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From the director I Transition and progress

AFTER A YEAR IN TRANSITION, the Emory Eye Center is moving forward in each area of its tripartite mission: patient care, research and education. I'm excited with the progress and especially grateful for the enthusiastic support from the faculty and staff on the direction of the Emory Eye Center during this time of growth.

EIGHT NEW FACULTY MEMBERS will join our program this summer (pages 18, 20). Each individual brings unique talents to our institution. They represent our future, and it looks

promising. Additionally, Baker Hubbard, who is prominently featured in this issue and is director of our retina service, has been selected to hold the Thomas M. Aaberg Chair of Ophthalmology.

THE OCULAR ONCOLOGY SERVICE is an innovative new program that aligns itself directly with the priorities of Emory Healthcare (cover story, page 2). In collaboration with Winship Cancer Institute (newly designated a "national center" by the National Cancer Institute), this service will combine numerous ophthalmic subspecialties to treat intraocular, pediatric and orbital tumors. Hans Grossniklaus, our ocular pathologist, directs the program. In addition, we have developed a fellowship that combines expert clinical care with ophthalmic pathology. This ground-breaking program is at the leading edge of ophthalmic cancer therapy in the country.

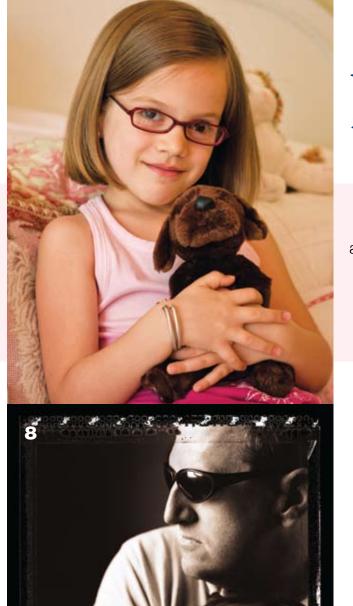
WE SHARE OUR GREATEST ADMIRATION AND RESPECT for retiring director of research Henry Edelhauser, who over the past two decades has brought our research program into the national spotlight. On September

1, Michael Iuvone will become the new director of research for the Emory Eye Center. Dr. Iuvone has been with Emory's department of pharmacology for 30 years and an adjunct member of our department most of that time. He is a perfect fit with our existing research program.

JOINING DR. IUVONE as vice director for research will be his long-time collaborator John Nickerson. Together they will create a dynamic team to guide and direct our research program. I cannot think of two more capable and well-respected individuals who truly have the research efforts of the Eye Center as their primary focus.

IT IS OUR PLEASURE TO SERVE YOU, our partners. The collaborative process between the Emory Eye Center, our patients, research partners, national colleagues and our exceptionally supportive community remains essential for us to *help people see as well as they can see*.

Timothy W. Olsen





⊢ EMORY EYE Magazine

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EMORY eye

When you hear your child diagnosed with RB, at first you think the whole world has come to an end.

But soon we realized that Emilia could still have a full and happy life.

—Cristina McKibbin 🤰

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A six-year-old girl proves that retinoblastoma doesn't have to slow you down.

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Seven new clinical faculty members join us.

Emory Eye Center *Uncommon knowledge. Uncommon sharing.*

Feature | Beyond eye cancer



"I can"

by Ginger Pyron

"Look what I can do!" Eager to impress, the little boy crosses his eyes.

"I can do that, too." His new friend slides one eye toward her nose.

"Wow, cool! How can you move one eye and make the other one stay still?"

The little girl bursts into giggles. "That eye is fake!"

To six-year-old Emilia McKibbin, having a prosthetic eye is no big deal. She knows to protect it—wearing her glasses for school and playtime, donning a scuba mask at the beach—but it doesn't limit her choices.

Following her interests, Emilia has earned a gold belt in karate. She's learning gymnastics. She swims. She loves

to romp with Daisy, her black cocker spaniel. And while most people don't even notice that one of this little girl's shining darkbrown eyes is different from the other, Emilia shares her story with a few. "I tell my teachers and my friends that I have a special eye," she says.

In 2005, Sandy and Cristina McKibbin had never heard of retinoblastoma (RB), a malignant tumor of the retina (the back of the eye) that mainly affects young children. Like their son William, their almost-two-year-old daughter Emilia was a healthy and happy child. When a family friend noticed a white spot in Emilia's left eye, no one panicked.

"Then one afternoon Emilia and I were in the basement, watching television," Cristina remembers. "In the darkness her eyes were really dilated, and I saw

the spot myself. My heart sank. I knew something was wrong."

Her foreboding intensified when Cristina called a nearby ophthalmology group. Initially told that she would have to wait several months for an appointment, she described the spot in Emilia's eye. That brought a different response: "Come in tomorrow morning."

Emilia's Friday appointment resulted in an immediate

referral to the Emory Eye Center—and also an immediate appointment with Baker Hubbard, Thomas M. Aaberg Professor of Ophthalmology, a pediatric ocular oncologist. Cristina had steeled herself for a possible diagnosis of blindness in the left eye, but she was shocked by Dr. Hubbard's news: "He said, with so much compas-

sion, 'I'm going to tell you something that's very hard to hear.
Emilia has a very aggressive form of cancer, and we will have to remove her eye."

The Emory Eye Center's oncology team acted quickly: Emilia was scheduled for surgery on Monday morning. "The good news from our pathologist," Dr. Hubbard recalls, "was that the tumor hadn't invaded the optic nerve, so Emilia didn't require chemotherapy."

Retinoblastoma, though a rare form of cancer, is the most common cancer of the eye of children. It occurs in one in 20,000 live births and comes in two equally malignant forms. In about onethird of the cases, the disease is hereditary and can be passed down from one generation to another; it can affect both eyes and sometimes other organs as well.

sometimes other organs as well.
Emilia's cancer was the more common non-hereditary form that typically affects only one eye. Thanks to medical advances, RB—previously fatal—has now surpassed a 95% survival rate in the United States.

