

Charles Gordon meets with Duke Eye Center glaucoma specialist Pratap Challa, MD, for a regular checkup.

CHARLES GORDON: EYE CENTER'S BIGGEST BOOSTER

From the picture window of his Elizabeth City, North Carolina, home, Charles Gordon and “Sweet Lucy,” his wife, enjoy the breathtaking view of the beautiful Pasquotank River where they can see 12 to 15 miles upstream.

This may not sound like anything short of a miracle, but considering that Gordon

was expected to be blind with his original diagnosis of glaucoma, it truly is just that.

The story began 50 years ago when Gordon, then 34, was enjoying the fruits of his labor: happily married to his sweetheart, a beautiful family, his sheet metal business taking off, saving up to build a home.

Wednesday, February 11, 1959—a date that Gordon will never forget. Adjusting to his new eyeglasses and reading the newspaper after work, he noticed that he couldn’t see out of the side of his left eye.

First thing the next morning, he went to the family optometrist in Elizabeth City. “The doctor took two fingers and laid them on my closed left eye. He walked immediately to the phone to call Dr. Banks Anderson at Duke and arranged an appointment for me the next morning,” Gordon recalls.

At that time, it was common knowledge that Duke was the place only the sickest people went. “It’s where people went to die. I knew there was a problem,” says Gordon.

Bright and early the next day, Gordon drove the 200 miles to Duke and was the first patient in the waiting room. He

spent the next nine hours in the basement of the old Duke building, the original location of the Eye Center, where his eye was examined, tested, and photographed.

The diagnosis: glaucoma—a word Gordon had never heard before. Doctors explained the condition and the prognosis

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CHARLES GORDON

for his acute glaucoma. “Dr. Anderson told me that I wouldn’t have a problem for about 10 years, but what I heard was that I had 10 years until I was blind,” Gordon says.

“I got home and figured I had two options: I could feel sorry for myself, try to do all the research myself so I would be aware of the ramifications, or I could put myself into the hands of Dr. Anderson and Duke and trust that they knew what

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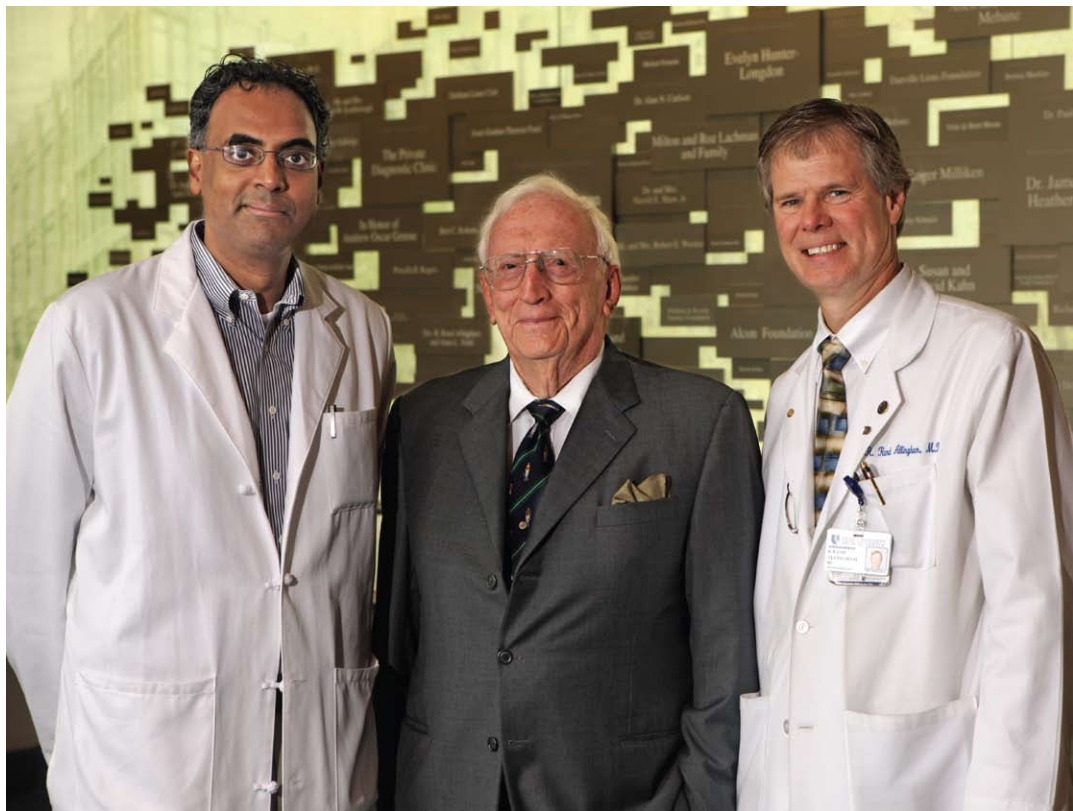


MANSFIELD:
Leaving behind dramatic change at the Eye Center

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“Duke is doing the cutting-edge research... Duke is moving ahead. If there’s something that can be done, Duke will know about it.”

