



EMORY EYE CENTER

OUR HISTORY

THE EMORY EYE CENTER traces its roots back to a time when the practice of ophthalmology was just beginning in the South—and in the United States. The year was 1872.

Abner W. Calhoun, the region's first specialist of the eye and ear, came to Atlanta Medical College, established by his father, Andrew B. Calhoun, in 1854. The college later became Emory University School of Medicine in 1915.

As the only scientifically trained ophthalmologist south of Maryland, Dr. Abner Calhoun was the specialist of choice for many a Southerner who had a serious eye problem before the turn of the 20th century. He served as faculty president from 1900 until 1910. He and industrialist Andrew Carnegie provided funds to construct a medical college building that later became part of Grady Memorial Hospital, still a training ground for Emory residents.

From 1910 until 1940, Abner's son, F. Phinzy Calhoun, Sr., was department chairman, earning a reputation as one of the region's leading ophthalmologists. His successor, Grady Clay, developed an academic program for ophthalmology students and for eye, ear, nose and throat resident physicians. Dr. Clay served as department chairman from 1940 until 1946.

In 1940, Dr. Clay and Phinzy Sr.'s son, Phinzy Calhoun Jr., organized an ophthalmic pathology laboratory, one of only a handful of laboratories of its kind in the country. The junior Calhoun went on to serve as department chairman from 1946 until 1978. During his tenure, he helped open an eye bank to serve patients in the Southeast needing cornea transplants. The eye bank was the fifth ever established in the U.S.

Phinzy Jr. is credited with bringing modern ophthalmology to Georgia. He was the first eye doctor in the state to perform surgery under a microscope and the first in the Southeast to perform a corneal transplant. Colleagues regarded him one of the best trained ophthalmic pathologists in the country during the 1950s and 1960s, when the subspecialty was beginning to develop. During his many years at Emory, he helped train more than 100 ophthalmologists who now practice across the country.

From 1988 to 2007 Thomas M. Aaberg, Sr. continued to expand that reputation as new chair, building the Emory Eye Center (EEC) to what it is today. He is highly regarded as an authority on complicated disorders of the retina. Ophthalmologists around the world use techniques and instruments Dr. Aaberg developed for surgery on the vitreous and retina. In 2007, Emory announced that Timothy W. Olsen, MD (University of Minnesota) would assume the position of new chair, beginning in January 2008. Also a retina specialist, Olsen has both clinical and research interests.



Phinzy Calhoun, Jr., MD

1854 Andrew B. Calhoun, MD, helps establish Atlanta Medical College, serving as a professor of general and descriptive medicine. The college later became Emory University School of Medicine.

1872 Abner W. Calhoun, MD, Andrew Calhoun's son, becomes Atlanta Medical College's first professor of eye and ear.

1900 to 1910 Abner Calhoun becomes chairman of the Department of Ophthalmology, Atlanta Medical College.

1910 to 1940 Andrew Calhoun's son, F. Phinzy Calhoun Sr., MD, serves as chairman of the Department of Ophthalmology at Atlanta Medical College.

1915 Emory University's board of trustees charter Emory University School of Medicine, replacing Atlanta Medical College.

1940 Grady E. Clay, MD, establishes a small laboratory for ocular pathology in the outpatient clinic at Grady Hospital. Financial support was provided by L.F. Montgomery, a prominent Coca-Cola executive.

1940 to 1946 Dr. Clay succeeds F. Phinzy Calhoun, Sr. as chairman of the Department of Ophthalmology at Emory.

1940 Dr. Clay establishes the Emory/Grady ophthalmology residency program at Grady Memorial Hospital.

1946 to 1949 Alton Hallum, MD, succeeds Dr. Clay as interim chairman of the Department of Ophthalmology.

1947 F. Phinzy Calhoun, Jr., MD, performs the South's first cornea transplant at Emory University Hospital, the flagship hospital of Emory University School of Medicine.

1949 Emory opens the Grady Clay Memorial Eye Clinic at Grady Memorial Hospital. The clinic serves as a vital center for eye patients in need and for Emory ophthalmologists in training.

