer eye health and safety organization, announced Owsley as the recipient of the 2019 Jenny Pomeroy Award for Excellence in Vision and Public Health.

4. **MIYOUNG KWON, PH.D., ASSISTANT PROFESSOR**
   Research to Prevent Blindness and Lions Clubs International Foundation have granted UAB Ophthalmology’s MiYoung Kwon a $300,000 RPB/LCIF Low Vision Research Award to support her eye research.

5. **JASON SWANNER, M.D., PROFESSOR**
   Swanner was appointed vice chair of Clinical Affairs for the UAB Department of Ophthalmology and Visual Sciences. In this role, he will work closely with the leadership in the department, School of Medicine, and Callahan Eye Hospital to organize and integrate clinical development in cohesion with the School of Medicine’s academic mission.

6. **CHRISTINE A. CURCIO, PH.D., THE WHITE-MCKEE ENDOWED PROFESSOR IN OPHTHALMOLOGY**
   Curcio received the 2019 Research to Prevent Blindness David F. Weeks Award for Outstanding AMD Research. The award carries the name of David F. Weeks, former president and chairman of Research to Prevent Blindness, in honor of his contributions to the field at vision research, and celebrates the excellence of current AMD researchers.
Researchers Discover New Biomarker for Age-Related Macular Degeneration

A Catalyst for Faculty Support

Faculty retention and recruitment is one of the most impactful ways a donor can support a department. Christine A. Curcio, Ph.D., was named as the inaugural holder of the Nathan E. Miles Chair of Ophthalmology. Through philanthropic support, our faculty are our greatest resource and support the department’s mission of alleviating blinding eye diseases. Every day, they invest their time and talent into the department. When donors choose to partner with this type of talent, they are actively supporting our long-standing culture of excellence.

Below, left to right: Christine A. Curcio, Ph.D., and Cynthia Owlesy, Ph.D.

Donors Make the Difference

Several years ago, Samuels and Grytz were conducting a study using optical coherence tomography when they made a surprising observation. “We realized that if we just moved the position of the camera less than a centimeter,” says Samuels, “the shape of the eye appeared to change dramatically.”

They wanted to investigate further, but their NIH grant would not cover an additional investigation. That is when one of Samuels’ glaucoma patients came to the rescue. Don Thornburgh, a retired engineer from Vestavia, says that during one of his eye appointments, he asked Samuels how doctors measure eye pressure.

“She was impressed with what he was doing and wanted to support him,” Thornburgh says. He and his wife made two monetary gifts to Samuels’ research. Samuels says donors like the Thornburghs are as much a part of a research team as the investigators in the laboratory. “They’re truly a part of what drives the innovations, discoveries and cures.”

Left: Patient Don Thornburgh
Above, left to right: Rafael Grytz, Ph.D., and Brian Samuels, M.D., Ph.D.

In addition to their independent research, Rafael Grytz, Ph.D., and Brian Samuels, M.D., Ph.D., are co-principal investigators on a study that aims to uncover the mechanisms underlying and potentially linking two blinding diseases: myopia and glaucoma. Grytz is a biomedical engineer whose areas of interest include the growth and remodeling mechanisms that occur in eye diseases like myopia. His research partner, Samuels, is an eye surgeon as well as a neuroscientist specializing in the diagnosis and treatment of glaucoma.

The researchers decided to pair up and use their individual expertise to determine why myopia might be a risk factor for glaucoma. Samuels says their study involves examining the pathological remodeling that happens near the optic nerve at back of the eye. Remodeling during myopia development can produce changes in the eye’s collagen structure which could increase the risk for pathologic remodeling and glaucoma. Samuels’ expertise as a surgeon and glaucoma specialist benefits these investigations.

“His skills and scientific skills to perform the translational research experiments proposed,” says Grytz. “We want to understand basic mechanisms, but we also want to develop new treatments. As an interdisciplinary team, we are better equipped to reach this goal.”

Conversely, Samuels said of Grytz, “He brings a unique combination of biomedical engineering and computational mechanics skills to our team that allows him to identify treatment targets and disease mechanisms that clinicians and other scientists would miss.” Besides the advantages that interdisciplinary collaborations bring to labtaining research, Samuels says teaming up also makes them more competitive for grants. “Other glaucoma or myopia researchers submit independent grants limited to their area of expertise,” he says. “Combining our talents opens up research areas where other researchers simply cannot go alone. Additionally, it gives us a better chance of finding a cure.”

Combined, Grytz and Samuels currently have more than $7 million in National Institutes of Health (NIH) funding support to study myopia and glaucoma.
Collaboration Leads to Innovation

BY LISA C. BAILEY

“It’s the divide-and-conquer idea,” Maria Grant, M.D., Eivor and Alston Calahan, M.D., endowed chair in Ophthalmology, says of her collaborative research in diabetic retinopathy. “You can’t do everything yourself. We’re a small- to medium-size lab, and my collaborators across the country are in the same situation. So you split up the workload to make it manageable. It’s a much more efficient way to have people doing what they do well to contribute to a project.”

