

Dean's Report

LIAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

TABLE OF CONTENTS

2 A Letter from the Dear	n
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- 4 UABSO By the Numbers
- 6 The Impact of COVID-19
- 8 Student Success
- 10 Faculty Excellence
- 12 Focus on Patient Care
- 16 Growth & Development
- 18 Alumni Excellence
- 20 Special Honors and Retirements



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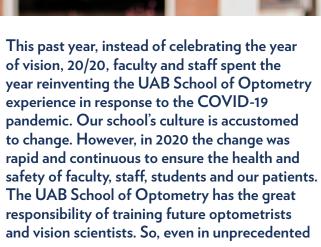
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times, it remained vital to maintain the quality academic experience that our students expect as well.

The UABSO family accomplished important goals despite challenges, which included not being able to gather large groups at once in person. New faculty members joined, while several key staff members were reclassified and promoted. Faculty received high honors for their contributions to optometric educa-

tion. Researchers had grant and contract success. Renovations of the fourth floor were successfully completed.

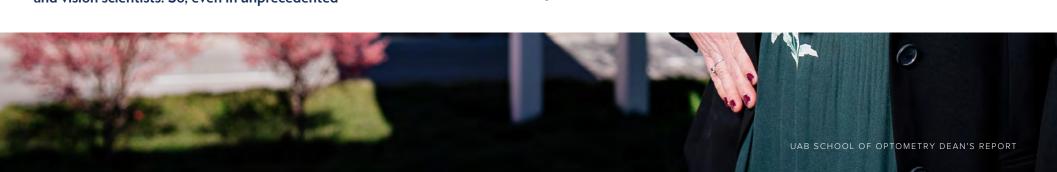
A LETTER FROM THE DEAN

Together, we upheld the UAB School of Optometry's long-held vision to make significant contributions to eye and vision care knowledge and vision science. Everyone found a way to continue providing meaningful service to humanity under the guidance of our shared values: compassion, collaboration, diversity, excellence, integrity and service.

There were so many silver linings last year. Stronger than ever, we wait patiently for the time we can all be together again, small but mighty!

KKNichols

Kelly K. Nichols, OD, MPH, PhD, FAAO Dean, UAB School of Optometry



Development & Alumni

Total Dollars Raised in 2019-20:

\$401,495

newly endowed scholarships in 2019-2020 for a total of 65

Patient Care





15,418

Patient Visits at UAB Eye Care 819

Patient Visits at Western Health Center

Education

402 optometrists
have completed
residencies at the
UAB School of
Optometry

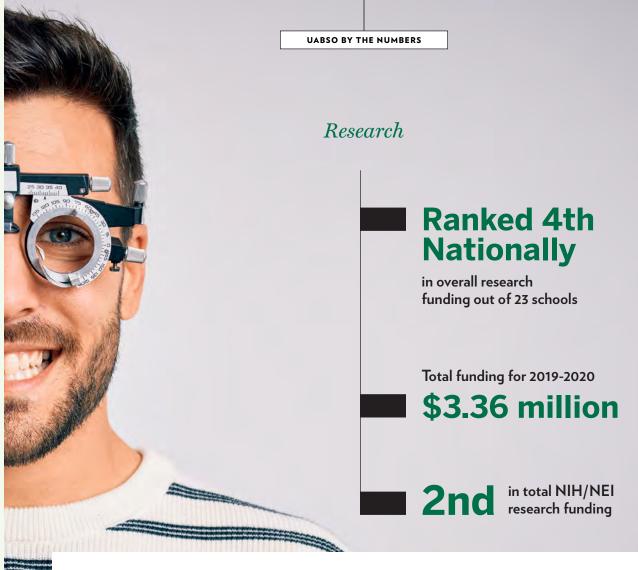
class members
of 2019 matched
into competitive
residencies

197 optometry students

20 doctoral students

4 dual-degree students

residents in six programs















347

Number of Applicants

166

Number of Interviews 60

Number of Students

3.61

Overall GPA 321
Average
OAT Score



The Impact of COVID-19: Rapid Change and Innovation

The COVID-19 pandemic proved to be challenging for the UAB School of Optometry. Because this was an unprecedented situation, the school experienced rapid change and disruptions that affected our students, faculty, staff, residents and patients. The silver lining is that the necessary change ushered in new approaches to classroom education, clinical education and patient care.





OUR STUDENTS

There were no on-site classes for the duration of the spring semester, and faculty transitioned to teaching classes online only almost overnight. This marked the first time in the school's 51-year history that didactic courses were offered fully online. Courses were taken via Zoom to ensure social distancing and the safety of faculty and students.

The NBEO postponed Part 1 of the boards, affecting third year students, and closed the Part 3 testing center, affecting several fourth year students. At the same time, the university suspended clinical care for internal and external students for the remainder of the spring semester. Therefore, students were not able to return to externship sites in the spring, and had to complete an alternate, case-based online curriculum.

Vision Science Graduate Program (VSGP) students continued their research, primarily from home, while no new research projects on campus were permitted. Research responsibilities occurred only according to the specific guidelines provided by advisors.

All public defenses for VSGP students were only open to student mentors and committees in person. Others were invited to attend via Zoom.

Lastly, instead of on-campus spring commencement ceremonies, UAB and the School of Optometry hosted virtual commencement ceremonies. No one can recall a time when students have been unable to gather together and celebrate graduating. "So much change was challenging initially," said Dean Kelly K. Nichols, OD, MPH, PhD, FAAO. "Leadership had to make the difficult choices to break traditions that are the hallmarks of anyone's academic experience. I am proud that we were able to quickly pivot, introducing both new ways of teaching and learning. However, I do feel for the students who were unable to graduate in person together. Commencement is what students look forward to throughout their academic career."

Strict social distancing guidelines remained in place throughout the summer and once the fall semester began. Students returned to clinical assignments with new disinfection protocols and personal protective equipment (PPE), and with partially-virtual participation through HIPAA-compliant Zoom connections. Students experienced classrooms and common areas with limited capacities. It also became each person's responsibility to ensure the cleanliness throughout the school in order to prevent the spread of COVID-19.

"Everyone was responsible for their safety and the safety of others," said Assistant Professor Andrew Pucker, OD, PhD, FAAO, FSLS. "Wear your mask, wash your hands, be socially distanced and use hand sanitizer were instructions we all learned to follow. A daily temperature check and N95 mask requirement was implemented at the school in order to prevent the spread of COVID-19 in our community and to ensure patient care access. This was in addition to the daily checks required by the university."