Throughout Emilia's treatment and follow-up, Cristina says, every person at the Emory Eye Center has been extraordinarily helpful and kind: "I can't say enough good things about them. Everything is done so well there—you



Emilia's lively spirit infuses everything she does.

The idea of your child having an eye removed is shocking, an extremely difficult thing for a parent to cope with. Actually, most children who lose an eye adapt very well and enjoy essentially normal lives.—Baker Hubbard, III, MD

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Feature | Beyond eye cancer



eye to eye | If a photograph of your young son or daughter shows a white spot in one or both eyes, it doesn't necessarily mean retinoblastoma. But you should definitely have it checked out. Any abnormal appearance in your child's eye is a warning sign, and early detection can save that little person's vision—even her life.

- 1 Emilia with gymnastics teacher Stephanie Yackley.
- **2** Among Emilia's other interests are karate. She has been awarded the gold belt.
- **3** Emilia with her dog Daisy, who also had eye surgery—to treat "cherry eye," a prolapse of the third eyelid.

always feel they know you and care about you. A visit to Dr. Hubbard's office is like a family reunion."

The Emory Eye Center "family reunion" encompasses a huge group of parents, children, and staff members each year on RB Kids Day, when families who've faced an RB diagnosis come from throughout the Southeast and beyond to play together, share stories, and celebrate. Though the event receives some external funding, Dr. Hubbard says, "For the most part, it's funded straight from the pockets of people who work in the Eye Center."

Emilia, who has attended RB Kids Day for several years, lists her favorite activities—"jumpy castles, face painting, making sand bottles, and riding the ponies"—and also remembers receiving passes for a thrilling trip to see the animals at Yellow River Ranch.

A great lover of all animals, from those at the Ranch and her dog Daisy to the stuffed deer head

on her bedroom wall, Emilia is also a voracious reader. She's now zipping through a big book on raising kittens, and says she'd like to be a veterinarian when she grows up.

"We let her try everything, because we want her to be confident," Cristina says. Emilia and William, both bilingual, are preparing for a twomonth visit to their grandparents in Uruguay, where they will also attend school.

Cristina continues, "When you hear your child diagnosed with RB, at first you think the whole world has come to an end. But soon we realized that Emilia could still have a full and happy life. And I decided I would do exactly what my mother did for me: Every single day, I tell Emilia how beautiful she is."

[WEB LINK] For more information about retinoblastoma, visit www.eyecenter.emory.edu/eye_conditions/retinoblastoma.htm or www.nei.nih.gov/health/blastoma/index.asp.

[PATIENT'S PERSPECTIVE]

It works for me

My doctor here in Alabama knew about the nevus—the growth in my right eye—and had been watching it over the years, checking to make sure it wasn't growing. Then during an eye checkup, he saw that it had gotten bigger. He told me, "You need to go have this checked out at Emory."

So my wife, Juanita and I headed to the Emory Eye Center, and that was the wisest thing we could have done.

The care we received there is top-notch. It couldn't be any better. Dr. Bergstrom and all the folks who work with him are so sincere and attentive. You know they care. That comes through right away. And I never felt a bit of anxiety about the treatment. I always felt like I was in the hands of real professionals.

They told me I had a choroidal melanoma—a cancerous tumor—and gave me the options: take the eye out or try radiation therapy to shrink the tumor. That made my decision pretty easy!

The radiation therapy works through a

radioactive plaque that they attach to the eye. I'll tell you what, I never knew there was such a thing. When they explained it to me, it made so much sense. The plaque aims the radiation directly at the tumor, and then next thing you know, those bad cells go away.

The surgery was done right there in the clinic, under local anesthesia, and I went home the next day with a patch over my eye. I had the patch on for a week. Then I went back to Emory, and that's when they removed the plaque. Right now, it's still too soon to tell how well it worked. We have to wait six months for the results.

The whole time, I have felt fine. I have no discomfort, no apprehension. I feel like the treatment was successful.

Juanita and I have both been extremely satisfied with the care we had over there. You couldn't ask for a better group of people. I have nothing but positive things to say about the Emory Eye Center. It's a great place. They take good care of you.

Jerald Burns, PhD, now twice retired, served as a colonel in the U.S. Army Airborne Special Forces and as the department

chair of sociology and criminal justice at Alabama State University. He and his wife Juanita live in Montgomery, Ala.

[DOCTOR'S PERSPECTIVE]

How it works

Jerald Burns' surgery went well. We sewed a radioactive plaque on his eye, directly over the tumor, so that the radiation in the plaque could bombard the tumor for a week.

Usually after one week, the dose is enough to destroy the tumor. Then, once the plaque is removed, we follow up with the patient every six months, for the next five years at least.

This treatment, called brachytherapy, has a 90% to 95% success rate.

The plaque itself is an interesting piece of equipment. It's made by a dental company—out of dental gold—and comes in various sizes, depending on the tumor's size. The radiation oncologist, who's a physician, prescribes the dose of radiation; then the radiation physicist assembles the plaque for surgery, lining it with radioactive "seeds" and spacing them out so they're evenly distributed.

Jerald was diagnosed with ocular melanoma, which is the most common primary intraocular (inside the eye) tumor among adults. His tumor was in the choroid, the vascular layer between the retina and the white of the eye, called the sclera.

Ocular melanoma is not very common, affecting only eight people in a million. But we do see a lot of cases here at the Emory Eye Center

because we're one of the few places in the Southeast that actually treats ocular melanoma. We've become a regional referral center, treating patients from Georgia, Alabama, South Carolina, Tennessee, and other states. Our reputation continues to grow.