CHARLES GORDON



From left to right: Pratap Challa, MD, Charles Gordon, Rand Allingham, MD

CHARLES GORDON

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they were doing.” Gordon chose the second option and hasn’t regretted it for a minute.

“I was determined not to let this diagnosis worry me and affect my family. I thought, if I may be blind in 10 years, I’d better do some things now to get ready. So, I built the house so I could learn to feel my way around it. As for my business and the community projects I was involved with, I pushed glaucoma aside and went ahead with my life.”

Over the next five decades, Gordon had a recurring appointment with Duke—every 70 days on average. That’s 275,000 miles of driving, or slightly more than 16 round trips from Anchorage, Alaska, to Buenos Aires, Argentina.

The pressure in Gordon’s eyes came down dramatically, but in July 1959, Anderson discovered that Gordon would need an iridectomy, a surgical procedure that removes a small piece of the iris, to control the heightened pressure in his left eye. He spent 10 days in the hospital and the procedure worked.

“Since then I’ve had eight surgeries plus numerous laser treatments. I’ve had more drops, ointments, salves, devices—you name it. I still have my eyesight. That speaks for itself,” Gordon says.

While under the care of Anderson, Gordon’s only restrictions were to avoid using aspirin and to never go to the movies. “Now I ask, why no movies? Nobody knows, but I did what my doc said,” he says.

When Anderson died in 1977, Gordon saw Banks Anderson Jr., MD. When he needed more procedures, Rand Allingham, MD, director of the glaucoma service at Duke, joined his team of Duke eye specialists. Today, Gordon’s team is led by Pratap Challa, MD.

Gordon offers empathy and guidance when he meets people who have eye problems—and he sends them to the Duke Eye Center for their initial exams because he’s confident they will receive the same outstanding care he gets. “My son has glaucoma; it’s hereditary. He goes to Duke and gets the same great care I do. I’ve sent people there who were absolutely terrified. I calm them down and tell them what to

expect. They come away from the Eye Center ecstatic.”

An active octogenarian who still works in the family business (he says he only works half days now, from 6 to 6), Gordon’s positive attitude and sense of humor are contagious. He says he is deeply appreciative and fortunate for the incredible care he’s received at Duke and for his eyesight.

Gordon has been an active Eye Center advocate since joining its advisory board in July 1999. He is a welcoming presence to other patients and new advisory board members and has recruited friends from his community who make regular trips to Durham. As far as anyone knows, he has never missed a meeting or an appointment.

What would he tell someone with eye problems today? “Get to the Duke Eye Center to get an evaluation. Even if they confirm what you already know, it’s worth going because Duke is doing the cutting-edge research. Other institutions are cutting back on research, but Duke is moving ahead. If there’s something that can be done, Duke will know about it.”

GLAUCOMA

GLAUCOMA IS THE SECOND most common cause of blindness in the United States. Characterized by increased pressure within the eyeball, the condition can cause progressive damage to the optic nerve. With early detection and good care, most glaucoma patients won't lose vision, although the condition cannot be cured. There are four major types of glaucoma:

ANGLE-CLOSURE (acute) glaucoma occurs when the clear fluid created in the eye becomes blocked. This causes a severe and painful rise in the pressure of the eye and must be treated immediately. Symptoms include:

- Decreased or cloudy vision
- Nausea and vomiting
- Lack of pupil reaction to light
- Red eye
- Severe eye pain, facial pain
- Swelling of the eye

CONGENITAL (inherited) glaucoma runs in families and is present at birth as the result of the abnormal development of the fluid outflow channels in the eye. Symptoms include:

- Cloudiness of the front of the eye
- Enlargement of one eye or both eyes
- Red eye
- Sensitivity to light
- Tearing