OUR PATIENTS

Due to the coronavirus outbreak, UAB Eye Care was only able to provide essential patient services from March to May. Routine care was on hold during this time. With the closure of the clinic for all routine eye care, UABSO in-house residents took over emergency care to meet the needs of patients. Less urgent needs were evaluated using telephone visits and telehealth video conferences. Clinic staff continued responding to requests for prescription refills, contact lens orders, questions about appointments and other concerns.

"Clinic faculty and staff had to become innovative and introduce new ways to provide patient care," said Elizabeth Steele, OD, FAAO, associate dean for clinical affairs. "Telehealth was not part of our service offerings previously. Because of our responsibility as healthcare providers, we had to introduce the option for patients to be seen from home where it was appropriate. The addition of telehealth also introduced a new learning opportunity for our students."

When students returned to clinic for the summer semester, telehealth and other virtual patient care activities became part of their clinical rotations. From home and in the clinic, they honed new ways to provide patient care. TelScreens, HIPAA-compliant digital projection systems connected to cameras showing the patient and slit lamp images, were added to exam rooms so that students at home could see what is normally viewed by being physically present.

"Despite the pandemic, clinical care and learning continued," Steele added. "Because of the pandemic, we were able to innovate in powerful ways, and have learned that some of the new practices should remain."

UAB took unprecedented measures during these unprecedented times. In addition to changes to the academic experience, a limited business model calling for many employees to work from home and strict social distancing guidelines were implemented.

These safety measures continued into 2021. Through it all, the UAB School of Optometry family proved that although it is small, it is indeed mighty, but also quite resilient.

UABSO LAUNCHED EYECARE4JUSTICE

In the midst of adjusting to a new normal because of the COVID-19 pandemic, our community and nation confronted the ugly truth of our long legacy of systemic racial injustice. This occurred as a result of the tragic murders of George Floyd, Breonna Taylor, Ahmaud Arbery and so many others who have suffered and died due to prejudice and racial injustice in America. In response, the UAB School of Optometry launched EyeCare4Justice.

The initiative was led by the school's Diversity Committee. Janene Sims, OD, PhD, FAAO, associate professor and certified diversity trainer, helped lead this initiative.

Like other units on campus and within the UA System, the UABSO Diversity Committee devised a plan to support the cause of social justice. Step one was holding a moment of silence in recognition of George Floyd, Breonna Taylor, Ahmaud Arbery and others.

Optometry leadership made the fight for social justice a shared responsibility, and ensured that the UABSO family lives actively and purposefully for integrity, respect, accountability, diversity and inclusiveness every day.

5 2020 EDITION UAB SCHOOL OF OPTOMETRY DEAN'S REPORT

Vision Science Student Sets Her Sights on Outer Space

By Brianna Hoge and Satina Richardson

Jessica Jasien, PhD, a summer graduate from the Vision Science Graduate Program, set her sights high after graduation.



She accepted a position as a senior vision scientist with the National Aeronautics and Space Administration's Cardiovascular and Vision Laboratory at Johnson Space Center.

In this position, Jasien will use the knowledge and experience gained through her time at UAB and in the laboratory of Professor J. Crawford Downs, PhD, to research spaceflight associated neuro-ocular syndrome (SANS).

"SANS is thought to result from an imbalance of intracranial and intraocular pressure that is caused by the absence of gravity," said Downs, who works in the UAB Department of Ophthalmology and Visual Sciences. "These cephalad fluid shifts are exactly what Jessica worked on in my laboratory at UAB."

"It's a perfect fit for the experiments NASA is doing in astronauts and healthy volunteers on Earth to understand the causes of SANS."

The idea of working for NASA is not new to Jasien. After obtaining her master's degree, her first research position allowed her the opportunity to travel to Johnson Space Center. During those visits, she came to realize that it would be an exciting place to conduct research.

"I am very fortunate that Dr. Downs and UAB have helped me make the dream of conducting research at NASA a reality," Jasien said.

Associate professor Lawrence Sincich, PhD, is the interim director of the Vision Science Graduate Program in the School of Optometry.

Sincich says that Jaisen is a great example of what a PhD can do for a student's career. "She entered UAB with a master's in biomedical engineering and had considerable experience working on clinical studies with glaucoma patients in New York," he said.

"Since current treatments for glaucoma merely slow disease progression,
Jasien wanted to learn more about what caused it. That brought her into basic research. As a graduate student in Downs's lab, she was able to complete detailed mechanistic studies on a primate model of the disease," he continued. "With that experience in hand, she now joins NASA to help understand why astronauts develop analogous symptoms. Eventually, what is learned in space will help to develop better future treatments for patients back on earth."

POSTDOCTORAL RESEARCHER AWARDED F32 GRANT



Michael Savage, PhD, postdoctoral fellow, was awarded an NEI/NIH F32

grant to study the relationship between neuronal orientation and color selectivity in the primary visual cortex.

The grant is for three years, totaling \$136,823. It has been 20 years since one of these competitive postdoctoral grants from NEI was won by someone in the UAB School of Optometry.

The research related to this grant is focused on understanding how the basic building blocks of vision are organized in the brain on a fine scale. The goal is to produce a cell-by-cell map for the functional configuration of the primary visual cortex.

His supervisors for this research are UAB School of Optometry professor Lawrence Sincich and UAB School of Medicine professor Paul Gamlin, PhD.

NOSA MEMBERS LED NATIONALLY

Two students from the UAB School of Optometry were named national leaders of the National Optometric Student Association





(NOSA). Walter Jackson (2021) was elected president, while Dana Shannon (2021) was elected vice president.

Jackson has previously served as the 2019-2020 Chair of UAB's American Academy of Optometry chapter, whose mission is the advancement of the optometric profession through research and academia.

Shannon previously held the 2019-2020 Presidency of UAB's student division of Volunteer Optometric Services to Humanity (SVOSH) chapter which travels to provide free eyecare domestically and in the developing world. Shannon and Jackson have also held numerous officer positions at UAB's local NOSA chapter and at the national level during their four-year

VISION SCIENCE STUDENT RECEIVED GRANT

optometric student career.



Kelli Cannon was one of six UAB graduate students awarded a Graduate

Research Scholars Program awards for the upcoming fall semester through Alabama Established Program to Stimulate Competitive Research.

The Graduate Research
Scholars Program is designed
to strengthen and enhance the
research capacity of Alabama
EPSCoR institutions by providing
support for students performing
federally funded EPSCoR
research — totaling about \$16
million a year to Alabama.

