As retired art professor Ted Ramsay walks through his studio, discussing his latest work with a group of visitors, what he emphasizes most is light. Pointing at one painting, he explains how the sunlight filtering in from two windows illuminates a figure.

Routine eye exam leads to early diagnosis of age-related macular degeneration

An Artist Sees the Light
From the Chair

Dear Friends,

I am pleased to report on the continued growth of the Kellogg Eye Center. Since 2010, when the expanded Eye Center opened, we have added 21 new faculty members, including five research scientists. You’ll meet the newest group of eight faculty in this issue of Advances.

We also feature two stories of hope for those dealing with age-related macular degeneration. One patient received early diagnosis and prompt treatment, allowing him to continue his lifelong career and passion for art. In addition, Dr. Mark Johnson offers an update on best and newest treatments for wet macular degeneration.

Our newly designated Thyroid Eye Disease Center is also in the spotlight. Our physicians go the extra mile to provide patients with coordinated care for the many manifestations of thyroid eye disease. In one such case, Dr. Alon Kahana helped a very grateful patient receive the care she needed. The new Center coordinates appointments for patients across the Health System, and our physicians hold regular meetings—inviting specialists from other departments—to discuss complex cases. This means that patients with advanced eye disease receive attention from some of the top clinical faculty at Michigan.

As the season for resident interviews approaches, we take a look at a program that always receives high marks from Kellogg residents. They value the opportunity to provide eye care to the service men and women at the Veterans Affairs Medical Center in Ann Arbor. And since July 2010, they have benefited from the leadership of one of Kellogg’s outstanding clinicians: Dr. Denise John. These advances in ophthalmology are possible thanks to a vibrant community of friends, faculty, patients, and supporters of the Kellogg Eye Center.

Paul R. Lichter, M.D.
F. Bruce Fralick Professor and Chair
University of Michigan
Department of Ophthalmology and Visual Sciences
Director, W.K. Kellogg Eye Center

Lectureship Celebrates Career of Dr. Roger Meyer

Helping to train individuals to become ophthalmologists and cornea specialists stands out as a highlight of Dr. Roger F. Meyer’s years on the faculty of the U-M Department of Ophthalmology and Visual Sciences. “I enjoyed teaching and getting to know the residents and fellows,” says Dr. Meyer, who joined the faculty in 1975 and retired in 2001. A gift from his wife, Judy F. Gordon, D.V.M., to endow the Roger F. Meyer Lectureship in Cornea will ensure that Dr. Meyer’s contributions to education continue.

“The endowment of the Meyer Lectureship will permit us to attract outstanding teachers and innovators as speakers,” says Alan Sugar, M.D., associate chair of the Department and chief of the Cornea Service. “And while we will be honored to have the leaders in our field as visiting professors, the visitors will also be highly honored to have Roger’s name associated with their teaching. Roger spent more than three decades as a renowned corneal surgeon, teacher, and clinical researcher. This lectureship recognizes his exceptional service to his residents, his fellows, and his patients.”

Dr. Meyer earned his undergraduate degree at the University of Michigan and his medical degree at Ohio State University. He completed his ophthalmology residency back at U-M and fellowships in cornea transplantation immunology and cornea transplantation at the University of California, San Francisco and the University of Florida. He served as a flight surgeon in the United States Air Force and as director of aeromedical service at Wurtsmith Air Force Base in Oscoda, Michigan. His clinical research included helping to develop corneal transplantation techniques aimed at making the procedure more effective.

“It was very rewarding to restore vision to patients by performing corneal transplants, replacing the failed cornea and implanting a new cornea that could function,” Dr. Meyer says.

The Meyer Lectureship will be inaugurated during Fall Reunion Day at the Kellogg Eye Center on September 23. “It’s a great honor to be recognized in this way and to have a legacy that will remain in perpetuity,” he says.
“People want to draw things as a line, but it is really light reflecting from a surface,” he says. “I spend a lot of time looking at colors and light when I am working. It’s an ongoing search. I have to keep looking, as if I had never seen something before.”

Two-and-a-half years ago Prof. Ramsay found himself dangerously close to losing his ability to translate his study of light onto canvas. He learned during a routine but serendipitous eye exam that he had an aggressive form of macular degeneration. He had been through a difficult bout of pneumonia, and his doctor had recommended a complete physical, including a visit to an ophthalmologist.