The focus of Grant’s most recent research is primarily on understanding basic mechanisms responsible for the pathogenesis in the development of diabetic retinopathy. “We are particularly interested in trying to understand how the bone marrow and the cells that produce that bone marrow, a process called hematopoiesis, is influenced in diabetes and how that affects the retina,” she says. Her collaborators on this particular research include Julie Buck, Ph.D., professor in the Department of Physiology at Michigan State University; Moshe Levy, M.D., professor in the Department of Biochemistry and Molecular & Cellular Biology at Georgetown University; and Quanhui Li, Ph.D., associate professor in the Department of Ophthalmology Research at the University of Florida. In her lab at UAB, Grant works with six graduate students, four post-docs, and three senior scientists.

“Most recently we’ve not only focused on the bone marrow interactions with the eye,” Grant says, “but also how the gut and the gut microbiome regulate metabolism and immune function in neuroendocrine pathways and how they influence development of diabetic eye disease.” According to Grant, the gut microbiome is deregulated in diabetes. “We studied the intestinal microbiome in the context of both Type 1 and Type 2 diabetes,” she says, “and we’ve found that it has an essential role. We’ve also used the idea of intermittent fasting to influence it, and we were able to show that we could prevent diabetic retinopathy. We found that intermittent fasting generated high levels of a particular neuroprotective bioacid called TUDCA, and we showed that in a paper we published in Diabetes last year. We’re continuing our research along those lines.”

Grant and her team are now applying some of the things they learned in diabetic retinopathy to atherosclerosis. “Atherosclerosis regression doesn’t occur in diabetic patients,” she says. “We’re trying to understand the mechanism for that, and we believe that it’s gut related and related to swings in blood sugars. Having a leaky gut accessibly or getting bacteria in the blood isn’t necessarily a bad thing. The body usually does an amazing job of cleaning things up and getting rid of the bacteria. But in diabetes this keeps happening many times during one day, and we were able to show that intermittent fasting could reduce that.”

The relationships among her collaborators have been very important in the progress of the research. “It’s important to have a really good collaborative team that is supportive,” she says. “It helps to have someone to talk to and someone to help you deal with the highs and the lows. There are a lot of discouraging times and rejection, and we keep each other encouraged.” She adds, “It also makes the science much more fun—a most important factor in keeping it going.”

Inspired Cooperation

BY LISA C. BAILEY

Massimo A. Fazio, Ph.D., associate professor of ophthalmology, and Christopher A. Ginir, M.D., EyeSight Foundation of Alabama Chair of the Department of Ophthalmology and Visual Sciences, understand the value of collaboration. Fazio leads the African Descent and Glaucoma Evaluation Study (ADAGES) together with Ginir at UAB, Linda M. Zangwill, Ph.D., co-director of Clinical Research at the Shiley Eye Institute at The University of California San Diego, and Jeffrey M. Liebmann, M.D., vice chair of the Department of Ophthalmology and director of Glaucoma Service at Columbia University.

Supported by grants from the National Eye Institute, the study explores the role of differences in the optic nerve that may explain why individuals of African descent are at greatest risk of developing glaucoma. ADAGES is the most comprehensive clinical study that includes mixed racial groups. It has previously focused on nerve structure and function, progression, and genetics. Now in its fourth iteration, the focus is currently on biomechanics.

Fazio has a doctorate in mechanical engineering with a multidisciplinary background in experimental mechanics, soft tissue biomechanics, and medical image analysis. He holds a primary joint appointment in the Department of Biomedical Engineering. In the ADAGES study, he uses a laser-based technique called optical coherence tomography, or OCT, that allows researchers to capture 3-D images of the optic nerve head using both clinically available and experimental devices.

“Glaucoma affects the optic nerve pole,” Fazio says. “The area where the optic nerve that connects the brain to the eye inserts into the eyeball. So we focus our attention on how this area is affected. Once we arrive at the morphology, we observe how it changes over time. Then we have an understanding of the biomechanics, the response of the tissue under pressure, and how all of this responds to disease progression.”

There is continued emerging evidence that the biomechanical behavior of the nerve may differ as people age across racial groups. Ginir says, “Once we understand how these changes occur, we can take steps to alter the biomechanical environment within the eye, either surgically or with pharmacological or genetic interventions, to change the response in the eye to pressure.”

Ginir adds, “Our investigators are experts in glaucoma, technology, imaging, visual function, and now biomechanics, so they are great to collaborate with in that regard. They also provide access to more patients, and, most importantly, a great diversity of patients across the country.”

Fazio states that working with Ginir has been quite synergistic. “Ginir’s M.D. with important knowledge and experience in how glaucoma develops differently across races, while I use my expertise to develop and tune up medical instruments and communication software to extract information. His approach of sharing our resources rather than promoting competition, within and outside the department, has been incredible.”