Here at Emory we have a strong team approach, and our process—from initial consultation through surgery and follow-up—involves a lot of excellent people. All the patients simply love our staff, particularly our ultrasonographers Rhonda Waldron and Jessica Gaultney.

We all try not only to do what's best for the patient but to make the process as convenient and pleasant as possible.

Melanoma is not a great diagnosis to have, and we understand that. Anything we can do to make a patient's treatment go more smoothly, we'll do it.

Chris Bergstrom, MD, OD, specializes in vitreoretinal surgery and disease. His research interests include ocular oncology, diabetic retinopathy, retinal detachments, and age-related macular degeneration.

When it comes to eye cancer,

we've got you covered

"A recent Gallup poll identified the two medical diagnoses that people are most afraid of hearing: 1) cancer and 2) eye disease that causes blindness. Our doctors often have to deliver both those pieces of bad news at once. It isn't easy."

But for Hans Grossniklaus, director of the Ocular Oncology Service (OOS) at the Emory Eye Center, that definitely isn't the last word.

He continues, "Cancer of the eye doesn't have to be a devastating condition. Our people also get to tell patients the great news: There is life after this diagnosis. Your cancer can be treated; good things do happen again. And we are here for you, every step of the way."

At Emory's Ocular Oncology Service, "we" is a big word.

"Cancer is best managed by a close-knit team of specialists," says Grossniklaus. Emilia McKibbin and Jerald Burns, for example, were each treated by a retinal surgeon specializing in their particular kind of cancer: Baker Hubbard in pediatric eye tumors such as retinoblastoma (RB), and Chris Bergstrom in ocular melanoma.

Patients with eye cancer further benefit from the expertise of retina specialist Tim Olsen; the facility of oculoplastic surgeons Brent Hayek and Ted Wojno; the research of ocular pathologist and clinical ophthalmolgist Grossniklaus; the skill of surgeons Doyle Stulting and Brad Randleman, who treat tumors in the front of the eye; and from the careful work of many others, including radiation oncologists,

medical oncologists, physicists, pediatric ophthalmologists, neuro-ophthalmologists, and ultrasonographers.

The Ocular Oncology Service is also aligned with Winship Cancer Institute, Georgia's only NCI (National Cancer Institute)-designated comprehensive cancer center.

Along with oncologists throughout Emory, OOS core team members attend monthly "tumor board" meetings to discuss difficult cancer situations and develop treatment plans. Three key principles guide the work of OOS:

- the group's dynamic *team approach*;
- a reliance on *evidence-based* medicine, i.e., treatments in keeping with



Strong collaborations at Emory Eye Center help each and every ocular cancer patient. L to R: Hans Grossniklaus, OOS director, Baker Hubbard, Chris Bergstrom and Brent Hayek.

the latest findings presented in medical literature; and

 translational science, the applying of laboratory learning directly to patient care in the form of clinical trials.

Clinical trials lead us to new knowledge—and new ways to help.

Hubbard is the principal investigator of an ongoing clinical trial that observes

Our patients need every bit of support we can offer—and with the compassion that comes from long experience, we offer it gladly.

young patients like Emilia, who have RB in just one eye. "The trial enables us to collect data on patients with this diag-

nosis," Hubbard says, "so we can learn more about it over a period of time." In collaboration with the AFLAC Cancer Center at Children's Hospital, Emory is one site participating in a nationwide trial examining different regimens of chemotherapy and injections of chemotherapy rounds in the eye.

Another clinical trial at Emory, led by principal investigator Dr. Hans

Grossniklaus, is studying eye melanomas and how they spread from the eye to other parts of the body.

Grossniklaus is also working with a group studying a new concept: the physics of cancer, or how cancers grow

and spread—how they invade tissues, migrate, and form patterns. Current research focuses on a local drug delivery mechanism to control melanoma and retinoblastoma.

Tremendous advances have been made; more are on the way.

- Fifty years ago, only 10% of children with RB survived. Today the survival rate is 95% to 98% in developed countries. We're now understanding the genetics of RB and how it can be inherited.
- During this same period, the percentage of people who had an eye removed because of melanoma has decreased from 90% to 10%. New knowledge about the biology of melanoma has brought exciting new developments in the treatment of this disease.

We always keep in mind: Cancer is not just a medical condition.

In cases of eye cancer, the diagnosis alone is enough to wreak havoc in someone's life. The Emory Eye Center physicians and others who work with ocular tumors never forget that this disease brings far-reaching implications for a person's career, relationships, and overall well-being.

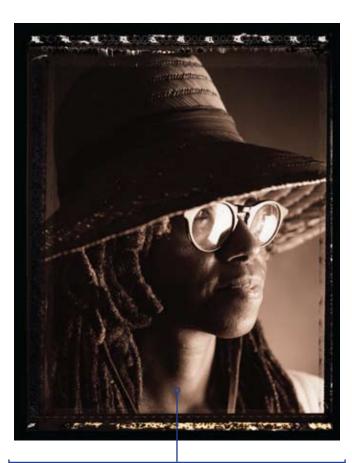
Our patients need every bit of support we can offer—and with the compassion that comes from long experience, we offer it gladly. Our message to patients and their families, over and over, is this: There's light at the end of the tunnel. And we will do everything we possibly can to help you see it.