When Prof. Ramsay came to the Kellogg Eye Center, Stephen J. Saxe, M.D., found that he had developed wet macular degeneration in his left eye and dry macular degeneration in his right eye. Dr. Saxe recommended immediate treatment for the left eye.

Macular degeneration causes progressive damage to the macula, the central portion of the retina, which may lead to impairment of the central vision and affect one’s ability to read, drive, or perform other daily activities. The disease has two forms: dry and wet. The dry type is the most common and usually progresses slowly over time. The wet type, which is less common but may progress rapidly, is caused by the growth of abnormal blood vessels under the retina that leak and can lead to bleeding. Fortunately, there are highly effective treatments available for wet macular degeneration in the form of specialized drugs that are injected into the eye, says Dr. Saxe.

“I had just come in for a checkup; I hadn’t noticed any symptoms,” Prof. Ramsay says. After his diagnosis, he realized that his right eye had been compensating for the trouble in his left eye, and he can see now how darkness crept into his paintings without his knowing it.

Prof. Ramsay taught art at the University of Michigan for 43 years and has conducted additional workshops in Australia, Spain, Japan, and the Netherlands. As a painter, sculptor, and fiber artist, he has worked in a variety of mediums over the years, including cast epoxy and handmade paper. His goal with students was always to help them to think like mature artists. “My studio objective was to teach my students that to paint is about learning to see form. The act of painting is the way to model form using pigment to describe the light reflecting from its surface. Art is also about communication, and that comes with a strong moral responsibility.”

Today some of his projects are influenced by his experiences with eye disease and treatment. He is working in a digital collage format in which he incorporates paintings, drawings, and photographic images of the retina, like the one used to diagnose his macular degeneration. He strives to convey the swirling action and flakes of color that he sees after an injection of medication into his eye. “It’s fascinating,” he says. “The collages are as close as I can come to artistically making what I see a reality. They are my way of coping with it.”

Prof. Ramsay donated one of these works to the Kellogg Eye Center’s Retina Clinic, a gift that Dr. Saxe says “inspires us each day to try to do better and to find a cure for macular degeneration.”

“I really appreciate all that Dr. Saxe and the Eye Center have done,” Prof. Ramsay says. “It’s fortunate to have someone who is able to spot these things so early. I was very lucky.”

“It’s fortunate to have someone who is able to spot these things so early. I was very lucky.”

—Professor Ted Ramsay

Professor Ted Ramsay’s digital collages reflect his experience with macular degeneration.
What is the best treatment for wet AMD?

Dr. Mark Johnson discusses a new report from the National Eye Institute

For the past several years, two drugs, similar in structure, have been available to treat the wet form of age-related macular degeneration. Patients and ophthalmologists have wondered whether one drug was better or safer than the other. A new study from the National Eye Institute provides the first direct comparison of Avastin and Lucentis.

Mark W. Johnson, M.D., a well-known retina specialist and a professor of ophthalmology and visual sciences at the U-M Kellogg Eye Center, explains what the study means for patients. “When you compare the two drugs, each given to patients on a monthly schedule, they are equally effective. That tells us we should be able to use these drugs interchangeably.”

Because the cost is significantly lower, Dr. Johnson says he and his colleagues in Kellogg’s Retina Clinic will recommend that patients start with Avastin. “If for some reason we don’t see the desired result, we can always try the other drug,” says Dr. Johnson. “Occasionally, an individual reacts differently than expected to a given treatment.”

The study also found that patients who received one of the drugs on an “as needed” basis had outcomes that were about the same as those who received a monthly injection. “When we combine what we learned from the study with our own experience, we know there is great variability among patients. Some require monthly doses, and some can do well for three months before needing another treatment.”

A takeaway point for Dr. Johnson is that treatment has to continue over time. “If you keep the injections going, most patients experience an initial improvement in vision.” He prefers having a continuous treatment schedule rather than waiting for signs that the disease has advanced.

Wet AMD, the focus of the study, affects far fewer people than the dry form, but it can occur suddenly, causing a great deal of damage. It is caused by the growth of abnormal blood vessels behind the macula, the part of the retina that provides fine, central vision. These blood vessels are fragile and tend to hemorrhage or leak, resulting in the formation of scar tissue and often permanent vision loss.