Generous Investment, Significant Outcomes

In 2003, Ginir partnered with the EyeSight Foundation of Alabama to fundraise for what then was known as the African-American Glaucoma Study. Now known as ADAGES. In 2006, the ESA gave $200,000 to support Ginir’s vision of groundbreaking clinical research aimed at developing improved diagnostic methods to detect glaucoma. The ESA went on to fundraise through a 2003-2004 capital campaign, raising another nearly $200,000 from 30 donors across Alabama. This $400,000 total was the baseline support system to expand this research through the ADAGES study. Since that time in the early 2000s, the impact of this gift has been immeasurable.
UAB Ophthalmology Residents Get Hands-On Experience Caring for Vets

BY GAIL SHORT

UAB ophthalmology residents are getting wide-ranging clinical experiences and surgical training through the Birmingham Veterans Affairs Medical Center. Every academic year, 10 residents rotate through the UAB Callahan Eye Hospital’s affiliate Veterans Affairs Eye Clinic in the UAB Medical Center and the Birmingham VA Medical Center’s surgical unit.

Cataract surgeon Jeffrey Crain, M.D., is the full-time director of the Birmingham VA Medical Center’s Ophthalmology Service. He also is an associate professor in the UAB Department of Ophthalmology and Visual Sciences and works alongside UAB Assistant Professor Andrew Everett, M.D., a full-time eye surgeon at the VA and participant in the residency training program.

Crain says that from the VA’s perspective, its partnership with the UAB Department of Ophthalmology and Visual Sciences is a “win-win” because the residents provide a valuable workforce. At the VA Eye Clinic, for example, where nearly 11,500 patients come for treatment for a wide variety of eye-related ailments every year, residents perform procedures ranging from eyelid biopsies and injections to laser therapies. Meanwhile, at the Birmingham VA Medical Center, second-year residents get hands-on training experience in the operating room, Crain says. By their third year, they are able, under supervision, to perform surgeries on their own.

Roy Hager, M.D., a two-term past president of the Alabama Academy of Ophthalmology, received his medical degree from UAB in 1967. He then did a general rotating internship at Lloyd Noland Hospital before serving as a General Medical Officer in the U.S. Army. “I was sent to Vietnam,” he says. “Spent a year there, and a year back at Fort Benning.” A battalion surgeon for the first seven months, Hager rotated back to Saigon in a neurosurgical/maxillofacial hospital. “All these head and eye injuries come from throughout Vietnam to that hospital. That’s where I changed my specialty and decided to go into ophthalmology.”

After returning to civilian life, Hager graduated among the first group of residents in the newly combined program of the UA Department of Ophthalmology and the Callahan Eye Foundation. “I started out as a resident with the UA Department of Ophthalmology, and the Callahan Eye Foundation program was separate with a separate group of residents. When I was a senior resident, there was a move to combine the two, and it has turned out to be a great program, better than it was as two separate ones.”

Upon completing his residency in 1973, Hager began a private practice in Montgomery. “I was basically a general ophthalmologist and saw any and everything. We referred some cases back to Birmingham, but most of what came through the door I handled here in Montgomery.” As the Department of Ophthalmology grew, so did Hager’s practice, and in 1987, he and two other physicians formed the Institute for Total Eye Care. Although he retired in 2018, Hager maintains his license, staying updated through UAB Ophthalmology and the Callahan Eye Foundation.

“The program has been very receptive to the people who finish there,” he says. “All the ophthalmologists here help each other, and the UAB Department of Ophthalmology and Visual Sciences is the backup we all need.”

When Hager first began his practice in 1973, there was no such thing as intraocular lenses for cataract surgery. He adds, “Back then it was a week in the hospital. As things progressed, it was five days, then three days, and now it’s outpatient. There has been such an explosion in ophthalmology since I finished, and I’ve seen the whole spectrum of things. That’s why I think it’s important that research is being done at the UAB Ophthalmology and elsewhere, and that’s why I support it.”

Hager and his wife, Shirley, have four children, six grandchildren, and two great-grandchildren. “The Department of Ophthalmology and Visual Sciences gave me a livelihood that has been good and very rewarding,” he says. “There are some really good people at UAB, and we need to keep them as up-to-date as we can. I would encourage everyone to support the program.”

Where Are They Now?

Our alumni are practicing all over the country. These are the cities you will find UAB Ophthalmology Alumni.

Roy Hager, M.D., A Partner in Time

BY LISA C. BAILEY

Roy Hager, M.D., has participated in the Alumni Challenge Fund more than once. “The Department of Ophthalmology and Visual Sciences deserves support,” he says. “It has gone from a relatively small program to an internationally-known program, and it takes people who support it for this to happen.”

“While last year was a banner year at the Alumni Challenge Fund, we are always looking for ways to increase alumni giving,” said Barbara Reardon, UAB’s seniorassociate director of annual giving. “UAB Ophthalmology Alumni and their families are an important part of our program, and we appreciate their support.”
From Birmingham to Nicaragua and back, David Neely, M.D., has blazed a trail of education and service. He graduated from medical school at UAB in 2012 and from the Department of Ophthalmology and Visual Sciences in 2016. In 2018, he completed a combined fellowship with UAB and Retina Consultants of Alabama, during which he taught residents.

Neely has also spent extensive time serving in medical missions in foreign countries, an interest that began at UAB. “Ophthalmology can make such a big difference in people’s lives from a health, a social, and an economic standpoint,” he says.