[WEB LINK] www.eyecenter.emory. edu/ocular_oncology.htm. Also, of help: www.eyecancer.com www.nei.nih.gov/

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Feature | Blind Sight









Atlanta photographic exhibition

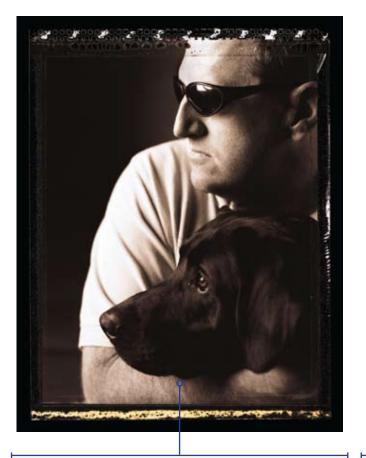
illuminating blindness

If there's one thing that an observer may take away from the visually stunning photographic exhibit *Blind/Sight*, it's that blindness is not universal. Everyone's experience is different.

"Blindness is not always darkness and darkness is not always lack of vision," says Billy Howard, an award-winning photographer based in Atlanta. In the exhibition of his beautiful photography, *Blind/Sight*, you learn that not every blind person "sees" the same thing. Many assume that those who are so afflicted merely see a constant black. Not so.

The 12 blind people so well described and photographed in his portraits are remarkably different. A variety of ages, diseases, accidents, and ultimate outcomes defines each person as a separate and unique story.

Those who are blind from birth often do not "see" anything. Those who lost sight later have various images in either their brain or in their remaining field of vision. Howard's partner in the visually compelling exhibition is Laurie Shock, who has the daunting job of rendering, as close as is possible, what the blind person "sees." Howard's photo-









graph and Shock's image are hung side by side with enough personal information in text that you feel you know these folks. An accompanying audio guide provides even more depth.

A 30-something policeman, catastrophically injured on the job, "sees" disjointed human body parts that seem to move across a screen. Shock artistically renders that somewhat disturbing image with gripping realism. And an

elderly lady with macular degeneration, left with very minimal and distorted sight, sees perfect butterflies and flowers in her field of vision. So like the lady herself, remarked Howard.

Howard's insight makes this event a not-to-be-missed experience for those who care about vision and its impact on our humanity. "What does it mean to be blind, to have a

Blind/Sight is on permanent view at the Center for the Visually Impaired in downtown Atlanta.

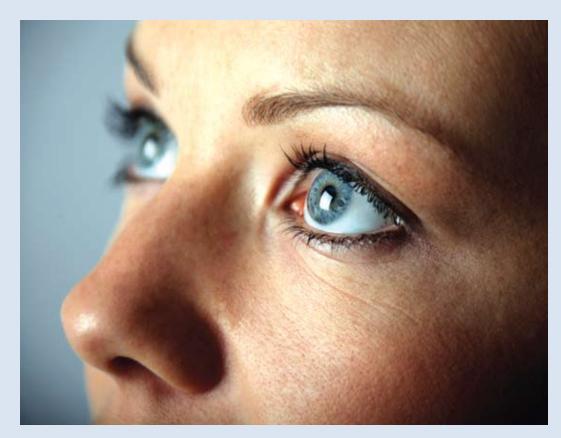
[WEB LINK] Go to: www.cviga.org/BlindSight. shtml

visual impairment, not to see?" says Howard. "I thought it was about darkness. It is not. It is about light, energy and the boundless creativity of the human mind to discover the world using all senses.

"Each of us has a unique view of the world around us. The people documented here know that," he continues. "They have discovered their own ways of seeing and ask only that you join their conversation.

"We all have different ways of seeing; the important thing, is that we listen."

Emory Vision—on the cutting edge of LASIK technology



Atlanta offers a number of LASIK surgery options—so how do you determine the best possible op**tion?** One deciding factor may be the technology available to your surgeon.

"We use devices and instruments to check patients' corneas and test their vision to make double and triple sure that we know what we're about to treat before we treat it. Other providers have one device to measure the corneal curvature and the refractive system of the eye. We have several."—Doyle Stulting, medical director, Emory Vision.

filiated with Emory Healthcare, has the safest and most advanced LASIK equipassignatic, or presbyopic. The new laser Call 404-778-2733 (2SEE) today.

ment available. "We have the fastest laser on the market," explains cornea/ refractive surgery expert Doyle Stulting, medical director at Emory Vision. "The diameter of the beam of light that

> hits the eye determines the resolution of the treatment."

This highly specialized laser system controls each laser pulse safely and accurately from start to finish.

Emory Vision, the only LASIK center af- The result? Outstanding vision, whether a patient is near sighted, far sighted,

technology also eliminates the glare and night vision halos that can result from other LASIK technologies. Patients often enjoy better vision than they had previously with contact lenses or glasses. And because our laser is fast, it provides clearer sight in a shorter, more comfortable treatment time—usually less than a minute—as well as a reduced recovery period.

Cutting-edge equipment gives Emory Vision surgeons and staff an invaluable advantage. During a patient's pre-surgery examination, measurements will be taken of the eyes and sight using several different tests—not just one. "We feel that we can offer much more than other providers in the area," says Stulting. "We use devices and

instruments to check patients' corneas and test their vision to make double and triple sure that we know what we're about to treat before we treat it. Other providers have one device to measure the corneal curvature and the refractive system of the eye. We have several." This thorough exam assures the patient the most accurate treatment and the clearest possible vision.

Emory Vision surgeons are all board-certified specialists with a wide range of experience gained through the research and training that only a leading academic medical center such as Emory can provide.

To learn more about Emory Vision, visit www.emoryvision.org. Interested in scheduling an initial examination?









- 1 Virginia and Tim Olsen (director, Emory Eye Center) with Emory School of Medicine Dean Thomas
- 2 Honoree Geoff Broocker with wife Debbie gives a "thumbs up."
- 3 Judy and honoree Thomas M. Aaberg, chair emeritus, Emory Eye Center.
- 4 An all-Emory group includes Vice President for Health Sciences Development Margery McKay; Emory President Jim Wagner and wife Debbie; Janet and Fred Sanfilippo, Executive Vice President for Health Affairs.