Across the eight EPSCoR PhD-granting institutions in the state, there were 88 GRSP proposal applications, and a competitive statewide review process that resulted in 38 awards for \$894,000. UAB received six awards — with \$25,000 granted for a full award — for a total of \$143,750. These students represent the next generation of researchers and innovators for the advancement of Alabama's high-tech human resource capacity.

EZELL FELLOWSHIP AWARDED

The American Academy of Optometry Foundation (AAOF)



awarded Kwaku
Osei, OD,
Vision Science
Graduate
Program
student, the

2020 Mike Daley/Essilor Ezell Fellowship.

A number of faculty and staff at the UAB School of Optometry have received this prestigious fellowship. A total of six faculty members are previous Ezell Fellows, and seven students have received the Ezell Fellowship.

Upon graduating, Osei hopes to obtain a postdoctoral position to further his research into dry eye disease and contact lens-related infection. His ultimate goal is to become a tenured faculty in an optometry school/college and make novel discoveries to advance the field of tear film and ocular surface research.

OPTOMETRY STUDENTS AWARDED NOSA SCHOLARSHIPS



Dana Shannon (2021) received the John L. Howlette and C. Clayton Powell Student

Founders Award and Dr. Robert Johnson Pediatric & Vision Therapy Award. Additionally, during the NOA Scholarship



Ceremony,
Daniele
Ewert (2023)
received the Dr.
Charles Comer
Community

Service Award.

(2022) received

Dvlan Cowan

Awards



the Wal-Mart Project Foresight Scholarship, and **Darian Travis (2023)** received the Dr. Marvin

R. Poston Leadership Award.



Sydney
Madrigal, OD
(2020), received
NOSA's
Residency
Grant. Madrigal

graduated in 2020 and was selected for an Ocular Disease Residency at Bascom Palmer Eye Institute in Miami, FL.

VSP AND AAOF SCHOLARSHIPS AWARDED

Sarah Kate Day (2021) and Whitney Powell (2021) were awarded the 2020 VSP and AAOF Practice Excellence Scholarships. Over the last 10 years, VSP has





provided more than \$1 million dollars in scholarship support to hundreds of optometry students. Joining forces with the AAOF, scholarships in 2020 were awarded to 48 students for a total of \$182,000, including a travel grant to attend the annual meeting of the American Academy of Optometry (AAO).

OPTOMETRY STUDENT AWARDED WALMAN OPTICAL COMPANY SCHOLARSHIP

Katharine Denius (2022) was the winner of Walman Optical Company's scholarship. The award provides \$5,000 for educational expenses. Walman



established a scholarship program to encourage and assist students at schools

and colleges of Optometry. Scholarships are offered each year for full-time study at participating schools selected by Walman.

Dr. Caroline Pate Named 2020 AOA Optometric Educator of the Year

A UAB School of Optometry faculty member was named the American Optometric Association (AOA) Optometric Educator of the Year for the third time in less than five years. Caroline Pate, OD, FAAO, was the 2020 recipient of the award.

"Dr. Pate has a steadfast commitment to the optometric profession in and outside the classroom," said Dean Kelly K. Nichols. "We are proud to have her on faculty and see every day just how worthy she is of receiving this esteemed honor."

The associate professor and the director of residency programs first served as residency supervisor for Family Practice at UABSO in 2008. At that time, she was the direct mentor to seven residents. As residency director since 2014, she has mentored and worked with 69 additional residency graduates, several of whom have become faculty colleagues at UABSO or at the school's affiliated residency sites.

Because of her leadership, each year the percentage of students from UAB entering residency programs exceeds the national average. Pate believes the percentage of students pursuing residencies speaks to



the culture created at the school regarding the importance of residency education.

"I can honestly say that my own residency changed my life — it changed my career path, put amazing mentors and colleagues into my life that I still keep in touch with today, and helped me become a more confident and well-rounded doctor," she said. "It is my hope that each of our UABSO graduates that pursues residency education will finish out their residency with similar sentiments."

Leading by example, Pate is committed to volunteering within the profession of optometry locally, statewide and nationally. She became involved in the Alabama Optometric Association (ALOA) and the Birmingham Area Optometric Society immediately after completing her residency at UAB. These organizations shaped who she is as an optometrist.

"Not being a native Alabamian, nor an alumnus of UAB, it was a wonderful opportunity to become involved in the profession and meet many colleagues from the state," Pate said. "Then, I didn't know what amazing leaders in optometry the state of Alabama has in the profession. Their mentorship has been invaluable."

Pate has served as the ALOA's Education Committee Chair for four years and produced very successful meetings for the association. She continues to share her expertise in the CE arena by serving on the ALOA Education Committee.

She has also served on the ALOA's Student Affairs Committee as a liaison between the association and the student leadership and faculty. Pate was named the Alabama Optometric Association's Young OD of the Year in 2014 and the Alabama Optometric Association's Educator of the Year in 2019.

She also assists the ALOA in organizing Student Day at the Legislature. Second-year students go to the state's capitol in Montgomery, to learn about optometric advocacy and to meet with their legislators. Pate helped to get this program off the ground and has been a part of it since its inception.

As her involvement within the state association has grown, so has her involvement on a national level. Through her work on the AOA Faculty Relations Committee, Pate has helped to develop and has participated in the Optometric Educator's Exchange on numerous occasions. She has attended the AOA Congressional Advocacy Conference in 2008, 2013 and in 2017 to help advocate on behalf of the profession. Pate served on the AOA Faculty Relations Committee from 2012- 2016.

Currently, she is serving on the AOA Membership Committee

and as the Faculty and Student Membership Engagement Committee/Liaison. Pate is serving as the chair of the Allied Health Professionals Education Committee for SECO International as well.

"One of the unexpected surprises of academia has been the opportunity to provide service to the profession in so many different ways," Pate said. "I want my students to leave UABSO with a love for the profession, not only being well-

prepared with the knowledge and clinical skills necessary to take care of the patients they will serve, but to trust what they know and admit what they don't, to never stop learning, and to always put the patient first. I want them to leave UAB with the desire to become involved in optometry outside of patient care, to find their passion within the profession — whatever that may be, and look for ways to give back."

NEW VISION THERAPY CLINIC CHIEF APPOINTED



Maggie Bailey, OD, assistant professor, was named chief of the Vision Therapy Clinic (VT), a specialty clinic within UAB Eye Care that provides treatment for children and

adults with eye teaming, focusing and tracking disorders. Patient volume in vision therapy is typically 2,500 visits annually.