One of his first trips was to the Dominican Republic with the Christian Medical Ministry of Alabama. Through his connections there, Neely met his wife, Jill Aragón, M.D., who was born and raised in Nicaragua and is now a U.S. citizen.

Aragón did her internal medicine residency at UAB, where she is currently an internist. She is also a fellowship director of the UAB HSF Global Health Fellowship and the UAB HSF Hospital Medicine Fellowship. “She’s been taking mission teams every year to Nicaragua,” Neely says.

In 2018, Neely joined Florida Retina Specialists in Merritt Island, which was started by a former UAB retina consultant from Alabama, Frank Venzara, M.D. “He taught me how to do my first retina surgery on a mission trip in Nicaragua,” Neely says. Another mentor, Richard Feist, M.D., attending surgeon of Retina Consultants of Alabama, has been going to Nicaragua for many years, and Neely worked with him there during his fellowship.

“The Centro Nacional de Oftalmología (CENAO), or the National Center of Ophthalmology in Managua, has a residency program with an attending retina surgeon,” Neely says. “We work with the surgeons and fellows there, sharing and learning from them. Retinal detachment, trauma, and diabetic retinopathy are the three main types of work we do, but there are also tropical pathologies.” He adds, “I’ve been there as a resident and later as a fellow, so I’ve been both the one being taught and the one teaching.”

Partnering with his wife on the service trips was a foundational element of their relationship, Neely says. The couple has formed many other partnerships along the way as well. “Francisco Rivas, M.D., the director of CENAO, has been a big supporter. She is in our Nicaraguan vision,” he says. Other partners include Rudy Vargas, M.D., an endocrinologist who started the organization FOR Nicaraguan Health, which sends a mission team every year, and Frank Page, M.D., a retired Birmingham OB/GYN.

As Neely was getting ready to graduate his fellowship, Nicaragua was hit with some political instability, temporarily halting the mission trips. “That is slowly being resolved,” he says, “but it’s still a difficult situation. We’re interested in spending a significant amount of time in Nicaragua in the near future—myself operating at CENAO, and my wife working in the medical school. We hope to reestablish the surgical camps, continue to teach the Nicaraguan residents and collaborate with the attending surgeons, and create a pipeline of equipment and supplies. We’re excited to help the people of Nicaragua. It’s a resource-poor country, but it’s such a beautiful country, with beautiful people. We’re very optimistic.”
Callahan Eye Hospital will feature art created by UAB students in a series of rotating exhibitions. The first exhibition will feature the works of two students, Caroline Myers and Emily Cox-Oldham, in the College of Arts and Sciences Department of Art and Art History. The work will be on view through summer and fall and can be seen on the third floor of the hospital.

Art is a universal medium of expression, bridging gaps across language, time and culture,” says Jessica Martindale, Callahan Eye Hospital communications manager. The value of art goes beyond paint, color, canvas, or clay and is instead found in the connection between the individual and the piece, no matter their physical ability. Art is about more than you can see, and this is an important concept for the patients at Callahan Eye Hospital & Clinics, she says.

The founder of the hospital, Alston Callahan, M.D., appreciated art, and was the primary driving force behind acquiring “Complex Vision,” a large-scale installation by artist Yasayoa Ajam, known as the father of kinetic art. “Complex Vision” has been the visual landmark of UAB Callahan Eye Hospital since November 1976 and adorns the front of the building.

“It is important that we continue to build upon Dr. Alston Callahan’s values, which is why UAB Callahan Eye Hospital & Clinics has partnered with the UAB Department of Art and Art History to build a relationship and keep original artwork alive in our facility,” Martindale said.

In the spirit of “Complex Vision,” works on view by UAB photography students Caroline Myers and Emily Cox-Oldham display sophisticated points of view that thoughtfully consider how light and line, color and texture can be captured by the camera and translated to meaningful, curious works of art. Cox-Oldham’s “The Slide Project” utilizes large-scale images to explore the texture and form of children’s playground slides. Across the playful, light-dappled series of photographs, bright color fills the field of view as the artist’s close-up view of children’s playground slides. Across the playful, light-dappled series of photographs, bright color fills the field of view as the artist’s close-up view of children’s playground slides.

Myers’ “Chasing Light” explores the magical way in which light can transform the simplest forms into dramatic, ethereal moments of beauty. By capturing warm, dappled light and deep, enveloping shadows across commonplace objects and domestic spaces, her photographs draw viewers into a series of contemplative yet fleeting moments.

Above: Callahan Eye Hospital features art in both the lobby and 3rd floor of the building that serves as a reminder that art is a universal medium of expression, no matter one’s physical ability. Below: The Sight Savers America Tribute Wall.

Callahan Eye Hospital & Clinics participated in over 30 community events and workplace environment. Callahan Eye Hospital & Clinics served as a major sponsor for the Exceptional Foundation’s 9th Annual Cornhole Classic. In 2018, Callahan Eye Hospital & Clinics served as the title sponsor for Vulcan’s 115th Birthday Bash.