1949 The Grady Clay Memorial Eye Clinic opens an eye bank to serve patients in the Southeast needing cornea transplants. The eye bank is the fifth ever established in the U.S. The Clinic also establishes a glaucoma service and a "muscle clinic" for children with strabismus.

1950 to 1978 F. Phinzy Calhoun, Jr., MD, succeeds Dr. Hallum as chairman of the department. For 115 years, the Calhoun family guided Emory University School of Medicine in its development as a preeminent medical institution.

Phinzy Calhoun, Jr., MD, was the fourth Calhoun to help develop Emory University School of Medicine as a leading medical institution. Credited with bringing modern ophthalmology to Georgia, he was the first eye doctor in the state to perform surgery under a microscope.

Colleagues regarded Dr. Calhoun as one of the best trained ophthalmic pathologists in the country during the 1950s and 60s, when the subspecialty was beginning to develop.

1953 The Advisory Board for Medical Specialties lists 15 board-certified ophthalmologists in Georgia, 12 of whom are Emory doctors and two are Calhouns.

1953 The full-time faculty of the School of Medicine establish a private practice facility, the Emory University Clinic (now called The Emory Clinic). The clinic allows the Department of Ophthalmology to develop a strong clinical research unit.

1955 Grady Memorial Hospital dedicates a new facility. The Grady Memorial Eye Clinic moves to the new hospital.

1961 Emory establishes an orthoptic training school, the third of its kind in the country. The one-year graduate program trains students in the science of treating children with strabismus.

1964 The Eye Center established the Laboratory for Eye Research, the first of its kind in the Southeast. Headed by Morton B. Waitzman, PhD, the laboratory housed leading scientists conducting



Grady E. Clay, MD



Phinzy Calhoun Jr., MD

research on the causes and treatment of glaucoma and cataracts. Today the Eye Center's laboratories are located at The Emory Clinic and Yerkes Regional Primate Research Center.

1978 to 1986 H. Dwight Cavanagh, MD, PhD, succeeds Dr. Calhoun as chairman of Emory Eye Center (EEC). Under his leadership and fund-raising efforts, the faculty was expanded significantly, a new building was erected (now Clinic B), and a basic science research program was initiated.

1980 The National Eye Institute selects EEC to direct the PERK (Prospective Evaluation of Radial Keratotomy) study, the largest and most



Thomas M. Aaberg Sr., MD

comprehensive clinical investigation of radial keratotomy.

1985 EEC is dedicated in a new, five-story building on the university's campus. In celebration, the Eye Center invites 45 guest faculty from across the country to speak at a special ophthalmology scientific symposium.

1986 to 1988 Louis A. Wilson, MD, becomes interim chairman of the Department of Ophthalmology.

1988 to 2007 Thomas M. Aaberg, Sr., MD, becomes chairman of the Department of Ophthalmology and director of EEC. Under his watch, the Eye Center experiences a growth in staff, physicians and an increase in rankings, taking its place among the very best eye centers in the country.

1989 EEC does its first vision correction surgery with an excimer laser.

1990 EEC establishes a neuro-ophthalmology program and adds neuro-ophthalmologist Nancy Newman, MD, to the faculty.

1991 Under the leadership of Ned S. Witkin, OD, the infrastructure of optometry and low vision services is built. This grows into a vital part of the Department of Ophthalmology. A new state-of-the-art clinic for vision and optical services is created on the main campus thirteen years later.



Emory Eye Center, 1365-B Clifton Road NE, Atlanta, Georgia

1993 The first master's degree-level ophthalmic assistant program in the country is established at EEC.

1994 The Eye Center establishes the Emory Vision Correction Center, the nation's first refractive surgery center.

1995 EEC is one of a few centers in the country with approval from the FDA to sponsor a study of laser-assisted in situ keratomileusis (LASIK), a refractive surgery procedure.