OPEN-ANGLE (chronic) glaucoma tends to run in families, and people of African descent are at a higher risk for this disease. Symptoms include:

- Gradual loss of peripheral (side) vision
- For most people, no symptoms until loss of vision

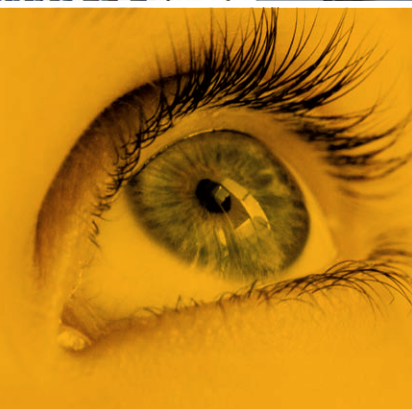
SECONDARY glaucoma is caused by systemic diseases, eye diseases, and use of drugs such as corticosteroids.

Everyone over the age of 40 should have an eye examination at least once every five years, and for people in the high-risk group, more often. Early diagnosis and careful management of glaucoma are critical in preventing vision loss.



In over 50 years, Charles Gordon has never missed an appointment which on average occur every 70 days—that's approximately 260 visits over his lifetime.

Below, In January 2010, Duke completed a seven-story parking garage adjacent to the Duke Eye Center. It offers Eye Center patients 300 parking spaces, three times what was previously available. *Bottom right*, Duke Eye Center completed the Albert Eye Research Institute (AERI) in 2005 thanks in part to a major gift from Ruth and Herman Albert. This facility provides a state-of-the-art environment for research to help cure blinding eye diseases.





Mansfield, seen here early in his tenure, oversaw unprecedented expansion of the Eye Center during his 25 years.

CHARLES MANSFIELD: 25 YEARS OF SERVICE

WHEN CHARLES MANSFIELD started as the business manager of the Duke Eye Center in 1984, it was a fledgling program with only 15 faculty members and one location. Now, as Mansfield leaves the Duke Eye Center, he leaves behind a dramatically changed place.

One of the top programs in the nation, the Duke Eye Center has grown to 10 locations in two states. The program boasts 49 clinical faculty, 14 research faculty, 20 clinical fellows, 16 residents, 17 research fellows, and seven medical students. The budget for the residency program alone in 2009 was larger than the budget for the entire department in 1984. The research program is one of the top-funded programs by the National Institutes of Health, and the private industry research is even bigger than the federal.

Says Mansfield, "I think it's really become a program that, on a national basis, others look to as a model. That in itself is significant."

Robin Woods, who started as Mansfield's assistant and is now the

planning and space coordinator, gives Mansfield credit for his oversight and leadership in helping make the Eye Center what it is today. "He really knew the business and the financial side. He helped grow our endowment and knew where to put our money. But he didn't lose sight of why we were here. He's been very fair and very open to everyone's ideas and opinions. He always wants to do the right thing."

Mansfield oversaw the expansion of the main Duke Eye Center building in Durham in 1988, when the Eye Center added an extra 30,000 square feet and remodeled an additional 15,000 square feet. In 2002, he oversaw the construction of the Albert Eye Research Institute building and pediatric clinic, which opened in 2005. All of these expansions have given Duke the ability to care for more patients than could have been imagined when Mansfield started. In 1984, the Duke Eye Center had 1,500 surgical cases; in 2009, there were 6,297.

Woods says that when she started in 1994, Mansfield told her that the Eye Center was getting ready to boom, to go out into the community with satellite offices and expand the faculty. "And it never stopped," she says. "I kept thinking, don't we have enough cornea [services]? Don't we have enough retina?"

Mansfield attributes the Eye Center's success to Duke's core vision. "I think that if you go back to the founding fathers, Duke's goal was to find the best and brightest minds, and to bring them here and create a unique and advanced program at all levels. I think that philosophy has remained as a core value within this organization, and that's been one of the main drivers for the success of the institution. And it's the

same for the Eye Center. We have a phenomenal faculty here," he says.

Mansfield got his start at Duke serendipitously. He knew some senior members of the administration socially, found out about the open position, and set up an appointment with Robert Machemer, MD, the late former chairman of the Duke Eye Center. Says Mansfield, "I talked to Robert Machemer and found that we were destined to work together until retirement. You know when you sit down with someone, and things just click? We worked very, very well together. I consider him a mentor."

