THE JAMES H. HALL EYE CENTER
EARLY INTERVENTION AND OPHTHALMOLOGIC CARE
TO A CRITICALLY UNDERSERVED POPULATION.

Year in Review 2015

SAVING SIGHT • RESTORING SIGHT • ENABLING CHILDREN
We continue to see an increase in the number of indigent patients. This includes additional referrals, as well as many of our previous patients who had medical insurance but have lost their jobs and medical coverage.

The James H. Hall Eye Center will continue to be a source of ophthalmologic care for new and existing patients in need. It is obvious to us in the medical profession that the unemployment rate is still quite significant.

Your loyal support and belief in our mission to preserving and restoring sight in early childhood enables disadvantaged children the only chance to get the surgery they desperately need. You give children the brighter, happier future they deserve.
**GREATEST NEED**

One area that stands out as needing a great deal of care is in the newborn world of prematurity. Premature infants are at greater risk for retinal detachment, which has a greater incidence the lower the birth weight, and the greater the amount of oxygen received in the first few weeks of life. The Center’s Pediatric Director Dr. Zane Pollard sees six to seven very premature babies weekly at risk for ocular problems. Many of these babies come from very young parents who either are unemployed or have low-paying jobs that do not provide health insurance. We are able to care for these children and actually find this to be one of our most worthwhile projects, as we are striving to make sure that these fragile infants have usable vision for the rest of their lives.
**HAPPY PATIENTS, HAPPY PARENTS**

Dr. Pollard examined a three-month-old male infant born in Louisiana prematurely at 26 weeks of gestational age. The child received good care in New Orleans and underwent laser treatment of both retinas, which was successful in preventing a retinal detachment. No physician could be found between New Orleans and Rossville (northern Georgia), who would take over the care of this patient after he left New Orleans.

Someone in New Orleans had heard of the Hall Eye Center, called us, and transferred the care of this child to us. While the bulk of the laser surgery had been successfully performed in Louisiana, it gave this young family a tremendous amount of support mentally to know that their first-born child had an ophthalmologist in Georgia who would care for their child.

**OUTREACH INTERNATIONAL PROGRAM**

The Hall Eye Center remains a valuable source of care for foreign patients who are supported by Childhood International, an organization that pays the travel expenses for one parent and one child from a foreign country. They also arrange to house the patient here in the USA when the child comes for treatment. We have been a partner with this organization for several years.

**REGAINING SELF-CONFIDENCE**

One case that stands out was a young girl with a large amount of esotropia (crossing of her eyes) coming to us from El Salvador. We successfully performed the surgery at Children’s Healthcare of Atlanta at Scottish Rite Children’s Hospital. We required that the child stayed here in Atlanta for at least one week after surgery so that we would be able to treat any complication such as infection or the need to perform a second operation in order to obtain straight eyes. Fortunately, she did well and was able to return to her home one week after her surgery. A letter from the family several months later told us that she had a total change in her interactions with her classmates at school. Having felt very shy and embarrassed for her crossed eye, she now had become quite outgoing, and the family reported a dramatic positive change in her state of happiness. We plan to continue with this program in the coming year.
**PATIENTS BENEFIT FROM A SLIT LAMP MICROSCOPE EXAM**

We had a conference on neurofibromatosis at Scottish Rite Hospital this year, attended by many doctors, to discuss how neurofibromatosis affects their specialty. Dr. Pollard lectured on the eye finding in neurofibromatosis, which includes tumors of the optic nerve and optic pathway, glaucoma and tumors of the eyelids and orbit. We can help make the diagnosis of neurofibromatosis by doing a slit lamp exam. Many of these children have Lisch nodules on the outer surface of their iris. These Lisch nodules are small neurofibromas, which can be diagnosed with the slit lamp microscope.

![Photo of upper eyelid infested with the eggs of pubic lice.](image)

*This photo shows the upper eyelid infested with the eggs of pubic lice. (The numerous round structures seen on the eyelashes). This was successfully treated with antibiotic eye ointment, which smothers the lice. The treatment usually takes about two weeks of daily use to cure the infection.*

**NEURO-OPHTHALMOLOGY CASES**

Dr. Pollard is working on a video book with one of the professors who trained him at the Wills Eye Hospital in Philadelphia. This work will present interesting pediatric neuro-ophthalmology cases. The majority of these children have very unusual eye movements such as those that occur in Spasmus nutans, oculomotor apraxia and opsoclonus. Residents in training, as well as ophthalmologists in practice, will be able to read about these entities, and see recorded video cases, which will teach them the physical presentations of these unusual pediatric neuro-ophthalmology entities. Dr. Pollard is already participating in several presentations and looks forward to adding many more this upcoming academic year.
LISCH NODULES ON IRIS OF NEUROFIBROMATOSIS PATIENT

These are localized neurofibromas. When we see these Lisch nodules, we can make the diagnosis of neurofibromatosis that can cause tumors of the brain, spine, and orbit. When a child is suspected to have this diagnosis, he or she is referred to us for a slit lamp microscopic exam to check for Lisch nodules, which if present, confirms the diagnosis of neurofibromatosis.

On the surface of the iris, one can see multiple small yellow-brown nodules called Lisch nodules.