1996 EEC receives its third five-year Core grant from the National Eye Institute (NEI) of \$1.1 million.

1996 to present *U.S. News & World Report* ranks EEC as a top center in the country for ophthalmology.

1996 EEC researchers are the first ever to publish a totally electronic, peer-reviewed life sciences journal, *Molecular Vision*, on the Internet.

1998 The Foundation Fighting Blindness names EEC a national research center for retinal degenerations with \$100,000 in funding for research into such diseases as macular degeneration and retinitis pigmentosa.

1999 Emory retina surgeons offer a new surgical procedure for the "wet" form of age-related macular degeneration—retinal translocation.

Photodynamic therapy shows promise in halting the progression of "wet" age-related macular degeneration.



2001 A dynamic new generation of vision-enhancing devices offers independence to those with low vision, including the JORDY. The device and EEC's director of Optometry and Vision Rehabilitation, Ned S. Witkin, OD, were seen on "Good Morning America."

EEC receives a new five-year NEI Core grant providing 20 consecutive years of funding. Henry Edelhauser, PhD, director of research, and his colleagues have received \$1.5 million in research dollars through the NEI.

2002 Emory's retinal specialists, participants of the NEI's AREDS (Age-related Eye Disease Study) at 11 sites nationwide, found that a regimen of dietary supplements could help slow the progression of macular degeneration ("wet" type) in those at high risk for the disease.

The OHTS trial (Ocular Hypertension Treatment Study) announced findings that eye drops used to treat elevated

orbital pressure can be effective in delaying the onset of glaucoma.

2003 Cornea specialist Doyle Stulting, MD performs the first U.S. artificial corneal transplant using a promising new device—offering hope to those with failed donor corneal transplants.

2004 EEC opens a new in-house LASIK center—Emory Vision—at The Emory Clinic Perimeter and completes new spaces for Vision & Optical Services and Comprehensive and Contact Lens on the main campus.

2005 EEC is the lead center for the NIH's Infant Aphakia Treatment Study (IATS), to evaluate whether a contact lens or intraocular lens provides optimal vision for babies born with cataract. Scott Lambert, MD is lead investigator.

Dr. Jiong Yan began a clinical study evaluating the Optobionics retinal chip in those with retinitis pigmentosa.

2006 Henry F. Edelhauser, PhD (as PI) received a five-year R24 award from NEI to study transscleral drug delivery. The grant will bring in \$1,172,000 in annual direct costs: one of the largest research grant awards that NEI has awarded. This delivery system will have great impact on the treatment for retinal degenerations and other disorders.

EEC receives a \$1M grant from the R. Howard Dobbs, Jr. Foundation to support AMD research.

Baker Hubbard, MD conducted two trials to test the efficacy and safety of Lucentis, an intraocular injection with great promise that may stop the active bleeding in macular degeneration.

EEC was selected as one of the vanguard centers for the Age-Related Eye Disease Study II (AREDS II), which evaluates Lutein and omega-3 fatty acids and their role in preventing AMD progression.

2007 Hans. E. Grossniklaus, MD, MBA (Pathology), was granted a \$75,000 Senior Scientific Investigator Award by Research to Prevent Blindness (RPB).

Researcher Jeff Boatright is awarded a three-year \$309,000 grant from the Foundation Fighting Blindness (FFB) to study synthetic bile acids to treat retinal degeneration.

Emory announced that Timothy W. Olsen, MD, of the Univ. of Minnesota, was tapped as new director of EEC in January 2008. He holds the F. Phinizy Calhoun Sr. Chair. He combines interests in research with an active clinical/surgical practice in retinal diseases disorders.

Ten persons with retinitis pigmentosa (RP) participated in a “compassionate trial” and received an innovative implant that has shown promising results in halting the progression of RP in the NEI trial.

2008 CATT, a groundbreaking NEI funded study, placed two drugs head-to-head (Avastin and Lucentis) to compare their effectiveness in treating AMD.

EEC was the first U.S. site to conduct an innovative trial on keratoconus—a Collagen Cross-Linking w/Riboflavin (CXL) treatment.