The study, the Comparison of AMD Treatments Trial (CATT), was launched in 2008 and followed 1,185 patients who were randomly assigned to be treated with Avastin or Lucentis on a monthly basis or as needed. Results were measured by outcomes in visual acuity.

The study also looked at safety concerns associated with each drug and found that there were no significant differences. The rates of death, heart attack, and stroke were low and similar for both drugs.

A third treatment is likely to be approved within the year, according to Dr. Johnson, who participated in a clinical trial to test the effectiveness of a drug called VEGF-Trap. When given to patients every two months, VEGF-Trap was shown to be as effective as monthly injections of Lucentis. As with Lucentis, the cost of the commercial drug will be a factor in its use. For now, Dr. Johnson is pleased to have another option for treating patients with wet macular degeneration.
Since joining the faculty at the University of Michigan Kellogg Eye Center in August 2008, Denise A. John, M.D., has spent much of her time just down the road at the Ann Arbor Veterans Affairs (VA) Medical Center, where Kellogg is the sole eye care provider.

The VA and the U-M Medical School have a long history—dating back to 1946—of collaborating to provide outstanding health care to the veteran community, and this includes staffing from U-M physicians and residents.

When it came time for Paul R. Lichter, M.D., Chair of the Department of Ophthalmology and Visual Sciences, to name a new Chief of Ophthalmology at the VA—in July 2010—Dr. John was an easy choice because of her impressive resume, as well as the invaluable time she had spent over two years attending to the eye care needs of the veteran community.

“I welcomed the role and was very grateful for the opportunity,” she says. “As a population, the veterans are a great group of patients. They are extremely appreciative of the care they receive.”

Dr. John earned her medical degree from Meharry Medical College in Nashville, Tennessee, in 2003 and completed her ophthalmology residency at Vanderbilt University in 2007. She completed her glaucoma fellowship at Kellogg in 2008.

Dr. John’s role at the VA includes overseeing Kellogg’s residents, who complete two, seven-week rotations in each year of the residency training program. During these rotations, Kellogg residents learn to diagnose and treat patients, as well as gain valuable surgical experience. Dr. John supervises these future ophthalmologists, both in the clinic and the operating room.

“Dr. John cares about the VA and works hard to make it a better place for both patients and staff,” says third-year resident Dolly A. Padovani-Claudio, M.D., Ph.D. “She makes all of us feel a part of the team and encourages us to be better. She is very approachable and seeks—and is responsive to—feedback. And, the patients really like her.”

In addition to her time with residents, Dr. John is responsible for the day-to-day operations of the eye clinic. This includes ensuring there are enough physicians on hand to meet the growing demand for eye care services at the VA.

The Ann Arbor VA serves more than 153,000 veterans living in a 15-county area in Michigan and northwest Ohio. It offers several specialty clinics and receives many referrals from the VA’s community-based outpatient clinics in Battle Creek, Saginaw, Grand Rapids and Toledo.

“The VA is a very busy service,” says Dr. John. “We see a lot of referrals and participate in many consults. Every day is different and there is never a dull moment.”
This spring Kellogg’s Low Vision and Visual Rehabilitation Service debuted its new “Living with Low Vision” information and support group, making Kellogg the only facility in a 40-mile radius where people with low vision can go for both eye care and support.

Nearly 14 million Americans have low vision, a level of 20/70 or worse that cannot be fully corrected with conventional glasses. Although individuals with low vision have some useful sight, they often find it difficult to perform daily activities, such as reading or driving. While the condition typically affects the elderly, younger Americans face a greater risk of irreversible vision loss, especially as cases of diabetes continue to rise.

The new group is open to the entire community, says Donna M. Wicker, O.D., optometrist and low vision specialist. “We hope to attract both senior and younger members of the low vision community, whether or not they are patients at the Kellogg Eye Center.”

The meetings feature a guest speaker one month and a group activity the next. At one of the first meetings Sadashi Inuzuka, professor at the U-M School of Art and Design, taught a printmaking class geared to people with low vision. “It was a fantastic project, but I also enjoyed the social aspects of the group,” said participant Pennia Ford of Ypsilanti. “It’s wonderful being around people who face the same challenges I do.”

Dr. Wicker, along with Sherry H. Day, O.D., and occupational therapist Karen Murphy, OTR, welcome participants to visit Kellogg’s Low Vision Clinic, which provides training with optical aids and other devices that make the most of an individual’s remaining vision. They also teach patients to use simple aids for everyday activities from reading to cooking to financial management.