Emory Eye Center celebrated 20 years of excellence while looking forward to the next 20

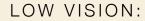
It was a dark and stormy night. Nevertheless, on November 7 more than 600 people, squinting through windshield wipers at unfamiliar street signs, found their way to historic Puritan Mill to honor physicians Tom Aaberg and Geoff Broocker, two longtime Emory Eye Center leaders who, in shaping our past, forged our future—and won our hearts forever. The event, 20/20: looking back, looking forward, was a chance to reminisce while looking ahead.

Held during the American Academy of Ophthalmology meeting in Atlanta, the celebration attracted many alums as well as current Emory Eye Center faculty, staff, students, and friends. Retrospective remarks by Aaberg and Broocker stirred two decades' worth of nostalgia and pride, along with plenty of laughter, and Director Tim Olsen outlined our trajectory for the next 20 years.

Emory's President Jim Wagner, School of Medicine Dean Tom Lawley, and Woodruff Health Sciences CEO Fred Sanfilippo also endorsed the Emory Eye Center and commended its training programs and the work of its people.

Large-screen monitors displayed a continuous slide show of Emory Eye Center, past and present. A highlight of the evening: when Olsen recognized the 32 individuals who have served at the Eye Center for at least 20 years.

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Finding answers

"One doctor we went to told me, 'Why are you having such a fit about low vision? You've earned a rest. Now you can just sit on the bank and fish, and let the world go by.' Well, I didn't even think that was worth a reply."

When Mary Gellerstedt has her mind set on doing something, she doesn't rest until it's done. For decades she and her late husband, Lawrence Gellerstedt, spearheaded fundraising campaigns that have heightened Atlantans' quality of life: Agnes Scott, Visiting Nurse Association, Literacy Action, Planned Parenthood, and the Atlanta Symphony Orchestra, among many others. "It's a great joy to see the successes that you've helped come to pass," she says.

Not until her early 70s did Mary undertake the campaign to save her diminishing vision. "Lawrence and I traveled all over the place looking for help. Then a friend sent me to Tom Aaberg, and we learned that Emory—right here at home—was the place to find answers."

Low vision, which can affect people of any age, means reduced vision that neither surgery, medical treatment, nor the best standard optical remedies can correct. Many with this condition are legally blind, unable to see well enough to drive a car, read a newspaper, or recognize faces.

Now 84, Mary wears zoom-in, zoom-out JORDY "glasses" to see more acutely. For reading, she uses a closedcircuit television reader that scans printed material and projects it, magnified, onto a screen.

And is Mary resting? Well, she doesn't make as many speeches as she used to, and she has chosen to stop driving, but she's still actively championing the causes that are close to her heart. Among them is the Emory Eye Center, whose work continues to benefit from her support both as a generous donor and as a forthright friend.

"I feel very dedicated to helping people see better," Mary says. "And Emory has been far ahead of other places in providing help for me. The doctors there are researching all the time." She's right: Emory's Low Vision Clinic is one of a few clinical sites in the U.S. developing the most advanced vision-assisting devices available on the market.



Low vision, which can affect people of any age, means reduced vision that neither surgery, medical treatment, nor the best standard optical remedies can correct.

As always, Mary has a plan—and the determination to help make it work: "My idea is, let's get everybody to see better. I want to tell people, low vision is not a life sentence. So don't give up! Low vision is just one more challenge, and we can beat it. Anytime you want me to get on the soapbox about that, I'm ready."

[WEB LINK] www.eyecenter.emory.edu/clinical_ specialties/low_vision.htm



The Emory Eye Center ranked in all four of the Top Ten categories with other distinguished U.S. academic eye institutions in the annual survey of ophthalmology programs conducted by Ophthalmology Times.

In the October 15 issue, the Emory Eye Center placed in all four of the ranking designations, the first time Emory has ranked in every surveyed category.

The categories and the Emory Eye Center's 2008 placements include:

- Best Overall Program (tied at 8th with University of Iowa)
- Best Research Program (9th)
- Best Residency Program (10th)
- Best Clinical (Patient Care) Program (6th).

"We are so pleased that our programs are recognized favorably by our peers," says Tim Olsen, Eye Center director.

"Emory is a unique place. Patient care, innovative research **Ophthalmology Times**

and quality physician training are the heart of

what we do. It is certainly gratifying that these efforts are recognized on a national level. We have an extraordinary team of talented and dedicated faculty who make a difference in the lives of many people every day."

Nationwide study shows older corneas suitable for transplantation

Corneal transplants using tissue from older donors have similar rates of survival to those using tissue from younger donors reported a nationwide study concluded at the Emory Eye Center and 79 other sites.

The five-year transplant success rate for recipients was the same—86 percent—for transplants performed across the nation with corneas from donors ages 12 to 65 years and from donors ages 66 to 75. Because of this new finding, the donor age pool—currently limited to donors 65 and younger—should be expanded to include donors up to 75 years of age. These are the conclusions of a study funded by the National Eye Institute (NEI) of the NIH.

"This pivotal study indicates that corneas from older individuals are just as successful when used for transplants as those from younger donors," said R. Doyle Stulting, director of the Emory Eye Center's cornea section. "These study results will expand the donor cornea pool and make the scheduling of transplant procedures easier for both surgeons and patients."

The availability of donor corneas has been adequate for the past 10 years in the United States, where more than 33,000 corneal transplants are performed each year. Recent FDA changes that make screening more strenuous may pose future limitations on transplants.



American Academy elects Eve J. Higginbotham

Emory Eye glaucoma physician Eve Higginbotham, who also serves as dean of the School of Medicine at Morehouse College, was elected as a fellow of the American Academy of Arts & Sciences. The academy, one of the nation's most prestigious honorary societies and a center for independent policy research, announced the selection April 20. She is among the 210 new fellows and 19 foreign honorary members representing leaders in the sciences, the humanities and the arts, business, public affairs and the nonprofit sector.