2009 Using the brain's ability to reorganize itself, Georgia Tech joins Emory in a trial to help patients with AMD see in a new way using computerized treatment.

P. Michael Iuvone, PhD, is appointed new Research Director. PhDs Henry Edelhauser, John Nickerson and Iuvone, along with Hans Grossniklaus, MD, MBA, are tapped as Association for Research in Vision and Ophthalmology (ARVO) inaugural fellows.

2010 Jeffrey Boatright, PhD, is elected president of ARVO, the premier vision research organization in the country. Michael Iuvone, PhD, is awarded the Senior Scientific Investigator Award by the Research to Prevent Blindness (RPB). Henry F. Edelhauser, PhD, was named the Charles D. Kelman Innovator's Lecturer by the American Society of Cataract and Refractive Surgeons (ASCRS). Bradley Randleman, MD, was chosen the first winner of the ASCRS Foundation's Binkhorst Young Ophthalmologist Award. Chair Timothy W. Olsen, MD,



Timothy W. Olsen, MD

received the 2010 Macula Society Young Investigator Award.

One-year outcomes of the IATS trial (2005) show no difference in visual acuity in children, whether the child is fitted with a contact lens or given an IOL immediately following cataract removal.

The Eye Center hosts the inaugural Southeastern Ocular Oncology/Pathology (SEOP) seminar, a forum for dissemination of knowledge in ocular oncology.

2011 Maria Aaron, MD, receives one of 10 national teaching awards for residency program directors through ACGME.

Bradley Randleman, MD, is tapped editor-in-chief of the *Journal of Refractive Surgery*. He also receives the international Kritzing Memorial Award.

Henry Edelhauser, PhD, and Georgia Tech professor Mark Prausnitz, PhD, receive a patent on their microneedle apparatus to effectively deliver drugs to the back of the eye.

Paul Courtright, PHD, and Susan Lewallen, MD, of the Kilimanjaro Centre for Community Ophthalmology, Tanzania, were recruited to co-direct the Eye Center's new Global Vision Initiative.

2012 Technology developed by Edelhauser and Prausnitz leads to a

start-up company that will develop the microneedle for ophthalmic use.

Emory Eye Center is the first center in Georgia to offer a new technology proven to help the vision of some patients with end-stage age-related macular degeneration (AMD), the implantable miniature telescope (IMT).

2013 EEC remains at top ophthalmology institution in *U.S. News & World Report* rankings.

To honor the life work of Henry F. Edelhauser, PhD, former director of research for the Eye Center, the Henry F. Edelhauser Translational Research Lecture was established.

Emory Healthcare acquires Paces Plastic Surgery Center and opens the Emory Aesthetics Center. Oculoplastics physicians Ted Wojno, Brent Hayek and H. Joon Kim provide consultations and procedures at the new location.

With the additions of Uveitis specialists Steven Yeh, MD and Purnima Patel, MD, EEC opens a dedicated Uveitis and Vasculitis clinical section. In addition, EEC adds a Joint Pediatric Rheumatology-Uveitis Clinic with Children's Healthcare pediatric rheumatologist Sheila Angeles-Han.

Allen Beck, MD was appointed to the Executive Committee of the Childhood Glaucoma Research Network (CGRN), an international group of clinicians and scientists who specialize in treating children with glaucoma around the world.

Hans Grossniklaus, MD, MBA, was inducted into the Academia Ophthalmologica Internationalis (AOI), a prestigious international ophthalmology organization consisting of the world's top academic ophthalmologists.

Director Timothy W. Olsen, MD, is a recipient of the American Academy of Ophthalmology's (AAO) prestigious Secretariat Award, recognizing

ophthalmologists for special contributions to AAO and ophthalmology.

Danny Haddad, MD, is appointed as Emory's Global Vision Initiative director. Former director of the Atlanta-based

International Trachoma Initiative (ITT), he brings considerable expertise and significant collaborative resources in the prevention of blinding eye diseases throughout the world.