YOUNG CHILD WITH PARINAUD’S SYNDROME

In this syndrome, the patient has lost the ability to look up. As you can see in this photo, the child has a sustained downward gaze and retraction of the upper eyelid bilaterally. This child had a third ventricular brain tumor and was referred to a pediatric neurosurgeon who successfully removed the tumor.
OCULAR TOXOCARA

This is a intraocular photo showing a dense fibrous band coming off the optic nerve. This is very characteristic of ocular toxocara, an infection in the human that comes from the larva of a dog worm. The dog defecates onto the ground or grass and a child picks up a blade of grass or stick contaminated with the egg of the worm and puts the grass or stick into his or her mouth. The larva comes out of the egg and is absorbed from the intestine and often goes to the eye. These children are treated with oral medications as well as surgery to restore their vision.

DIFFICULT SURGERY TO RESTORE NORMAL ANATOMY AND NORMALIZE OCULAR PRESSURE

Dr. Mark Bordenca recently operated on an indigent patient with ICE syndrome. This is the iridocorneal endothelial syndrome. This Down’s syndrome child had a membrane growing in the anterior chamber of the eye, which had caused the iris to adhere to the cornea and raise the intraocular pressure (glaucoma). He performed a very difficult surgery stripping the membrane off the iris and cornea in order to restore a normal anatomy to the anterior chamber and to normalize the pressure.

DOGS PLAY AN IMPORTANT ROLE IN CHILDREN’S LIVES

We have specially trained dogs at Scottish Rite Hospital who visit with many of the patients before surgery to alleviate their fears. This has been a very successful endeavor. After the surgery is performed, Dr. Pollard again visits with the parents to explain what has occurred in the operating room and what the post-operative period will bring.
The work of the James H. Hall Eye Center

BACK TO SCHOOL
The goal of the Hall Eye Center is to help children with wide-ranging problems. Recently we had a young teen-age girl present with keratoconus, a dystrophy of the cornea in which the cornea becomes shaped like a cone instead of round and smooth. The best vision corrected in glasses was only 20/80 in each eye but with a specially fitted contact lens, her vision improved to 20/25 in each eye and she is now able to do all of her school functions.

THE CENTER IS UNIQUE
The provision of special contact lenses for corneal diseases and for infants who have undergone cataract surgery has been an ongoing project for the Hall Eye Center since its inception and no one else offers this service in Georgia. These aphakic contact lenses are much more expensive than the regular ones fit for nearsighted or farsighted patients. We plan to continue this critical service to indigent children afflicted with these difficult problems.
WE ARE PASSIONATE ABOUT TRAINING FUTURE PEDIATRIC OPHTHALMOLOGISTS

We have over 4 million births each year in the USA and therefore, there is a tremendous need for pediatric ophthalmologists. This year we added another teaching project to the Hall Eye Center. We had our first intern who spent three months with us at the Center. She saw patients with Dr. Pollard in the office, and we arranged for her to go to surgery as an observer. We gave her a series of lectures on pediatric ophthalmology and we hope she will consider pediatric ophthalmology as her home in medicine. Through this internship, we are hopefully finding and steering worthy young adults into our field.

INSPIRING FUTURE PEDIATRIC OPHTHALMOLOGISTS

Children’s Healthcare of Atlanta at Scottish Rite Children’s Hospital has 150 high school student volunteers in the hospital. This pool comes from over 500 applicants. Dr. Pollard gave an hour lecture to these high school students and showed them pictures dealing with pediatric ophthalmology problems in over 50 children and infants. We are always looking for young students who will be motivated to be the pediatric ophthalmologists of tomorrow.
OUR IMPACT IN THE METRO ATLANTA AREA: MARIETTA OFFICE

Dr. Marc Greenberg examines newborns at two hospitals in the Atlanta area. He sees between 260 and 400 patients a year in the newborn nurseries. The expertise of the neonatologists has increased over the past 10 years, helping save children with lower birth weight and fewer weeks of gestation. Unfortunately, these very small neonates are at high risk for developing retinopathy of prematurity, which is the reason that our coverage of the newborn nurseries is so important.

PATIENTS ALWAYS FEEL WELCOME

The atmosphere at the Hall Eye Center is directed especially toward children and attempts are made to make the encounter with our physicians as non-intimidating as possible. Before each surgery, the team of ophthalmologists personally talk to the parents in the pre-op area to re-explain what the surgery is trying to accomplish. They also talk to the young children assuring them that they will feel no pain during the procedure.

Our ophthalmologist team, composed of our Pediatric Director Zane F. Pollard, M.D. and associates Marc F. Greenberg, M.D., Mark Bordenca, M.D. and Shivani Sethi, M.D., donated more than $300,000 in medical services in 2015.

Included in donated fees is $108,160 to treat 416 indigent new patient exams, $130,000 for 52 indigent patient surgeries, and $65,000 for indigent patient hospital consultations.
YOUR GENEROSITY ENABLED US TO PURCHASE A NEW TONOPEN

We have several projects already started in the James Hall Eye Center. We will be working with a new tonometer. A tonometer is an instrument that measures the intraocular pressure, which when elevated can lead to glaucoma.

Glaucoma is a disease that can destroy vision by injuring the optic nerve. The new tonometer will be used mainly in children as it allows us to measure the intraocular pressure with a special top that is so delicate that topical anesthesia is not needed.

This instrument will be of tremendous aid in working with infants. It is our hope that this instrument will enable us to diagnose glaucoma in infants without having to put them to sleep with general anesthesia. Dr. Shivani Sethi, our newest addition as a pediatric ophthalmologist, has a special interest in children with glaucoma. The instrument will also be of great help in measuring the intraocular pressure in children and adults confined to a wheelchair and have difficulty moving to our examining chair.