This photography is a new addition to the original art already housed in Callahan Eye Hospital. One of Callahan Eye Hospital’s partners, Sight Savers America, commissioned a visually impaired artist to produce a piece of art dedicated to the annual recipient of the Hall W. Thompson Hero For Sight Award.

W. Thompson Hero For Sight Award. Both the award and the commissioned piece of artwork are on permanent display along the 25-foot Sight Savers America Tribute wall in Callahan Eye Hospital’s first-floor lobby.

Hall W. Thompson Hero For Sight Award

Leaving a Footprint in our Community

In 2019, Callahan Eye Hospital & Clinics served as the title sponsor for UAB Callahan Eye Hospital & Clinics Fan Zone.

1. Callahan Eye Hospital & Clinics served as the title sponsor for Vulcan’s 115th Birthday Bash.
2. Callahan Eye Hospital & Clinics served as a major sponsor for the Regions Tradition Golf Tournament in May 2019 by sponsoring the “UAB Callahan Eye Hospital & Clinics Fan Zone.”
3. The hospital placed within the Top 50 for recipes used during the Exceptional Foundation’s Annual Crab Cook-Off with their 90s-themed booth.
4. The hospital participated in the Moss Rock Festival in Hoover, Alabama.
5. In 2019, Callahan Eye Hospital & Clinics served as the presenting sponsor for the Exceptional Foundation’s 9th Annual Cornhole Classic.
Sight Savers Focuses on Providing Quality Eye Care for Children

BY CARY ESTES

The non-profit organization Sight Savers America has paved the way for the creation of a two-way street that runs through the UAB Department of Ophthalmology and Visual Sciences. And the destination is the same in either direction: Quality eye care for children from lower-income households.

“Our goal is to improve children’s vision, and UAB has been a great partner in achieving that goal,” says Sight Savers founder and President/CEO Jeff Haddox, who began his career in the vision sciences conducting research at Callahan Eye Hospital. “Since the late 1990s, we have collaborated on several programs designed to help children.”

Sight Savers has created programs to provide comprehensive eye-care opportunities, from basic exams and glasses to surgeries and home delivery of high-tech vision aids, all at no cost to a patient’s family. The organization works closely with UAB—led by Dawn DeCarlo, O.D., M.S., MSPH—to identify patients who need the assistance.

“What’s very distressing for any doctor is knowing that life-changing treatment exists for a child with severe visual impairment, but the family can’t afford it,” Haddox says. “So, we refer patients to UAB for evaluation and treatments to improve their vision, and they refer patients to us to purchase treatments and provide education on the use of equipment. It’s a two-way street.”

Sight Savers also works with UAB Pediatric Ophthalmologist Martin Cogan, M.D., and other eye-care providers to conduct one-day clinics in rural Alabama, particularly in the Black Belt region. The collaborative team travels to a public health department, school or church, sets up four fully functional exam rooms, and sees approximately 100 children throughout the day.

“Some rural counties don’t have an eye doctor, so it’s a big deal for them to have this opportunity,” Haddox says. “It also gives the pediatric ophthalmologists a chance to teach, and the residents a chance to learn how to function in a very rural area with low income patients who they wouldn’t normally see.”

“So, it is a win for the ophthalmology department, for Sight Savers America and for the children. Everybody gains from this partnership.”

Since 2014, the partnership between Sight Savers and UAB has been officially recognized through a 25-foot long tribute wall in the lobby of Callahan Eye Hospital. The wall honors Sight Savers America and late Birmingham businessman Hall T. Thompson (who helped secure state funding for Sight Savers), and includes a plaque recognizing that year’s Hero for Sight award recipient, as well as a commissioned painting created by a visually-impaired artist.

Below: Anne-Marie Arciniegas Bernal, M.D., performs an exam on a child through Sight Savers.
Bottom: Jeff Haddox and Rett Grover unveil the 2019 Hero for Sight award recipient.

BY CARY ESTES

International trips provide an opportunity for a world-class university to take its classes out into the world. Members of the UAB Department of Ophthalmology and Visual Sciences have been making such medical excursions for decades, providing much-needed eye care to underserved areas, and receiving valuable lessons in return.

“We’ve had residents and fellows and medical students go with us on these trips. That’s important for an institution like UAB to have contact with the wider world,” says Richard Feist, M.D., an associate professor with the Department of Ophthalmology and Visual Sciences who has taken regular trips to Nicaragua since 2000. “It’s a valuable education that most people don’t get, and it’s one that’s available because of the contacts that we have.”

Feist is a part of the Friends of Rudy (FOR) Nicaragua Health mission team—started by endocrinologist Rudy Vargas who worked at the UAB Callahan Eye Hospital—and travels annually to the country to perform surgeries and provide training to Nicaraguan ophthalmologists. While this is primarily a humanitarian mission, Feist says these trips also offer numerous educational opportunities, even for a veteran physician.

“We don’t always have the same resources there that we have here. So I’ve learned a lot as a surgeon and gotten more confidence just knowing that I can make do with fewer resources and less technology,” Feist says. “It makes any problem we have here in the States seem minor by comparison.”