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Nasolacrimal duct obstruction study for infants

The Emory Eye Center is participating in third phase of a National Eye Institute sponsored multicenter clinical trial, the

Nasolacrimal Duct Obstruction (NLDO)
Study. The trial will evaluate which of two approaches is optimal in treating young infants with blocked tear duct: probing the obstruction immediately or waiting to see if the condition goes away on its own after six months, as is often the case.

Co-investigators Amy Hutchinson and Scott Lambert, Eye Center pediatric ophthalmologists, are enrolling the first patients.

Infants must be between six and 10 months old. Half the group of children eligible for enrollment in the study will undergo immediate probing.

The other half will wait six months for probing.

The later group may receive eye massage at home, which in itself can be helpful. An antibiotic eye drop may also be prescribed if necessary. At six months, if the obstruction persists, probing will be done within a month. Assignment to either of the two groups is randomly picked via computer.

"This trial will give important information that will help physicians provide the best, safest and most cost effective treatment to children with this very common disorder," says Hutchinson.

"Doctors are trying to find the most cost-effective ways to treat diseases," says Lambert. "This study should help us better understand where it is more cost-effective to treat blocked tear ducts during infancy or to wait until children are older."

Training the eye to see in a new way

John Mishik is an active 70-year-old who conveys a sense of energy when you meet him. An ex-Marine, he

is not thrown by much, but his age-related macular degeneration (AMD) has been a relentless problem he's had to deal with during the past couple of years.

"I can't read well, and certain conditions make it even worse, such as glossy paper found on most magazines and menus, and light that is too bright," he says. Because



Low vision expert Susan Primo assists John Mishik in reviewing text.

he still wants to read and carry on daily activities well, he was one of the first to enroll in Emory's new study. As he recounts, he held his hand up high and said, "I'm here!" when asked about the study.

Mr. Mishik has enrolled in the Cortical Reorganization Clinical Trial at the Emory Eye Center in order to "re-learn" how to see. Specifically, how to reorganize his brain to use those retina cells that are not damaged by his AMD, a phenomenon known as "plasticity." The new region is called the PRL or preferred retinal locus, an area that can become a sort of "sweet spot" where the patient can learn to see from.

The science behind this trial comes from colleagues at Georgia Institute of Technology's psychology department. Eric Shumacher, a psychologist and an expert in visual pathways, and Keith Main, a doctoral candidate, meet with patients at Emory and use their computerized program to tell how the patient is seeing. On this day, Mr. Mishik is receiving positive feedback on his seeing ability, generated by the loud beeps emanating from the machine.

Susan Primo, director of Vision & Optical Services at the Emory Eye Center and an expert in low vision, treats Mr. Mishik. She also brings in an occupational therapist to work with him about once each week. "Mr. Mishik and other patients like him can truly benefit from this new technology," she says. "It not only helps them use the vision they have left to see better, but it provides them hope for the future."

Mr. Mishik's story was so interesting to WAGA-TV (Fox 5) reporter Beth Galvin that she featured him and this new treatment on her health segment last December.

Emory Eye Center to participate in a clinical research study to investigate promising new treatment for retinopathy of prematurity

The Emory Eye Center along with 10 other sites across the country will participate in a Phase I research study to establish a safety profile for an anti-VEGF (vascular endothelial growth factor) drug, Avastin® (Bevacizumab), for premature babies with retinopathy of prematurity (ROP).

The study is enrolling babies with aggressive posterior ROP who have failed appropriate laser treatment and develop recurrent vascular activity. The babies must be at least 30 weeks postmenstrual age (PMA) and no greater than 36 weeks PMA. One eye will be

randomly selected for anti-VEGF treatment and the fellow eye will serve as the control eye. The anti-VEGF drug Avastin will be given as a one-time intravitreal injection. The target enrollment is 22 infants from 11 sites with no more than three infants from any one site.

Retina specialist Baker Hubbard will serve as Emory's physician investigator for the PAN-VEGF BLOCK-ADE FOR THE TREATMENT OF ROP (BLOCK-ROP).

"Bevacizumab is an exciting new drug that may benefit infants with ROP, and we are pleased to be able to systematically study the drug with



other clinical investigators around the country," says Hubbard. "Safety is our number one concern, however, because we already have an effective treatment for most cases of ROP in laser photocoagulation. That is why, in this first phase of the study, we are investigating the effects of the drug only in the most severe cases that have already failed laser."

The Anne and Jack Glenn Foundation has generously supported Phase I of the BLOCK-ROP TRIAL.

Men with intracranial hypertension experience vision loss more often than women

Men who suffer from idiopathic intracranial hypertension (IIH), a cause of increased pressure around the brain, are more likely to have vision loss than women

with the same disease, says Eye Center neuro-ophthalmologist Beau Bruce.

The cause of IIH is not known. Symptoms include headache, ringing in the ears, and vision problems (due to swelling of the optic nerves) such as blurriness and double vision. It is most common in young, obese women. If untreated, vision loss is possible.

According to research published in the October 15, 2008, issue of *Neurology*®, the medical journal of the American Academy of Neurology, Bruce and his colleagues here and at the University of Mississippi and Wayne State

University retrospectively reviewed the medical records of more than 700 people with the disease. Nine percent of the group was male. The participants had visual acuity exams, visual field exams, and brain scans as part of their evaluations. At both initial and final evaluations, men's vision was worse than the women's.

The study found that men with IIH were more likely to present with visual loss, while women presented with headache more frequently. It was also noted that men had a diagnosis of sleep apnea more frequently (24% vs. 4% for the women). It is not known how much that condition contributed to the vision problems.