Prior to Bailey, **Kristine Hopkins**, **OD**, **MSPH**, **FAAO**, **professor**, led the VT clinic for 22 years. Hopkins launched the service after joining the faculty in 1998.

ASSISTANT PROFESSOR RECEIVED UAB TEACHING AWARD



Terri Call, OD, was awarded the UAB 2020 President's Award for Excellence in Teaching. The award is based solely on outstanding accomplishments in

teaching as demonstrated, in part, by her thorough knowledge of the subject area and exemplary classroom instruction.

Call earned her doctor of optometry degree from the UAB School of Optometry in 2015. She joined the faculty as an assistant professor in 2016 following the completion of a residency in Geriatric and Low Vision Rehabilitative Optometry at the Birmingham Veterans Affairs Medical Center.

At the school, Call is the Primary Care Clinic director. She is the Clinical Evaluation of Visual Skills (CEVS) instructor and coursemaster as well.

ASSOCIATE PROFESSOR NAMED 2020 ALOA EDUCATOR OF THE YEAR



Katie Clore, OD, was named the 2020 Alabama Optometric Association (ALOA) Educator of the Year. Clore is a longtime UAB educator. After

receiving her Doctor of Optometry degree from UAB in 1982, she joined the optometry faculty as a primary care clinical instructor.

She is a proven leader in the field of optometric education. Clore is a past president and board member of ALOA. Clore currently serves as chair of the Association of Contact Lens Educators (AOCLE). She is a manuscript reviewer for Review of Optometry Online, and a course review for several organizations, including the Southeastern Educational Congress of Optometry (SECO), the Southwest Florida Optometric

Association (SWFOA), PSS Eyecare and the Florida chapter of the American Optometric Association.

DEAN ELECTED TO NAEVR/AEVR BOARD



Dean Kelly K. Nichols, OD MPH, PhD, FAAO,

was elected to serve on the National Alliance for Eye and Vision Research (NAEVR) and the Alliance for Eye and

Vision Research (AEVR) Board of Directors in the class of 2020-2023.

The mission of NAEVR is to achieve the best eye and vision care for all Americans through advocacy and public education for eye and vision research sponsored by the National Institutes of Health (NIH) and its National Eye Institute (NEI), Department of Defense (DOD), Department of Veterans Affairs (VA) and other federal agencies. AEVR works to ensure the best eye and vision care for all Americans through the education of congressional legislators, government policymakers, coalition partners, the media and consumers about the value of eye and vision research.

Few optometrists have been tapped to serve as board members.

A Mother's Journey: Diagnosed as Blind, Baby Receives Hopeful Future, Thorough Care

Twin sisters Mary and Emily are fighters! The girls were born at 36 weeks and contracted a brain infection caused by parechovirus at three weeks old. When the girls were six months old, their mother, Tara Monk, noticed her babies weren't hitting their vision development milestones at the same time.

Mary did not follow the spoon when being fed cereal and didn't open her mouth until the spoon touched her lips. Emily, on the other hand, watched the spoon and was ready to eat.

Concerned, Monk took her baby girls to their pediatrician for an evaluation. The doctor suggested that Mary may be developing behind her sister and to bring them back for another evaluation at age nine months. The worried mother remained highly concerned. Not sure what to do next, she spoke with Jeanine Spoors, her cousin and a UAB School of Optometry third year student.

Spoors told her about UAB Eye Care's InfantSEE program. InfantSEE, managed by Optometry Cares®, provides free comprehensive eye exams to children ages

6-12 months. The program is designed to ensure that eye and vision care becomes an essential part of infant wellness care to improve a child's quality of life.

"A comprehensive eye exam by an experienced pediatric optometrist or ophthalmologist can uncover not only eye problems, but also problems where vision experts can use the eyes as a window to the brain," Kathy Weise, OD, MBA, FAAO, director of pediatric optometry services, said.

Monk took both girls for an eye exam at age eight months.

The babies were seen by optometry students, Weise and Tamara Oechlslin, OD, PhD, FAAO.

During the appointment, Emily had a slight eye turn, but was fine developmentally. Mary's exam, however, had a different outcome. Her exam revealed that she could be blind because of the parechovirus the babies experienced as newborns.

"I remember talking to her and using words like 'visual impairment' and 'difficulty seeing,' "Weise said. "I struggled to find the right words."

Weise understood the impact the diagnosis would have on Monk and what this prognosis meant for the baby, as well as her mother and family.

"I was in total shock; how could my healthy baby, not be able to see and potentially be completely blind?" Monk said. "I broke down and started crying. As I looked up, Dr. Weise had tears in her eyes and I could tell she was concerned about Mary and myself. She reassured me that we would find out exactly what was happening with Mary."

Weise then referred Mary to neurologist Jayne Ness, MD, PhD, at Children's of Alabama. After an MRI at age nine months, Mary was diagnosed with Cortical Visual Impairment (CVI).

"This virus is really rare, but is becoming increasingly recognized," Ness said. "They both contracted the virus and for reasons we don't understand, Mary was affected more severely than her twin sister. Vision problems are often the first clue that something is going on with a baby's brain. Vision has early milestones. It's invaluable to have someone with expertise evaluate the child if milestones are being missed."

With Weise's help, Monk was able to get Mary involved with Early Intervention, where she receives vision, physical, occupational and speech therapies.

"Our Pediatric Optometry Service is part of an extensive network that includes specialists like Dr. Ness, developmental therapists and other healthcare providers who work together to improve the wellbeing of the child," Weise said. "Our goal is to do whatever we can for our patients to have the best outcomes possible."

With guidance from the team at UAB Eye Care's pediatric clinic, Mary has progressed.

"Mary has improved so much since we started therapy," she said. "She is able to do her own 'crawl' and get where she wants to go. We are currently working on standing. She can also drink from her cup and finger feed some food. She has so much potential and we want to encourage her to work hard to achieve her goals. The girls turned two on July 3rd, 2020. The past two years have flown by! We are hopeful that as Mary grows older, we will continue to see her grow and improve."



GIFT OF SIGHT CHANGED, CONTINUED DURING PANDEMIC



In its seventh year, the Gift of Sight is the school's biggest charity event. Organizers held the event despite the COVID-19 pandemic and provided free comprehensive eye exams and glasses to 227 low-income and underinsured patients. Even though the 2020 event wasn't held over the typical three-day period, more patients were served overall than in the previous years. Instead of a multi-day event, patients became part of the clinic schedule at Western Health Center from early-November to early-December.