The new Living with Low Vision group is an effort to provide a regular setting for camaraderie and support. “We are striving to create a welcoming and educational experience,” says Ms. Murphy. “We want to share information and we want people to meet and have the support of others with low vision.”

The Living with Low Vision group meets from 5:30–7:30 p.m. on the second Wednesday of each month. To learn more, call 734.763.9468.

To make an appointment in the Low Vision Clinic, call 734.764.5106.
Drivers over age 65 are the fastest-growing segment of the driving population, and their eye care providers—ophthalmologists and optometrists—are playing an increasingly important role in assessing their ability to drive safely.

Kellogg researchers surveyed 500 vision care providers (VCPs) in Michigan to learn how they assess the driving capabilities of their senior patients. David C. Musch, Ph.D., M.P.H., who led the multidisciplinary U-M study team, observed that such assessments are needed to insure the safety of an aging population and to keep the roadways safe for all drivers.

Dr. Musch and his team found that the majority of VCPs feel it’s their responsibility to ask senior patients about driving, and most do it routinely. They test acuity, field of vision and peripheral vision, but often fail to ask about other factors—such as medical conditions or medications—that might affect the ability to drive. While VCPs often inquire about glare, driving at night and reading signs, they don’t often ask about challenging driving situations—merging or backing up—or the patient’s recent driving record.

Many VCPs stress that certain resources—driving assessment guidelines, clinical screening instruments and a patient self-evaluation tool—would help them assess the driving capabilities of their senior patients, and help to address higher accident rates for drivers over age 75.

“Good vision is one key to safe driving, but other factors can affect the driving abilities of older adults.”

“’We’ve identified a need and, as medical care professionals, we can help,’ says Dr. Musch, who cites research indicating that when seniors lose the ability to drive, there are consequences. They have higher rates of depression and social isolation, more limited access to health care services, and are more likely to need long-term care. ‘Our goal is to intervene and work with our patients to modify their driving habits. This will allow them to drive appropriately and maintain their independence,’ he says.

While most VCPs feel confident in their ability to determine whether vision is adequate for safe driving, fewer consider themselves the most-qualified professional to identify unsafe drivers. When asked about reporting unsafe drivers, common concerns were negative impact on the doctor-patient relationship, liability issues, doctor-patient confidentiality and the patient’s quality of life. In fact, only a small number of VCPs communicate driving concerns with the patient’s primary care physician or refer patients to driving rehabilitation specialists or driving school.

Still, VCPs are among the most important professionals in seniors’ health care, and they need to be on the lookout for seniors who need special attention, says Dr. Musch. Providing VCPs with resources to aid them in evaluations is the next step in the process, he adds.
“Don’t I look great? I have two good eyes.” LaQuilla Harris is a warm and engaging woman who cannot say enough about the doctors and staff at the U-M Kellogg Eye Center who have treated her for thyroid eye disease. After several surgeries and many visits to Kellogg from her home in Maryland, Ms. Harris believes she has turned a corner.

Two years ago, Ms. Harris met orbital surgery specialist Alon Kahana, M.D., Ph.D., at a conference sponsored by the National Graves’ Disease Foundation. Pointing to a patch over one eye, Ms. Harris explained that her eye pointed inward, causing severe double vision and eye pain. She rarely ventured from her home due to the pain in and around her eye. Specialists in her area had told her that wearing the patch was her best option. But Dr. Kahana had a different idea. "I can help you," he said. Those were powerful words for Ms. Harris, who was discouraged but had not given up hope. Today she attributes her progress to Dr. Kahana’s compassion, expertise, and the time he has taken with her. “The doctors and the staff here understand what you are going through,” she says. “The bonding between the doctor and patient makes for great healing.”

“Thyroid eye disease is a difficult condition to live with,” says Dr. Kahana, the Helmut F. Stern Career Development Professor of Ophthalmology and Visual Sciences. It is a disease that causes bulging eyes, eye irritation, facial distortion, and double vision, sometimes progressing to vision loss. Treatment often requires multiple evaluations and complex surgical procedures, a focus of Kellogg’s growing Thyroid Eye Disease Center. “We are becoming recognized as a destination for patients with thyroid eye disease, orbital tumors, and other complex eye disorders,” he adds.