"This study highlights the importance of following men with IIH carefully because they may not have the typical symptoms of raised intracranial pressure to alert the physician to be more aggressive," says Bruce. "In addition, it emphasizes the importance of screening patients with IIH for sleep apnea when appropriate."



Outreach to Dominican Republic - ORBIS 2009

The ORBIS Flying Eye Hospital circles the globe to train eye care professionals and treat underserved patients in developing countries.

Three of our alumni participated recently in a

trip to the Dominican Republic.

Most medical outreach missions set out to perform lots of surgeries and help the most acutely ill, but the **ORBIS** mission for Santo Domingo



was to teach its doctors how to do a number of sight-saving surgeries so that the work of the team will go on long after ORBIS has left. Further, those ORBIS-trained physicians can also teach

other physicians those same skills. Eye Center graduating resident Grace Prakalapakorn journeyed to Santo Domingo this winter to assist another residency program graduate, Hunter

Cherwek ('05), medical director of ORBIS and Rosalind Stevens (retina fellow '85). The exchange of knowledge was paramount, says Prakalapakorn, who will join ORBIS upon completion of her residency.

Flying Eye Hospital destinations in 2009 include Laos, Peru, Syria, Kenya, and India, among others.

To read more about Grace Prakalapakorn's ORBIS trip, see her blog: blog.orbis.org/orbis_international/2009/02/index.html

February 22, 2009:

"Esprit de Corps"

Against the tropical backdrop of palm trees and blue waters, the ORBIS DC-10 Flying Eye Hospital made a perfect landing in Santo Domingo, Dominican Republic. On the ground, both crew and FedEx members eagerly awaited to welcome the plane. As soon as it arrived, a bustle of activof this was through the direct transfer of knowledge and skills from the visiting faculty and nurses to their trainees, it also occurred in the reverse direction from the trainees to the visiting faculty and nurses though sharing of experiences and between the individual team members at all levels. What im-

> pressed me the most was how the ORBIS team members came together to work as a unit. The team members themselves were a diverse group that came from all over the world (including Canada, China, India, South Africa, the United Kingdom and the United States to name a few) and each member brought a unique skill set to the team via their dif-



ity ensued on board as both crew members and volunteers worked side-by-side to unpack the plane and prepare it for the weeks ahead.

For the remainder of its stay, the ORBIS team along with partnership from the local Ophthalmology Society, six local hospitals and FedEx worked tirelessly to complete a program that focused on building local capacity and public advocacy. Through screening days, surgical cases, symposiums and a public advocacy campaign involving mobile screening units, ORBIS was able to fulfill its goals.

Throughout the trip, there was continuous exchange of knowledge, ideas and skills. While the most overt example

ferent backgrounds in training (pilots, mechanics, engineers, nurses, doctors, etc.) and life experiences.

Overall, I enjoyed the opportunity to work with such a great and unique organization. Through its endeavors at capacity building, increasing local awareness about eye care and forming partnerships with local organizations and individuals, ORBIS Flying Eye Hospital's impact on the community will extend well beyond its two-week tenure in Santo Domingo.

S. Grace Prakalapakorn, MD, MPH

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Michael Iuvone joins Emory Eye Center as director of research

P. Michael luvone, a professor in Emory's department of pharmacology will move to the department of ophthalmology and serve as director of research at the Emory Eye Center beginning in September.

Iuvone will take the lead role in vision research at the Emory Eye Center and continue the national reputation of scientific excellence that Henry F. Edelhauser has cultivated over the past two decades.

Research, an important part of the Emory Eye Center's mission, seeks to translate laboratory findings into treatments for eye diseases and the prevention of blindness. A number of "firsts" have occurred at the Eye Center, many during the past 20 years: pivotal clinical trials, innovative treatments and procedures for numerous vision disorders, along with the growth of a brilliant research team. Iuvone will complement the excellence that already exists.

Originally from New York, Iuvone received his BS in psychology at the University of Florida. He completed his graduate work there, earning his doctorate in neurosciences. His post-doctoral experience was conducted at the National Institute of Mental Health (NIMH). He came to Emory in 1978, serving in the pharmacology department and was promoted to full professor in 1990. He has held a joint appointment in ophthalmology since 1980.

"Dr. Iuvone has an outstanding academic record in vision research," says Tim Olsen. "He is a thought leader



in retina and cell biology and is worldrenowned for his work in circadian rhythms, with an emphasis at the basic level on neuromodulation and cell signaling in the neurosensory retina.

"Dr. Iuvone clearly has the respect and admiration of our basic scientists as well as our clinicians," he continues. "We are thrilled he is joining us. We anticipate that he will lead the Emory Eye Center's research efforts to new heights."

Iuvone is a leader in numerous research organizations, such as the Association for Research in Vision and Ophthalmology (ARVO) and the International Society of Eye Research. Iuvone currently serves as principal

investigator on a NIH grant that deals with retinal function, which provides basic science information relevant to eye diseases such as age-related macular degeneration and diabetic retinopathy. He has been an editorial board member on five distinguished journals including the Journal of Neurochemistry, Experimental Eye Research and Molecular Vision. He was named a fellow of ARVO at the society's 2009 meeting.

He is a co-investigator on several other NIH grants dealing with myopia, ocular melanoma, and circadian rhythms in health and disease. He has published more than 140 articles in peer-reviewed literature.

Kudos: Edelhauser, Grossniklaus, Iuvone and Nickerson named ARVO 2009 fellows

Four Eye Center scientists were honored as distinguished fellows at this year's annual Association for Research in Vision and Ophthalmology (ARVO) meeting in early May: Hank Edelhauser was awarded the highest distinction, Gold Fellow; Hans Grossniklaus, John Nickerson and Michael Iuvone were each awarded Silver Fellow distinctions.