2014 The Infant Aphakia Treatment Study (IATS) releases findings that say following cataract surgery in infants use of contact

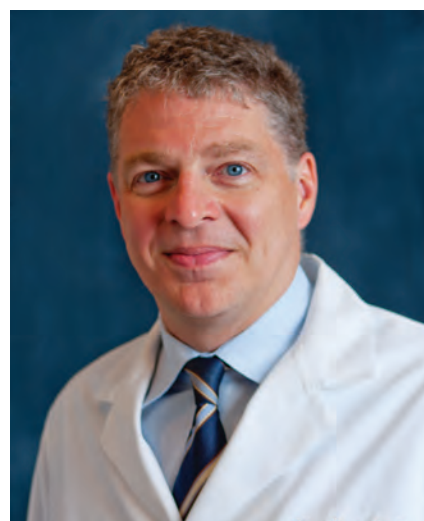
lenses over intraocular lenses is preferable. Scott Lambert, MD, and team at Emory were the national lead center in this important study at 12 sites throughout the country.

Director Timothy Olsen receives the Foundation Fighting Blindness "Visionary Award" for his commitment as a researcher and clinician.

In December, uveitis specialist Steven Yeh, MD, treats Ebola survivor Dr. Ian Crozier for his post-Ebola ocular issues. Yeh's findings of the Ebola virus within Crozier's eye *after* his recovery from the disease and the subsequent, successful pharmacologic treatment inform healthcare providers throughout the world about the issues Ebola survivors face. It received wide media coverage.

2015 An Emory Eye Center team including Yeh, resident graduate Jessica Shantha, MD, and oculoplastics specialist Brent Hayek, MD, travel to West Africa to assist in evaluation and treatment of ocular complications in Ebola survivors. The Quiet Eye West Africa (QEWA) team also included Dr. Crozier, who worked with healthcare professionals and NGOs in Monrovia, Liberia.

2016 Emory announces the appointment of Allen D. Beck, MD, as interim chair and director on March 14. Dr. Beck serves as William and Clara Redmond



Allen D. Beck, MD

professor of ophthalmology and is the former director of the Glaucoma Section. He received his MD degree from Emory School of Medicine.

Hans E. Grossniklaus, MD, MBA, was appointed interim vice chair. Grossniklaus is F. Phinzy Calhoun Jr. Professor of Ophthalmology; director, L.F. Montgomery Pathology Laboratory; and director, Ocular Oncology and Pathology Section.

2017 EEC's global ophthalmology work continued to expand as relationships with groups such as Orbis International were strengthened. Annette Giangiacomo, MD, was featured as a spotlight physician during an episode of CNN's Vital Signs that highlighted Orbis' Flying Eye Hospital.

The Fogarty International Center supported EEC's global ophthalmology fellowship program with a \$100,000 grant. The one-year fellowship was established in 2016 through a gift pledge from the Alcon Foundation.

Nancy J. Newman, MD, director of neuro-ophthalmology services, received one of the most prestigious honors the Emory School of Medicine can bestow upon a faculty member: the 2017 Dean's Distinguished Faculty Lecture and Award. She also delivered the H. Houston Merritt Lecture during the

American Academy of Neurology's 2017 meeting.

Emory Eye Center received widespread media attention when interviews with G. Baker Hubbard, MD, director of clinical retina services, about the August 2017 solar eclipse were picked up by national and international outlets.

2018 Research led by EEC basic science researcher Eldon E. Geisert, PhD, showed that a protein that affects corneal thickness might also be connected to glaucoma risk.

For the twentieth consecutive year, EEC was noted as a top ophthalmology center in the United States, according to *U.S. News & World Report's* guide to America's top medical institutions.

Hans Grossniklaus, MD, MBA, and his research team publish their findings on whether genetic patterns can help determine the best treatment protocols for patients with retinoblastoma. If so, the affected eye might be saved by chemoreduction or chemotherapy rather than being removed.

April Maa, MD, received the prestigious National Wolcott Award for Excellence in Clinical Care Leadership from the Veterans Health Administration (VHA). She was recognized for her efforts to create and implement an eye disease screening program (TECS) that allows the VA to reach rural, medically underserved, and homeless veterans.