As for what's next, Mansfield says he's going to take some time off. "I'll spend time with my family. I also have a bunch of hobbies that have been neglected over the years, and several antique boats that need restoration. This job has been an all-consuming thing, and I've been working since I was 16." He says he's not sure he'll be able to last long without working, and he's likely to go into consulting. "I find that things tend to fall into my lap that I find exciting."

Wherever he finds himself, his legacy at Duke will remain strong. "He's been a great mentor to me—to a lot of people," says Woods. "[The Eye Center] wouldn't be where we are today if we didn't have him pushing us, the faculty, and the research. He kept us on point and on task, and reminded us why we're really here. If you cut him, that man will bleed Duke blue. I know he won't sit still. He just won't." ■

EDITORIAL

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Duke Photography
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ROBERT MACHEMER, MD

ROBERT MACHEMER, MD, Helena Rubinstein Foundation Professor Emeritus of Ophthalmology at Duke University School of Medicine, died of cancer on December 23, 2009. He was 76.

Machemer was born in Münster, Germany, in 1933. After receiving his medical degree in Freiburg, Germany, he married his classmate and first love, Christel Haller. Upon completing his residency in Göttingen in 1966, he came with his wife and daughter, Ruth, to the United States for a retina research fellowship at the Bascom Palmer

ophthalmic surgery through teaching and research. He was best known for creating the pars plana vitrectomy, a surgical procedure which has revolutionized the treatment of posterior segment eye diseases and allowed vision recovery for hundreds of thousands of people who would have otherwise been blind. His research into an experimental model of retinal detachment led to study of the development and management of proliferative vitreoretinopathy. He not only developed a host of instruments and techniques which allowed for elegant surgery inside the closed

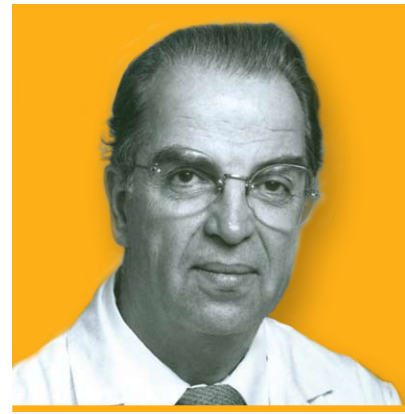


Eye Institute. While there, he worked under the leadership of Ed Norton, MD, who quickly discovered Machemer's potential—he was offered a faculty position after only one year. He remained on faculty until 1978, when he accepted the chairmanship of the Department of Ophthalmology at Duke University. During his 13-year tenure as chairman, the department achieved an international reputation, especially in the field of vitreoretinal disease and surgery.

Throughout his life, Machemer was dedicated to restoring vision by advancing

eye, but taught these new skills to retinal surgeons. This generous teacher traveled to share his knowledge with surgeons on every continent and hosted hundreds of visiting doctors who learned firsthand by watching him operate.

Machemer's genius in retinal research and leadership in vitreoretinal surgery has been recognized throughout the world, with a list of awards and recognitions too long to fully enumerate here. A few of these include: the Herman Wacker Award of the Club Jules Gonin, gold medal for the Vitreous



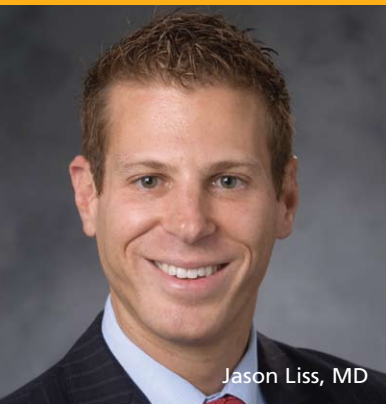
Infusion Suction Cutter (VISC) at the 12th International Congress of Ophthalmology in 1974, Helena Rubinstein Foundation Professorship, Proctor Medal and Lecture from the Association for Research in Vision and Ophthalmology, von Graefe Prize from the Deutsche Ophthalmologische Gesellschaft, Howe Medal of the American Ophthalmological Society, Helen Keller Prize for Vision Research, and the Gonin Medal of the International Council of Ophthalmology. He was also the first laureate of the American Academy of Ophthalmology.

In 1991 Machemer stepped down as chairman of the Duke Eye Center but remained professor of ophthalmology and continued to address eye diseases that might be amenable to surgical therapy. Most recently, he made a proposal for the treatment of age-related maculopathy. By surgically translocating the fovea and moving it into a new position, the area of best vision is placed on healthy pigment epithelium. This operation allows recovery or maintenance of visual acuity.