This wonderlust began with UAB Callahan Eye Hospital founder Alston Callahan, M.D., who visited 93 countries during his career. It continues today with his son, Michael Callahan, M.D., a professor of Ophthalmology at UAB. In addition to working with the organization FOR Nicaragua Health, Callahan has made medical trips to countries such as Thailand, Kenya, Morocco, and Jamaica since 1983.

“A lot of these areas are very behind in the delivery of health care and surgical information. So it’s important for them to have doctors come in and demonstrate the new techniques and instruments,” Callahan says. “And the patients are always extremely grateful that someone will see them and try to help them.”

Callahan says it is not unusual for the group to perform 20 to 30 surgeries each day during a week-long stay in a country. He says patients show their gratitude in the simplest ways, bringing baskets of fruit or writing heartfelt thank-you notes.

“Even if you treat only one patient, you are making a difference in that one person that will help them and their family for the rest of their life. And it’s help they might not have been able to get any other way,” Callahan says. “That’s the impact of this type of service.”

Below: Countries that Dr. Feist and Dr. Callahan volunteered eye care services.
Below: Anne-Marie Arciniegas Bernal, M.D., performs an exam on a child through Sight Savers.
Next phase of our 20/20 Initiative: Raising $10 million from the community

This significant commitment serves as a springboard, catapulting us to the Retinal Research Foundation, and the University of Alabama at Birmingham.

The 20/20 Initiative is a philanthropic campaign with a goal of raising $25 million from individual donors, foundations, and community members to cover administrative and programmatic costs. NIH funds cover only the science, but there are so many behind-the-scenes costs that are required to keep a nationally recognized program running. 

“By 2018, UAB Ophthalmology ranked No. 5 in the country for the amount of funding it received from the National Institutes of Health (NIH), with over $10.6 million in NIH grant support during fiscal year 2018. This represents a nearly fivefold increase in research funding since 2012. This sort of momentum wouldn’t be possible without community, partners, but to sustain this kind of potential, we need to not only build upon the partnerships we already have, but form new ones. This type of NIH funding can bolster game-changing medical discoveries,” says Christopher A. Gerken, M.D., EyeSight Foundation of Alabama Chair of the Department of Ophthalmology and Visual Sciences. “But what most people don’t realize is for every dollar spent of NIH funds, the department spends over a dollar and a half to cover administrative and programmatic costs. NIH funds cover only the science, but there are so many behind-the-scenes costs that are required to keep a nationally recognized program running.”

UAB Callahan Eye Hospital & Clinics continues to see more and more patients each day as the demand for vision care services increases. With the need for services comes the need for more space, equipment, and renovation of facilities. The stakes are at an all-time high, and the time to make a difference is now. Community partners have the opportunity to support any of our five key areas and make an impact on their community, loved ones, and the world.

**A Legacy of Giving**

In 1963, Alston Callahan, M.D., founded the Eye Foundation Hospital, now known as Callahan Eye Hospital, the first facility in Alabama dedicated to the care and the treatment of the eye. The hospital wasn’t built with a standard loan, but through the support of philanthropic giving. Callahan was able to raise all of the funds needed to build the hospital through grateful patients and charitable giving. UAB Ophthalmology is a top 5 nationally ranked department, and Callahan Eye Hospital is the only freestanding Level One Trauma Center in the county and aligned to serving the community with several satellite clinic locations. Together, this team is committed to making a difference. This is the only facility in Alabama that’s three-pronged mission focuses on ground-breaking discoveries, high-quality patient care, and a comprehensive education. We will continue this journey together, and we invite you to join us on the road ahead through the 20/20 Initiative.

**20/20 Initiative Priorities**

1. **Faculty Support**
   - Funds to assist with recruiting and retaining outstanding faculty
   - Endowed chairs and professorships for faculty – a critical component for both recruitment and retention
   - Flexible funds to be used at the discretion of the chair of the department

2. **Research and Innovation**
   - Support medical discoveries, interdisciplinary research, and technological advances
   - Fund laboratory equipment
   - Research funding, such as pilot grants for junior faculty and bridge funding for faculty investigators

3. **Enhance Facilities**
   - Improving and updating our building and clinical space, as well as satellite clinics
   - Transformational naming opportunities within the building space

4. **Resident Education**
   - Funds for residents to attend professional and scientific conferences
   - Endowments to support resident scholarship opportunities
   - Flexible funds to be used at the discretion of the residency program director to support emerging priorities

5. **Programmatic Support**
   - Strengthening service opportunities for our faculty and patients through the Low Vision Clinic and the Connections Support groups

At UAB Ophthalmology and Callahan Eye Hospital, we are excited about the 20/20 Initiative and the possibilities that lie ahead. Your generosity can support our $10 million goal and help to transform the lives of those living with blindness in Birmingham, and beyond.
Thank you all for reading our 2019 Annual Report. Philanthropy is the true key to our progress, and we would love for you to partner with our team of clinicians and scientists. Your gift could be the answer to unlocking the next great scientific breakthrough. As we launch the next great scientific breakthrough, we invite you to partner with our organization and make us part of your estate plans.