Nieraj Jain, MD, received a Career Development Award from Foundation Fighting Blindness to continue his work studying pattern dystrophies in relation to a newly discovered drug-related retinal disorder.

Emory Eye Center, in partnership with Himalayan Cataract Project, hosted the first-ever International Council of Ophthalmology (ICO) review course in Ethiopia in 2018. The innovative ICO review course has greatly improved education in Ethiopia.

2019 Mary Lynch, MD, received the prestigious Innovator Award from the American Glaucoma Society. The award is given to one physician each year in recognition of his or her contributions to the field of glaucoma. She was the first woman to receive this award.



Nancy J. Newman, MD, director of neuro-ophthalmology services, received the 2019 NANOS Thomas Carlow Distinguished Service Award, the highest award given to a NANOS member for excellence in service to the society and neuro-ophthalmology.

In partnership with University of North Carolina and World Health Organization, Emory Eye Center developed and implemented an eye care program for Ebola virus disease survivors in eastern Democratic Republic of Congo.

Emory Eye Center announces the appointment of Allen Beck, MD, as chair of the Department of Ophthalmology at Emory University School of Medicine and director of the Emory Eye Center. He has served as interim director and chair since 2016.

Maria Aaron, MD, Allen Beck, MD, Valérie Biousse, MD, Hans Grossniklaus, MD, MBA, Baker Hubbard, MD, Nancy Newman, MD, and Ted Wojno, MD, were selected from the Atlanta metropolitan region as "America's Top Doctors®" and are listed in the "Top Docs" feature in the July 2019 issue of Atlanta magazine.

Steven Yeh, MD, received a Research Project Grant (RO1) from the National Eye Institute, National Institutes of Health (NIH) to further study vision-related issues in Ebola virus disease survivors.

Once again, Emory Eye Center was rated as a top ophthalmology center in the United States, according to *U.S. News & World Report's* guide to America's top medical institutions.

Jessica Shantha, MD, received a Mentored Patient-Oriented Research Career Development Award (K23) from the National Institutes of Health to study ophthalmic disease in a viral hemorrhagic fever zone.

Emory Eye Center expands its clinic space at the Emory Saint Joseph's Hospital in Atlanta.

Purnima Patel, MD, was selected to the Emory Professional Leadership Enrichment and Development Program (EM-ProLEAD), cohort of 2020.

Priyanka Sood, MD, was named Outstanding Female Leader in Ophthalmology in the Sept/Oct. 2019 issue of Millennial EYE, an all-digital publication developed by Alcon for future leaders in ophthalmology.

2020 Hans Grossniklaus, MD, MBA, director of ocular oncology and pathology services, and Georgia State University Regents Professor Jenny Yang's collaborated on research investigating new methods for detecting early-stage cancer. The research garnered attention from WSB-TV Atlanta.

In collaboration with the BONSAI group and Singapore National Eye Centre, Nancy J. Newman, MD, and Valerie Biousse, MD, publish their findings on using artificial intelligence to detect abnormalities in optic nerves from photographs.

Emory Eye Center fellows Fran Wu, MD, MPH, Keri Allen, MD, and Joseph Licht, DO, MS, each received a Fogarty award totaling \$100K.

Jacquelyn O'Banion, MD, MSc, received a grant to support HIV/AIDS research.

Emory Eye Center strengthened its relationship with Clarkston Community Health Center and increased its volunteer services to serve the population at need.

Natalie Weil, MD, and Soroosh Behshad, MD, received a grant from the Sidra Foundation for their work in Jordan.

Since its inception, the diabetic teleretina program at Grady Memorial Hospital has screened over 8K diabetic patients per year. Under the leadership of Yousuf M. Khalifa, MD, Emory Healthcare/Emory Eye Center has launched a pilot program for diabetic retinopathy screening. Due to the coronavirus (COVID-19) pandemic, telecare has become a key part of eye care delivery at Emory Eye Center.