Machemer was diagnosed with three severe illnesses in his later years: Guillain-Barre syndrome, Parkinson's disease, and cancer. He is survived by his wife, daughter, son-in-law, Franz, and his beloved granddaughter, Hallie. His brother Hans and wife, Sigrun; brother Peter and wife, Roswitha; sister-in-law, Christa Haller; nieces Claudia Haller, Andrea Heiland, Oda Machemer, Elisabeth Machemer; and nephews Helmut Machemer and Ernst Machemer, survive him in Germany. ▀



Stefanie Schuman, MD



Jason Liss, MD

CLINICIAN INVESTIGATOR IN THE MEDICAL RETINA SERVICE

Stefanie Schuman, MD, is the latest addition to the retina service, where she will be engaged in research and clinical care. She will treat patients with diseases that include macular degeneration, diabetic retinopathy, and retinal venous disease. Splitting her time between the main Duke Eye Center in Durham, the Duke Eye Center of Raleigh, the Wilmington retina clinic, and the Durham VA Medical Center, she'll balance her work with clinical research and teaching.

Says Glenn Jaffe, MD, professor of ophthalmology and director of the Duke Reading Center, "She's a very enthusiastic and talented teacher and clinician. I think she'll excel in those areas and also as a clinical researcher. We also anticipate a role for her at the Duke Reading Center. I'm very enthusiastic about her coming."

Schuman grew up in Memphis and attended medical school at the University of Tennessee. After residency at the New England Eye Center in Boston and a fellowship at Duke, she joined a private practice in Providence,

Rhode Island, but decided she wanted to be in a more academic environment.

Her interest in the retina developed during her residency. "I was drawn to it because the retina gives us a window into the whole body—the status of blood vessels, circulation—and tells us a lot about the whole system. Sometimes we're the first ones to diagnose a systemic disease that's not just in the eye. That's really rewarding," she says.

Schuman says her previous experience at Duke drew her back to North Carolina. "I had a great experience during my fellowship, and I saw firsthand the collegial environment.

I knew collaborating with leading ophthalmologists would be an amazing opportunity to accelerate translation of fundamental scientific discoveries to improve vision."

She also wanted the opportunity to be involved in research with more wide-reaching implications. She says, "The Duke Eye Center is a great environment. They have all the resources to answer those scientific questions and improve patient outcomes."

Scott Cousins, MD, trained Schuman during her fellowship. "She was one of our best trainees, and we're pleased to have her back," he says. "She's an extraordinarily sympathetic person who will be an outstanding patient-oriented physician. She's going to fill a major niche as a young, energetic clinician investigator—something we need to expand in our eye center."

OCULOPLASTICS SERVICE

After completing a one-year fellowship at the University of Pittsburgh, **Jason Liss, MD**, has joined the oculoplastics service at Duke.

Liss is focused on eyelid reconstruction and repair, lacrimal surgery, orbital surgery, and thyroid eye disease. He'll be training with Julie Woodward, MD, director of

oculoplastics, to learn more about aesthetic surgery. He'll split his time between the main Duke Eye Center in Durham and the Raleigh location. In addition, he'll spend time teaching residents and giving lectures.

He was originally attracted to ophthalmology because he was interested in the science behind the visual system. Later, he came to appreciate the variety that oculoplastics offers. "You have to use some creativity in choosing how you're going to fix each problem," he says. "You need to make some adaptations while you operate. I like the aesthetic aspect of it, too. It's very important that you get a good cosmetic result."

Liss attended medical school at Columbia in New York, went to Scripps-Mercy in San Diego for his internship, and completed his residency at Cornell—staying for a year of chief residency. He says Duke offers a chance to work at a great eye center and live in a place he and his wife would enjoy. He says, "Duke's a fantastic medical center with a top eye program. Being from New York, I was ready for someplace smaller and quieter that still offered a variety of intellectual and cultural pursuits and good restaurants."

While Liss says he is looking forward to learning from the great retina, cornea, and oculoplastics specialists at Duke, he also finds interacting with residents inspiring. "They make you think about why you're doing what you're doing, and they're interested in the latest research. I like the collegial work environment during the day. It's pleasant and fun to be part of a team of people who all have the same goal."

Says Woodward, "Jason has a lot of energy. He's enthusiastic about teaching and working with patients. He's pleasant to work with and a pleasure for all the staff to get to know." 🍷