OUTRIGHT GIFTS
Outright gifts put your contribution to work immediately—funding existing programs or creating a reliable source of future income for an existing endowment. It can be made through check, credit card transactions, legal tender, personal checks, cashier’s checks, and/or money orders.

PLEDGES
UAB Ophthalmology and Callahan Eye Hospital welcome your gift through a pledge—a formal statement of intention to make a gift over a period of time.

ENDOWMENTS
An endowment establishes a fund managed by the department, which provides perpetual, annual support for its initiatives. Endowments provide long-term security by expanding our permanent financial base and creating a predictable source of future income.

PLANNED GIFTS
Shape the future of our department and hospital. Leave your legacy by choosing to make us part of your estate plans.

ANONYMOUS GIVING
Donors who wish to remain anonymous are no less appreciated. A gift without a name attached to it can be as impactful as any other gift and can use the funds to positively transform lives and research.

TRIBUTES
A tribute gift is a thoughtful way to honor or memorialize a loved one while making a difference in the world. Your memorial gift can establish an endowment or help fund other projects.

The Gorrie family is one of the major reasons why. The fact that the Gorries think this is important really does elevate our center in everybody’s eyes.”

“I feel like we have a world-class center here,” DeCarlo says. “I’ve never met a better advocate.” Alie B. treasures her relationship with DeCarlo. “I’ve never met a better advocate.”

A Songs for Sight 10-year thank-you concert was October 5th, 2019. “The event took place at the Red Mountain Theatre Company Cabaret Theatre,” Jim Gorrie says. “We had a good turnout to update our supporters and celebrate all the good work that has been done.”

“Seeing the number of kids and families that use the services double and triple has been so exciting and inspiring,” Alie B. says. “Continued growth is my biggest hope. There’s nothing better than feeling included, supported, and taken care of. For that feeling to stay with all these kids and all their families, that’s what I want.”

“I feel like we have a world-class center here,” DeCarlo says, “and the support of the Gorrie family is one of the major reasons why. The fact that the Gorries think this is important really does elevate our center in everybody’s eyes.”

Above: Alie B. Gorrie and a friend during a recent Songs for Sight event.
Below: Dawn DeCarlo, O.D.

A Visionary Connection

BY LISA C. BAILEY

At UAB’s Center for Low Vision Rehabilitation, the Songs for Sight Youth Low Vision Support Group provides educational, recreational, and peer-support opportunities to families of children with vision impairment. Songs for Sight, created by Alie B. Gorrie to raise money, awareness, and understanding for low vision, has generated more than $1 million to help support the center and its director, Dawn DeCarlo, O.D."

Alison and Jim Gorrie have continued their daughter’s support, establishing the Alie B. Gorrie Low Vision Support Fund a few years ago. Alie B. was diagnosed as an infant with optic nerve hypoplasia. She first visited the center when she was in junior high. “In Dr. DeCarlo’s first assessment,” Alison says, “she said she thought Alie B. would be able to drive, and Alie B. was so inspired. She wanted to give back to a place that gave her some hope she had not anticipated.”

According to DeCarlo, the signature product of the Gorries’ philanthropy is the center’s support group. “It provides a tremendous amount of information and lets families connect from across the state,” DeCarlo says.

Last fall Alie B. spoke at the support group’s event. “What was most impactful to me was seeing the kids who had formed lifetime friendships,” she says. “They come from different parts of the state, and they may be the only kid with low vision in their school. It provides a community for them, and I think it’s invaluable.”

Alison adds, “I can’t stress enough the gratitude we feel. The center has meant so much to us because of our child, and we want to help others who may not have the resources available to them.”

Alie B. treasures her relationship with DeCarlo. “I’ve never met a better advocate.” Alie B. says of her mentor. “She focuses on possibilities rather than limitations. That’s what I think makes her special. It’s why so many families and kids love her.”

DeCarlo, O.D.

Above: Morgan Quarles, Development Officer

Morgan Quarles,
Development Officer

Sincerely,

Morgan Quarles,
Development Officer

A Songs for Sight 10-year thank-you concert was October 5th, 2019. “The event took place at the Red Mountain Theatre Company Cabaret Theatre,” Jim Gorrie says. “We had a good turnout to update our supporters and celebrate all the good work that has been done.”
Luke White Fund

Christine A. Curcio, Ph.D., an endowed professor in the UAB Department of Ophthalmology and Visual Sciences, has developed an influential ally in her efforts to study age-related macular degeneration. The New York-based Macula Foundation, which has distributed several million dollars to eye research across the country, is an enthusiastic supporter of Curcio’s work.

“Dr. Curcio knows more about the pathology and the anatomy of the macula than anyone alive,” says renowned ophthalmologist Lawrence Yannuzzi, M.D., founder of both the Macula Foundation and Vitreus Retina Macula Consultants of New York (VRMNY). “Her work has advanced our science immeasurably. We don’t just support her. We’re dependent on her, because she does this work better than anyone else out there. So we are pleased to help in her research projects.”

Curcio, in turn, is extremely grateful for the support. She says the foundation’s assistance has enabled her to hire additional research fellows and upgrade the technology in her laboratory.