Night of Spectacles a great success!

The evening of April 30 saw a dazzling array of beautifully attired folks from around the metro area—and some attired in recycled eyeglasses!

All for a good cause, as this event helps fund the Georgia Lions Lighthouse. Its mission is to provide vision and hearing services through education, detection, prevention and treatment. Through collaborative partnerships,

Through collaborative partnerships, such as that with the Emory Eye Center, it enables greater independence and increased quality of life for Georgians in financial need. such as that with the Emory Eye Center, it enables greater independence and increased quality of life for Georgians in financial need.

According to event Co-chair Baker Hubbard, retina specialist at the Eye Center, "the Lighthouse is a wonderful organiza-

tion that helps fund eye surgery for patients in Georgia who cannot pay. We at Emory partner with this organization on a weekly basis to perform vision saving eye operations." The event brought in \$85,000, a significant increase over last year's \$53,000. Emory Eye Center's retina service was a sponsor for this worthy event.

- 1 Emory's glaucoma service was well represented. Annette Giangiacomo with Tassos and Anna Costarides.
- 2 Night of Spectacles co-hosts Karen and Baker Hubbard.
- **3** Andrew Feinberg (EEC alum), Maria and Wayne Aaron, and Baker Hubbard enjoying the evening.
- 4 Rachel and Sunil Srivastava with Sarah Epting of Georgia Lions Lighthouse Foundation.
- 5 Tom Aaberg and unidentified woman looking a bit like a real-life Tinkerbell! The dress she's wearing is made of recycled eyeglasses (one of many) and this one was chosen as "fan favorite" in the design competition.



Blaine Cribbs, MD will join the vitreoretinal section in August. Dr. Cribbs is originally from California. He completed his medical education at UCLA, followed by his internship and ophthalmology residency at Emory University. Dr. Cribbs completed a vitreoretinal fellowship at the Emory Eye Center. Prior to his fel-

lowship, he served as an instructor at the Emory University School of Medicine in the comprehensive ophthalmology section. His clinical interests include medical and surgical management of diabetic retinopathy, retinal vascular disease, age-related macular degeneration and retinal detachment.



Phoebe Lenhart, MD will join the pediatric ophthalmology section in September. Dr. Lenhart graduated from Medical School at Emory University and completed her internship there. She completed her residency in ophthalmology and her fellowship in pediatric ophthalmology at the Emory Eye Center.

Her clinical interests include pediatric keratoplasty, which she will inaugurate as a new service within pediatric ophthalmology. Other clinical interests include strabismus, pediatric cataracts, vision screening in Georgia, ptosis, management of capillary hemangiomas and Morning Glory Disc Anomaly.



Paul Pruett, MD will join the glaucoma section in July. Dr. Pruett completed his medical education at Emory University School of Medicine. He remained at Emory for his residency where he served as chief resident. Dr. Pruett completed his glaucoma fellowship at Emory as well. His clinical interests include medical and

surgical management of glaucoma, including laser therapy, as well as surgical management of cataracts. He also has a special interest in the education of ophthalmology residents.



Bryan Schwent, MD will join the vitreoretinal section in August. Dr. Schwent completed his medical education at Saint Louis University. He completed his ophthalmology residency and a vitreoretinal fellowship at the Emory Eye Center.

Dr. Schwent's clinical interests include medical and surgical management of vitreoretinal diseases including diabetic retinopathy, retinal vascular disorders, macular degeneration, retinal detachments and uveitis. He will see patients at the Emory Eye Center, Emory University Hospital Midtown, Grady Memorial Hospital and at a satellite clinic in Covington, Ga.



Susan Shields, OD joined Vision & Optical Services of the comprehensive section this spring. She did postgraduate training at SUNY State College of Optometry in New York and finished a residency at East New York Diagnostic and Treatment Center. Dr. Shields has interest in the treatment and management of ocular

disease and contact lens fittings.



Jill Wells, MD will join the comprehensive ophthalmology section in July, while also completing an ocular oncology fellowship. Dr. Wells graduated from the Medical College of Georgia and completed her internship at Carraway Methodist Medical Center in Birmingham, Ala. She completed her ophthalmology residency

at the University of Alabama-Birmingham. Her clinical interests include adult comprehensive ophthalmology, cataract surgery, and tumors of the eye.



Maria Woodward, MD will join the cornea section of the Emory Eye Center in August. She earned her medical degree at Columbia University Medical Center in New York. Dr. Woodward completed her residency at Emory, served as chief resident, and finished her fellowship in cornea and refractive surgery. She has

a strong interest in refractive surgery. Dr. Woodward has an impressive seven published articles to date, four as first author. She will see patients at the Emory Eye Center and at Emory Vision, its refractive surgery center.



THE "LIFE LIST" that Dr. John Hagan made in his forties included big dreams: travel more, seek adventure—and endow a chair in ophthalmology at Emory. Years before, Hagan had made Emory Eye Center the top choice for his medical residency, "because for ophthalmology, it was one of the best." The training he received here surpassed his expectations.

When Hagan and his wife Becky began estate planning, they knew they wanted to give back. Endowing a professorship through a bequest to Emory Eye Center made good sense financially and also met a need of the heart: "I wanted to

help other physicians practice academic medicine. And I wanted a way of saying, "I was here for a while, and I made a difference in eye care."

Legacy giving ensures that what you've worked hard for will keep going. To learn how Emory can fit into your estate plans, call 404.727.8875 or visit www.emory.edu/giftplanning.

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RB Day participant Aiden enjoys one of the most popular events of the day — blowing bubbles.

The annual summer event offers retinoblastoma (RB) patients and their families an opportunity to celebrate their young lives among friends and fun activities.

Emory Eye Center

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Uncommon sharing.