UAB EYE CARE INTRODUCED TELEHEALTH



UAB Eye Care introduced telehealth eye care in response to the COVID-19 pandemic, allowing patients to receive eye care without leaving home.

CLINIC ONE OF FIRST WITH DAILY CONTACT LENS TO SLOW MYOPIA



UAB Eye Care was one of the first clinics in the country to have MiSight® 1 day contact lenses, a daily wear, single-use contact lens that slows the progression of myopia.

12 2020 EDITION UAB SCHOOL OF OPTOMETRY DEAN'S REPORT 13

Dr. Jason Nichols Honored for COVID-19 Papers



NICHOLS NAMED AOA LEGEND

In 2020, Dr. Jason Nichols received the Contact Lens Cornea Section Legends Award from the American **Optometric Association** (AOA). This award is given to optometrists who demonstrate intellectual depth and passion toward contact lenses, cornea or refractive technology and quest for continued learning and firm foundation of basic and clinical sciences of contact lenses and anterior segment. Recipients also must exhibit exceptional leadership skills and mentoring, innovation and desire to advance research.

The American Public Health Association (APHA) recognized Jason Nichols, OD, MPH, PhD, FAAO, associate vice president for research and professor at the UAB School of Optometry, with its 2020 Vision Care Section (VCS) Outstanding Scientific Paper Award.

Nichols was one of five of the world's most prominent ocular scientists to receive the award. Two papers published by the group as the COVID-19 pandemic took root provided timely, evidence-based guidance to address and correct misinformation regarding safe contact lens wear.

"These papers were of significant importance to the ophthalmic community as they were among the first to make evidence-based recommendations for eyecare practitioners as they navigated the early days of COVID-19 in their clinical practices," Nichols said.

Their papers, "The COVID-19 Pandemic: Important Considerations for Contact Lens Practitioners" and "The Ocular Surface, Coronaviruses and COVID-19", and authors were honored with the award during APHA's virtual 2020 Annual Meeting in late October for contributing "significantly to the advancement of eye/vision care in the public health field." The gathering is the largest public health conference in the world.

Both papers hold the highest ever Altmetric scores for the journals in which they were published, regardless of topic. Moreover. "The COVID-19 Pandemic: Important Considerations for Contact Lens Practitioners" is among the top 0.2 percent of all research scored by the analytics service across all disciplines. They have received widespread attention in more than 40 countries, generating over 6,000 medical, scientific and mainstream media stories with a potential reach eclipsing 6 billion. The findings spurred the most cohesive alignment on a single public health issue by contact lens manufacturers, educators and fitters in the last decade.

Lyndon Jones, DSc, director of the Centre for Ocular Research and Education (CORE) at the University of Waterloo, initiated the project and was lead author of the first paper. Mark Willcox, DSc, director of research at the School of Optometry and Vision Science at UNSW (Sydney), headed up the second paper, with Karen Walsh, MCOptom, professional education team leader and clinical scientist at the CORE, Nichols and Philip Morgan, PhD, director of Eurolens Research at the University of Manchester, contributing to both.









RESEARCHER SELECTED AS NIH PEER REVIEWER

Marina Gorbatyuk, PhD, associate professor, was invited by the National Institutes of Health (NIH) to serve as a peer reviewer in the study section for the Biology of the Visual Systems Study Section, Center for Scientific Review. The appointment is for four years and places Gorbatyuk at the heart of the NIH's grant process.

According to the NIH, membership on a study section represents a major commitment of professional time and energy as well as a unique opportunity to contribute to the national biomedical research effort. Study sections review grant applications submitted to the NIH, make recommendations on the applications to the appropriate NIH national advisory council or board, and survey the status of research in their fields of science.

2 R01 GRANT TO STUDY CATARACT DEVELOPMENT

Researcher Om Srivastava, PhD, professor, hopes to slow the progression of age-related cataracts, the most common causes of blindness in the world. He was awarded a \$1.57 million, four-year R01 grant from the NIH to study the mechanism of age-related cataract development.

The goal of the research is to determine factors that lead to age-related cataracts, principally of lens structural proteins (crystallins) that undergo aggregation and subsequent precipitation that are inducible by genetic mutations, and by their age-related post-translational modifications. The results will be of significant therapeutic value to delay the development and progression of age-related cataracts, the most common causes of blindness.

GRANT RENEWAL FOR CONE DYNAMICS RESEARCH

Timothy Kraft, PhD, professor and interim associate dean for research, received a grant renewal of \$464,046 from the NIH, continuing research about the comprehensive quantification of cone dynamics. The cost for all four years is \$1.77 million, and this notice is the award of year two of the four years. Lawrence Sincich, PhD, associate professor and interim director of the Vision Science Graduate Program, is the co-principle investigator of the project.

The primary aims of this grant are to generate a more comprehensive characterization of cone photoreceptor physiology in conedominated animals, including primates.

These data will be used to develop a complete theoretical model of response properties based on cone phototransduction which will be of great use to vision scientists and may

delineate the limits and boundaries of in vivo vs. in vitro experiments on the retina. An additional aim will be to detail how a novel form of cone activation—via pulsed infrared 2-photon excitation—may be used for improved spatial stimulation of cones.

GRANT RENEWAL FOR RESEARCH ON IMAGING AND STIMULATION OF PHOTORECEPTORS

Lawrence Sincich, PhD, associate professor and interim director of the graduate program, received a grant renewal of \$1.02 million from the NIH, continuing his research on imaging and microstimulation of photoreceptors, the cells in the eyes that allow people to see.

Cell-resolved imaging can deepen the understanding of how each cell contributes to signals that create the visual world and how disease might alter such signals. With the development of adaptive optics retinal imaging that assesses how photoreceptors function, Sincich is hopeful that it can be used to detect the earlier stages of retinal disease for patients.

This grant continues a Bioengineering Research Partnership with the University of California–Berkeley, the University of California–San Francisco and Montana State University.



UABSO Welcomes Largest Class in its History

With 60 new students and two returning students, the UAB School of Optometry's class of 2024 is the largest class in the school's 51-year history.

"While 2020 might be known as a year of challenges, our recruitment cycle for the class of 2024 was a notable exception," said Dean Kelly K. Nichols, OD, MPH, PhD, FAAO. "We did not experience any difficulty in filling our class at UAB this year. With the leadership of Dr. Gerald Simon, along with determination from the entire Student Affairs team and admissions committee, we were able to go above and beyond with both class size and the quality of the matriculating students."