“It’s been a fantastic collaboration that’s resulted in about 59 publications,” Curcio says. “It’s been very important for our research, because now we have a good timeline of the disease where it begins, how it progresses.

“Dr. Yannuzzi is one of the leading figures in clinical retina, and the doctors in that practice are like explorers because they’ve discovered so much by using advanced diagnostic technology. It’s a privilege for me to work with people who have such deep clinical expertise, and are open to new ideas. We’re making a difference in the field.”

The Macula Foundation

Buck Trust Planned Gift

Carl and Pauline Buck were important contributors to the growth of UAB Callahan Eye Hospital. After Carl sold his successful Fairfield-based, wire-manufacturing business in 1964, a friend suggested he become a trustee with the Eye Foundation. Carl accepted, and the Bucks began making regular contributions to the new hospital.

The Bucks’ assistance in the ensuing decades was so substantial that the hospital named two patient rooms in their honor. Then in 1985, the Bucks donated funds for the construction of what became known as the Pauline and Carl Buck Memorial Operating Room, followed in 1988 by the opening of the Pauline and Carl Buck Ambulatory Surgery Center. The couple willed their entire estate to the Eye Hospital, and their support continues today through the Buck Trust Planned Gift. The trust helps with equipment and capital expenditures related to eye care, treatment of vision-related diseases, and medical and scientific research.

“The history of the Eye Foundation Hospital cannot be told without remembering those who gave willingly of their time, and whose unselphless generosity made it possible for the hospital to go from a dream to a reality,” says Sandra Blackwood, MPA, executive director of the International Retinal Research Foundation and a friend of the Bucks. “Pauline and Carl Buck were part of a special group of individuals who recognized their good fortune in being able to help others. The Bucks are on important part of the UAB Callahan Eye Hospital, and remain an important component of its legacy.”

Clarence and Sheila Blair

“I’ve lived with Clarence for 63 years, and I’ve seen all the various eye problems he’s had,” says Sheila Blair, who herself has been treated at Callahan for macular degeneration and retinal obstruction. “We are so fortunate to have a world-class eye department and eye surgeons in Birmingham, and we’re glad to be able to help.”

Clarence Blair, who served on the hospital board in various roles for several decades, says Callahan is “an institution that has done exceptional work and justifies support.”

“That’s why Sheila and I contribute to it,” he says. “It goes beyond the ability of a doctor to help with what’s wrong with you. It’s also the ongoing research that has developed at the hospital. Other breakthroughs will come, and it’s gratifying to play a small part in that.”

Even though he passed away 10 years ago, Milton “Luke” White, M.D. is the first person mentioned on the list of physicians at the Retina Consultants of Alabama website. That shows how much he still means to the practice he helped found in 1952.

RCA also honors White’s memory through the Luke White Fund, which was established to support research and education at the UAB Department of Ophthalmology and Visual Sciences. The fund recently was repurposed for an endowed professorship, which went to Christine A. Curcio, Ph.D.

“Dr. White was the embodiment of the compassionate, caring physician,” says RCA vice president Michael Albert, Jr., M.D., an assistant professor at UAB. “He is the ideal to which I aspire as a physician myself.

“The lasting rule he tried to impart upon us is in every endeavor and every decision we make is to let the only and overriding motivation be to do what is best for the patient.”

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<th>Name</th>
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<tr>
<td>CARSON BEE, M.D.</td>
<td></td>
<td>Medical School: Oregon Health &amp; Science University</td>
<td>Pathogenesis of age-related macular degeneration, diabetic retinopathy</td>
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<td>J. WAID BLACKSTONE, M.D.</td>
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<td>Southern College of Optometry</td>
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</table>
- **Lanning B. Kline, M.D.**
  - Education: Medical School: Duke University
  - Research Interests: Neuro-ophthalmology

- **Rafael Grytz, Ph.D.**
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  - Research Interests: Growth and remodeling mechanisms in myopia, keratoconus, and glaucoma

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  - Clinical Specialty: Stem cell use for retinal repair and regeneration

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  - Fellowship: Wilmer Eye Institute, Johns Hopkins University, Seattle Eye Center, University of California, San Diego
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  - Residency: Washington University, St. Louis
  - Fellowship: University of Washington
  - Clinical Specialty: Oculoplastics

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  - Fellowship: Wilmer Eye Institute
  - Clinical Specialty: Cornea

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Title: Assistant Professor
Clinical Specialty: Glaucoma
Research Interest: Health services research, novel methods of care delivery, such as telemedicine

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- Fellowship: Massachusetts Eye and Ear Infirmary, Harvard School of Medicine
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Clinical Specialty: Cataract, anterior segment, and glaucoma surgery

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Research Interest: Role of the central nervous system in the development and progression of glaucoma
Clinical Specialty: Glaucoma

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Research Interest: Retina and vitreous; ocular trauma

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Clinical Specialty: Neuro-ophthalmology

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- Postdoctoral Training: Virginia Polytechnic Institute & State University; Wilmer Eye Institute, Johns Hopkins University, School of Medicine
Title: Professor
Research Interest: Photoreceptor regeneration in the mammalian eye
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