On her first visit to the Eye Center, Ms. Harris met with Dr. Kahana; Steven M. Archer, M.D., an eye surgeon who specializes in eye muscle disorders; and Wayne T. Cornblath, M.D., a specialist in neurologic
Faculty Awards

David A. Antonetti, Ph.D., Professor, Department of Ophthalmology and Visual Sciences, was a recipient of a Jules and Doris Stein Professorship. This award—considered to be the premiere award of Research to Prevent Blindness—was established to attract eminent basic scientists to conduct clinically relevant eye research. Dr. Antonetti studies the formation and loss of the blood-brain and blood-retinal barrier in normal vascular biology, diabetes and cancer with a long-term goal of contributing to the development of novel treatments to prevent or reverse the debilitating loss of vision from diabetes and cancer.

Raymond S. Douglas, M.D., Ph.D., Associate Professor, received the Lew R. Wasserman Merit Award from Research to Prevent Blindness. This award is given to distinguished researchers who are extensively engaged in eye research. Dr. Douglas’ research focuses on understanding and developing new treatments for Graves’ or thyroid-associated orbitopathy.

Julia E. Richards, Ph.D., Harold F. Falls Collegiate Professor of Ophthalmology and Visual Sciences, and Terry J. Smith, M.D., Frederick G.L. Huetwell Professor of Ophthalmology and Visual Sciences, were each awarded the inaugural League of Research Excellence by the University of Michigan Medical School. This award celebrates U-M Medical School faculty researchers who achieve significant success and recognizes the quality and quantity of their work.

David N. Zacks, M.D., Ph.D., Associate Professor, is the recipient of the Macula Society’s W. Richard Green Lecture and Award for his research into the mechanisms underlying photoreceptor cell death and degeneration during retinal disease. The W. Richard Green Award is presented to an individual whose work has helped explain the pathogenesis of diseases of the retina.

Restoring vision, continued

One Patient’s Vision

disorders affecting the eye. Together they mapped a plan calling for multiple surgeries that would restore visual function and allow Ms. Harris—finally—to discard her eye patch.

First, they convinced Ms. Harris to stop smoking, which can worsen thyroid eye disease. Next, Dr. Kahana performed orbital decompression surgeries to remove bone and scar tissue from behind the eye and create more space for the thickened muscles and tissues. Finally, Dr. Archer performed surgery to straighten out the eyes, and Dr. Kahana followed with eyelid reconstructive surgery.

Throughout, Ms. Harris was comforted by the knowledge that she had a team of experienced eye surgeons and specialists who were focused on her care. And in September 2010, she threw away the eye patch. During her most recent visit, Dr. Archer gave Ms. Harris the go-ahead to drive again, another sign of her recovery. Ms. Harris is clearly happy with her progress. “I have come such a long way,” she says. “If you could see where I was a few years ago, you’d be smiling for me, too.”

Learn more about the Thyroid Eye Disease Center at 734.764.5106 • www.kellogg.umich.edu/thyroid
Welcome to Kellogg’s New Faculty

**Hilary M. Grabe, M.D.,** has joined the faculty of the Neuro-Ophthalmology Service and sees patients in Kellogg’s Ann Arbor and Briarwood offices. Dr. Grabe received her medical degree from Baylor College of Medicine and completed both her residency and her two-year fellowship in neuro-ophthalmology at the University of Michigan.

**Christopher T. Hood, M.D.,** has joined the faculty of the Cornea and External Disease, Cataract and Refractive Surgery Service and sees patients in the Ann Arbor office. Dr. Hood earned his M.D. from the University of Michigan and then completed his residency at the Cleveland Clinic. In 2011, Dr. Hood completed a fellowship in cornea and external disease at Michigan.

**K. Thiran Jayasundera, M.D.,** assistant professor, has joined the Retina and Uveitis Service. He sees patients in the Ann Arbor office. Dr. Jayasundera earned his medical degree from the University of Auckland (New Zealand) and completed his residency at the Royal Australian and New Zealand College of Ophthalmologists. After residency, Dr. Jayasundera spent several months as a research fellow studying retinal dystrophies and uveitis at Kellogg. He went on to complete a retina fellowship at McGill University (Quebec, Canada) before returning to join the Kellogg faculty.