The class of 2024 has an average GPA of 3.61 and the Optometry Admission Test (OAT) scores well above the national average.

"Because the number of qualified applicants was so great, we decided to accept students, rather than wait-list them," said Gerald Simon, OD, director of Student Affairs. "Their qualifications greatly influenced our decision to grow the class."

It also helped that the Henry Peters Building can now accommodate a higher number of students. During renovations, completed in 2020, classroom, pre-clinic, locker room and lounge space was added or increased. This includes a new simulation lab on the fourth floor. Existing common areas throughout the building were updated or made larger as well.

Due to COVID-19, the entire class was unable to meet in person during the calender year. Orientation was held virtually for one week, with only CPR certifications being held at the Henry Peters Building in very small groups. With the exception of labs, their classes were online or hybrid courses. Still, administrators didn't notice any less enthusiasm from the class of 2024.

Connie Wright, Student Affairs program manager said, "They were as enthusiastic as any other first year class and we were just as excited to have them become part of the UABSO family."

Class sizes at the UAB School of Optometry have changed several times over the years. Nine students were admitted to the first class in 1969. However, Henry Peters, OD, MPH, founding dean, had his sights set on admitting 40 students once the school was established.

"Although it was Dr. Peters' goal to admit 40 students by the mid-1970s, this didn't actually occur until 1978," said John Amos, OD, former dean and professor emeritus. "Over the next several decades this was, within one or two students, the number admitted."



FACULTY PROMOTED TO PROFESSOR

Drs. Marina Gorbatyuk, Tim Gawne and **Caroline Pate** were promoted to professor. Each talented professor makes a unique contribution to UABSO. Gorbatyuk's research focuses on the biochemistry and molecular biology of degenerating photoreceptors. Gawne's primary research interest is in the neural circuitry that actively controls eye growth during infancy and childhood. Pate's area of focus is eye diseases of the anterior segment. She also serves as the director of residency programs.

Fifty students were admitted for the first time in 2012. This remained the maximum number of students prior to reaching 60 entering students in a single class in 2020.

Nichols views the recent increase as one that's in keeping with why the optometry school was established 51 years ago.

"The school exists because there was a need for optometrists in Alabama," she said. "Even though our footprint now extends outside the state, the need still exists to ensure the availability of eye and vision care in both rural and metropolitan areas. What has changed is our ability to effectively educate and train a greater number of students than before."

Because our class sizes remain smaller than most optometry schools, I have no doubt that our students will still be able to form the lifelong friendships and relationships with instructors that result from a close-knit family atmosphere. We don't anticipate we will always have a class this size. This was truly a remarkable recruiting year. We are confident the class of 2024 will carry on the hallmark excellence and family spirit that defines UABSO."



NEW PEDIATRIC RESIDENCY INTRODUCED

A residency at the Vanderbilt Eye Institute (VEI) in Nashville, TN, was launched, bringing the total number of residency programs available at the UAB School of Optometry to seven, with a total of 12 positions. This is one of two pediatric residencies available. The other is in-house at UAB Eye Care, the clinical arm of the UAB School of Optometry.

The residency, which has one position available, began undergoing the accreditation process during its first year. The opportunity trains competent and compassionate optometrists who provide high-quality, evidence-based pediatric eye care and are prepared for a career in a medical and/or academic setting.



FACULTY LEARNED A NEW TEACHING METHOD

CEVS faculty prepared to introduce students to VRmagic binocular simulators. With this addition to the clinical learning experience, students will experience high-end virtual reality technology and real-time tissue simulation. There'll be a highly-immersive training experience. This technology will be a great compliment to traditional teaching.

NEW FACULTY WELCOMED



Juan "Jenny" Huang, PhD, OD, MPH, joined the faculty in late-2019 as an assistant professor, tenure track.



Jillian Ziemanski, OD, MS, PhD, FAAO, was hired as a full-time assistant professor, tenure track. Ziemanski first joined the faculty in 2017 as a research assistant professor.



Natalie West, OD, and Keisha Brown, OD, joined as assistant professors

TWO NEW CLINIC SITES ADDED

Cahaba Medical Care's West End location and the metro area location of the Alabama Regional Medical Services (ARMS) became additional sites for students and doctors to provide weekly care in the community.





16 2020 EDITION UAB SCHOOL OF OPTOMETRY DEAN'S REPORT



Celebrates 100 Years On November 7, 2020, Day Eye Care celebrated an

On November 7, 2020, Day Eye Care celebrated an epic milestone—100 years of providing eye and vision care. It was on this day in 1920 that Frances J. Day, Sr., OD, received his reciprocity license in Alabama allowing him to open the optometry practice.



Howard Day, OD, UABSO class of 1987, is Frances Day's grandson. He shared that obtaining the license wasn't easy. However, during the 1920s

Birmingham was booming.

"Things were great until the depression came, and I have letters where he had to work out payments with equipment suppliers to stay afloat," he said. Next, World War II began, and Frances Day was diagnosed with hypertension. He passed away in 1945 at 50 years old. His two sons, however, were able to sustain the family business. F. J. Day, Jr., OD, had joined the practice after serving as an optometrist in World War II. Not long after in 1950, Jim H. Day, Sr., OD, joined as well.

Howard Day has worked at the practice since childhood and owns the practice today.

"As I like to say, I grew up working on the family farm," he said. "I've done every job at the office: painter, plumber, optician, etc., so it was natural for me to always want to be an optometrist and follow in my father's footsteps. My father was very much a mentor and inspiration for both my brother, Jim H. Day, Jr., OD, and myself."

While reflecting on how optometry has evolved since 1920, Howard Day said that the profession of optometry has changed significantly, but has remained the same when it comes to patient care. Optometrists still practice at the highest level their license allows, using the latest technology.

Day Eye Care has grown to include five optometrists and an MD. Howard Day's wife, Sharon Day, OD, UABSO class of 1987, is one of the optometrists on staff. The two met as students at UABSO and have been married for 33 years. They remain involved with the school in a number of ways. For instance, the couple has endowed the Day Family Endowed Scholarship in Optometry and sponsored some of the new school renovations. Sharon Day is currently the Alumni Association's president-elect.

"The many ways that Drs.
Howard and Sharon Day support
our students and our school are
appreciated beyond measure," said
Dean Kelly K. Nichols, OD, MPH,
PhD, FAAO. "It is clear the family
is passionate about optometry.
They live in the present while
preparing for their future and the
futures of others."

Howard Day said the future is bright for optometry.

"Never before has there been such need for our services," he said. "Visual requirements will continue to expand with computerization of just about all aspects of our lives. And the technology to help our patients will grow as well. For my fellow and future optometrists, my father would say, "Treat your patients like they're friends and family and they'll send you their friends and family.' I know my grandfather would be proud of optometry today."



DR. PAUL BATSON NAMED 2020 ALUMNUS OF THE YEAR

Paul Batson, OD, class of 1998, was named the 2020 Alumnus of the Year by the UAB School of Optometry Alumni Association.

In addition to being an alumnus, he has been a part-time faculty member in ocular disease for nearly two decades.

Batson serves as Center Director for VisionAmerica's Birmingham office where he specializes in the diagnosis and management of complex eye diseases as well as the pre- and post-operative management of a variety of surgical procedures.

His contributions to students at the UAB School of Optometry have been immeasurable. Batson has been a faculty member for 17 years.

He is a member of the American Optometric Association, Alabama Optometric Association and the Birmingham Area Optometric Society. Batson has served as Chairman of the Continuing Education Committee for the Alabama Optometric Association and is a past president of the Association.

In 2003, he was recognized by his peers as the Alabama Young Optometrist of the Year. Batson was also recognized by his peers in 2015 and awarded the Alabama Optometrist of the Year Award for his outstanding services on behalf of the profession and the visual welfare of the public.



DR. TOMMY PINKSTON NAMED 2020 YOUNG ALUMNUS OF THE YEAR

Tommy Pinkston, OD, class of 2012, was named the 2020 Young Alumnus of the Year by the UAB School of Optometry Alumni Association.

After earning his doctor of optometry degree from UAB, he completed a residency in ocular disease and refractive surgery with Woolfson Eye Institute in Atlanta, GA. During his residency, Pinkston became involved with the Georgia Optometric Society and facilitated the beginning of their young OD program in 2013.

Pinkston also volunteered with the Greater Atlanta Optometric Society. As a result of his involvement, in 2015 he was named Young OD of the Year by the Georgia Optometric Association.

In 2016, Pinkston moved to North Carolina to join his classmate, Aimee McBride, OD, in private practice. He and McBride own Haywood Family Eye Care, a growing private practice in Waynesville, NC.

Their practice has been in Waynesville since 1955 and has experienced tremendous growth over the past few years.

Pinkston's commitment to being an advocate for the profession continues in North Carolina. He was elected president of the Mountain District Optometric Society in 2019.

UABSO ALUMNI ASSOCIATION CONTINUES IMPACT

The Alumni Association has served the UAB School of Optometry in many ways over the years. Even given the challenges of 2020, the association was able to have several impactful accomplishments:

- Completed the pledge of \$25,000 to UABSO for scholarship support
- Completed the Dr. L. Don Snellgrove Endowed Scholarship in Optometry
- Awarded six existing endowed scholarships to deserving students
- Converted previously pledged AOSA student travel funds to attend the AOA/OM into scholarship dollars to aid students
- Recognized Dr. Paul Batson as the 2020 Alumnus of the Year and Dr. Thomas Pinkston as our 2020 Young Alumnus of the Year
- Hosted and helped fund the networking alumni reception at the 2020 SECO in Atlanta, GA

None of these achievements would be possible without the financial support of graduates through their membership and donations to the UABSO Alumni Association.

UABSO ALUMNI ASSOCIATION BOARD OFFICERS 2019-2020

President

Bill Tillman, OD ('86) Andalusia, AL

President-Elect

Candice Turner, OD ('03) Birmingham, AL

Secretary/Treasurer Sharon Day, OD ('87) Gardendale, AL

Immediate Past President

Caleb Gardner, OD ('08) Greenville, AL

MEMBERS-AT-LARGE

Term Expiring 2020 Jamie Hill ('09) Charleston, SC

Susan Persall ('01) Hartselle, AL

Term Expiring 2021 Gussie Branch ('16) Oneonta, AL

Brooke Kaplan ('12) Mountain Brook, AL Joel Jenkins ('83) Athens, GA

Term Expiring 2022 Tim Ansley ('14) Helena, AL

Haley Perry ('09) Fletcher, NC

Samara Perryman ('17) Troy, AL

Valencia Wells ('09) Birmingham, AL

UAB SCHOOL OF OPTOMETRY DEAN'S REPORT

FACULTY & STAFF RETIREMENTS



Trana Mars 26 YEARS

and conduct screenings.



Debbie Barnes 18 YEARS



Scelelar "BB" Jefferson 21 YEARS



14.5 YEARS



After 26 years of service. **Trana Mars** retired from the UAB School of Optometry. She joined UAB Eye Care as a receptionist in 1994 and became the first clinic coordinator. Mars found her permanent home in pediatrics. She reflects fondly on being part of the COMET study, working closely with Dr. Wendy Marsh-Tootle to help build the number of participating patients. The team would pack up Dr. Marsh-Tootle's station wagon to travel

Debbie Barnes, optician, has retired after 18 years of service to the school and patients. Barnes held her American Board of Opticianry certification during her tenure at UABSO.

Scelelar "BB" Jefferson retired after 21 years of service at the UAB School of Optometry. She joined the school as a title cashier, and held several other positions within UABSO. In 2008 she became a member of the CEC team as program coordinator. She earned the CEC clinic coordinator title in 2011, a position she held until retirement. BB was the heart of Gift of Sight, UABSO's largest giving event, since it began six years ago.

Following 14.5 years at UAB Eye Care and the School of Optometry, Vicki Fetui retired on

August 31st. "There are so many things I will miss about being at the school. It has become a part of my life watching and hopefully helping these young interns grow into fine young doctors," Vicki says. "At times I feel like an intern myself, still learning new things from doctors here who have become more than just doctors, but also my friends. And the staff...what on earth can I say about the staff? Some people here have been mainstays and 'go tos' and have helped me with so many things through the years. And some have become my lifelong friends. I will forever be grateful for my years and experience here at the School of Optometry.'



DR. ROBERT KLEINSTEIN NAMED PROFESSOR EMERITUS

Robert Kleinstein, OD, MPH, PhD, retired UAB School of Optometry professor, was appointed Professor Emeritus in the Department of Optometry and Vision Science by the Board of Trustees of the University of Alabama System. Kleinstein retired in 2019 following 45 years of service. When starting his career, Kleinstein said he never imagined that this title would be bestowed upon him.