**Ariane D. Kaplan, M.D.,** has joined the faculty of the Comprehensive Ophthalmology Service and sees patients in the Ann Arbor and Canton offices. Dr. Kaplan earned her M.D. from the University of Louisville in 2007 and completed her residency at the University of Michigan in 2011.

**Jennifer A. Kozak, M.D.,** has joined the faculty of the Pediatric Ophthalmology and Strabismus Service. She earned her medical degree from the University of Pennsylvania and completed both her residency and a fellowship in pediatric ophthalmology at the University of Michigan. Dr. Kozak sees patients in Kellogg’s Ann Arbor office.

**Amy L. Lagina, O.D.,** is an optometrist who has joined the faculty in Kellogg’s Contact Lens Clinic. She sees patients in Kellogg’s Ann Arbor office as well as at the VA Hospital in Ann Arbor. Dr. Lagina earned her O.D. from the Illinois College of Optometry and joined a private practice. Before coming to Kellogg, she spent four years as a clinical instructor at Northwestern University.

**Hemant Pawar, Ph.D.,** assistant research scientist, has returned to the Kellogg research faculty after serving as senior scientist at Alcon Laboratories, Inc., in Texas. After earning his Ph.D. in biochemistry from the National Chemical Laboratory in Pune, India, Dr. Pawar joined Kellogg as a postdoctoral research fellow in 1991 and by 1995 had become a research investigator. Dr. Pawar studies the molecular genetics of glaucoma and his research has been supported by the Glaucoma Research Foundation as well as the Midwest Eye-Banks.

**Tiffany N. Szymarek, M.D.,** has joined the faculty of the Glaucoma, Cataract, and Anterior Segment Disease Service. She sees patients in the Ann Arbor and Brighton offices. Dr. Szymarek earned her M.D. from the University of Michigan in 2006 and completed her residency at the University of Florida in 2010. She then returned to Michigan in 2011 to complete a fellowship in glaucoma and cataract.
We’ve Got Accessibility
There’s more than meets the eye at Kellogg’s new website

The first thing you will notice about the Kellogg Eye Center’s new website is its fresh design and clearer means of navigation. But the beauty isn’t only skin deep. The coding below the surface makes the website accessible to users who are blind or have impaired vision, but also to users who suffer from other disabilities.

Click on the accessibility statement at the bottom of every page to learn about the many new features. Among them:
• A structure that facilitates the use of screen readers—like JAWS—to read web content.
• A “skip navigation” system that goes directly to the main content on a page.
• Ability to increase font size.
• “Breadcrumb” navigation that allows users to keep track of their locations within the website.
• Ability to navigate without having to depend on a mouse.

View the new website to learn more about eye care and eye disease—and about the clinical and research faculty who are dedicated to saving your sight. Visit us at www.kellogg.umich.edu

Save the Date
Fall Reunion Weekend
September 22–24, 2011

Join us for an engaging program on best clinical practices in ophthalmology and a lively reunion with your colleagues.

Alumni and Kellogg faculty will present challenging cases, new approaches to surgery, promising research, and more. We’ll also have tours of the new Residency Education Center and other areas at the Eye Center. Our featured alumni speakers are:

Brian P. Brooks, M.D., Ph.D., R’01, F’02, will give the Distinguished Alumnus Lecture, “The Genetics of Uveal Coloboma.” He is Chief of Pediatric, Developmental, and Genetic Eye Disease at the National Eye Institute and National Human Genome Research Institute.

Richard A. Garfinkel, M.D., R’87, will give the Alumni Achievement Lecture, “Keeping It Interesting: A Guide to a Fulfilling Professional Career.” Dr. Garfinkel practices with the Retina Group of Washington, Chevy Chase, Maryland.

Register by mail, online, or contact Gayle Dickerson at 734.647.7382 or gayled@umich.edu.
Ida Iacobucci, Kellogg’s respected and beloved orthoptist, received a Lifetime Achievement Award at the annual meeting of the Midwest Regional American Association of Certified Orthoptists (AACO) in recognition of her contributions to the profession for over 54 years. The award was presented by Kellogg’s Bruce Furr, who currently serves as president of the AACO. Miss Ida, as she is known at the Eye Center, has established a clinic that bears her name, has contributed to the care of countless patients with strabismus and other eye muscle disorders, and has trained hundreds of residents.