DR. FELTON PERRY RETIRED **AFTER 45 YEARS**



Dr. Felton Perry, OD, joined the faculty part-time upon graduating from the UAB School of Optometry in 1974 as a part-time clinical assistant professor while operating a private practice. He provided leadership as director of Community Eye Care from 1996 to 2018, becoming the longest-serving director of CEC. He was director of the University Optometric Group from 2012 to 2017. Within the Alabama Optometric Association, he rose through the leadership ranks and served as President in 1986-87. Perry also served the profession as a member of the Optometric Peer Review Committee for the Alabama Medicaid Agency.

Amongst his career highlights are being named Optometrist of the Year by the Alabama Optometric Association and serving on the Alabama Vision Services board of directors. This organization eventually became VSP Vision Care.

"I had a chance to be involved in the growth of VSP from a state by state level all the way to the national level," he said.

Another highlight for Perry was working on the Black Belt clinic initiative to provide eye and vision care in Alabama's poorest region. He partnered with Mary Jean Sanspree, PhD, former director and associate scientist of education and research in Vision Science Research, and Shirley Wilson, EdS, Black Belt Adult Eye Care Clinic project coordinator, on the initiative. This program, begun in 2002, continues today and has provided care to more than 13,000 patients in underserved communities.

His passion was always patient care, especially as an attending doctor for CEC, the community outreach arm of the UAB School of Optometry.

"Giving back to the community was always something I felt like was important," he said. "I am an Alabama native, and when I went to the UAB School of Optometry I was able to benefit from in-state tuition. Part of my tuition was paid for by the state, so I wanted to serve the community to pay that back. Optometry has been good to me."

DR. MICHAEL **LOOP RETIRED AFTER 42 YEARS**

After 42 years at the UAB School of Optometry, Michael Loop, PhD, associate professor of Optometry and Vision Sciences, retired effective April 30th.

Loop joined the school's faculty in 1978 as an assistant professor of Physiological Optics and Psychology following a threeyear stint as a visiting assistant professor in the Department of Physiology and Biophysics at the University of Illinois at Urbana-Champaign. In addition, he held postdoctoral positions at the University of Virginia School of Medicine and Florida State University.

During his tenure at UAB, Loop had 46 publications in journals such as Vision

Research, Visual Neuroscience and the Journal of Comparative Physiology. He had 46 papers and abstracts along with 22 invited presentations.

Among his other career highlights is receiving first place study section rank order grants at the National Institutes of Health and National Science Foundation. In 1987, he received fan mail from Nobel Laureate Torsten Wiesel, who won the Nobel Prize in Physiology or Medicine 1981 for discoveries concerning information processing in the visual system. Torsten wrote to say that he greatly enjoyed reading Loop's article in the Journal of Physiology and requested a copy. Torsten was grateful that the article clarified a number of issues for him.

Loop also proudly graduated 11 master's students and eight PhD students.



The 2020 Springer Lecture honored Toronto-based optometrist Barbara Caffery, OD, PhD, FAAO. During her lecture, titled "Corneas, Contact Lenses and the Vale of Tears." she noted the current leading matters of concern being faced by optometrists as well as the role of optometrists in unveiling the natural history of eye disease.

According to Caffery, one of the important current challenges is understanding how devices, such as computers, tablets and cellphones, change our eyes over time. Are we creating dry eye disease through our lifestyles? Another matter worthy of focus is the need for more optometrists to contribute to the understanding of eye disease through clinical research.

"Our offices serve all communities so the social and ethnic differences can be analyzed," she said. "This will greatly contribute to our understanding of the prevalence and natural history of dry eye, for example, in all populations."

Caffery is a known expert on contact lens and Sjögren's syndrome. She completed her PhD program in Vision Science at the University of Waterloo in 2009 upon defending her thesis titled, "Sjögren's Syndrome: A Clinical and Biochemical Analysis." Currently, she is a member of the University Health Network

Multidisciplinary Sjögren's Syndrome Clinic and the Kensington Vision and Research Centre's Therapeutic Contact Lens Clinic.

Through the years, she has charted the evolution of how optometrists prescribe contact lenses.

When she entered the profession, a contact lens appointment would last one hour as doctors measured and tried various lenses and calculated. Now contact lens fittings are done quickly with little measuring unless the patient is receiving specialty lenses like scleral lenses. One thing that has not changed, despite technological advances in contact lens materials and disposability, is the rate of contact lensrelated infections. The only change is that daily disposable contact lenses have lowered the rate of serious infections. As a result of this knowledge, she believes optometrists should prescribe daily lenses more frequently.

Caffery has noted how the treatment and evaluation of Sjögren's syndrome have changed as well.

"Most important to me has been the recognition of Sjögren's syndrome by optometrists," Caffery said. "I hope that my thesis work contributed to that. Then came the evolution of the definition of dry eye disease through the Tear Film and Ocular Surface Society. We learned about inflammation, recognized symptoms and understood the complexity of the disease."

She added that today's treatments are directed at the known pathophysiology with anti-inflammatories and autologous serum tears, for example. We have also recognized the importance of the meibomian glands.

"The question I have is what can we learn about prevention. How can we find the Sjögren's patients early enough to prevent the destruction of the lacrimal gland? How can we prevent meibomian gland obstruction? What is good preventative dry eye hygiene and does diet matter?"

The first Canadian woman to serve as president of the American Academy of Optometry, Caffery believes optometrists have the responsibility of asking questions and thoroughly observing their patient's in order to understand the history of eye disease and to question clinical norms.

"There is so much to question in every observation that we make," she said. "We are the finest observers of the eye and we need to use our collective observations to unveil the natural history of eye diseases. Clinical research is important. There are diamonds in every chart."

Caffery is the 22nd Springer Lecture honoree. Due to the COVID-19 pandemic, the December 11th lecture was held live via Zoom.

ABOUT THE SPRINGER LECTURE

The lecture is supported by the Nathaniel E. Springer Memorial Fund, which was established in 1999 to bring distinguished visual scientists or clinicians to the School of Optometry to share knowledge with faculty and students.

The fund was created by Donald Springer, O.D., who was instrumental in the founding of the School of Optometry and a leader in optometry in Alabama and the U.S. along with other members of the Springer family, in memory of Springer's father Nathaniel E. Springer. Donald Springer died in 2011.

SPECIAL HONORS & RETIREMENTS

