The Michigan Difference in Vision
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Dear Friends,

The year has been marked by rapid progress on the Kellogg Eye Center Expansion, many new faculty initiatives and research advances, and, as always, exceptional generosity on the part of those who support the Eye Center.

In this report, we have the opportunity to highlight the Cornea Service and its contributions to the Department over many years. Among the foremost contributors is Alan Sugar, M.D., nationally known for his leadership in that subspecialty. He is an expert on a complement of corneal disorders and surgeries, including corneal transplantation. He has served for many years as a medical director of the Michigan Eye-Banks, and is principal investigator for the Department’s arm of the Cornea Donor Study, a multi-center study sponsored by the National Eye Institute. Along with others of us, Dr. Sugar was in on early stages of discovery when the Department realized that an industrial laser, the femtosecond laser, could be used for eye surgery. That research resulted in the commercialization of a new laser for refractive surgery. Now Dr. Sugar and colleagues are investigating that laser’s use for corneal transplantation. Dr. Shahzad Mian leads a pilot study that investigates the femtosecond laser in cutting corneal tissue for the surgery, and he reports early positive outcomes.

The Department continues its strong, long-standing reputation for research on retina function and disease. Such research has profound implications for understanding diseases that affect the vision of so many older individuals. As part of a new program initiated by the Foundation Fighting Blindness, several Kellogg scientists and clinicians are collaborating with colleagues from other institutions to create new treatments for retinitis pigmentosa, a disease that results in progressive loss of vision. The collaborative nature of the study is an example of research models now in favor among federal funding agencies.

Pediatric ophthalmology at Kellogg has also grown at a record pace over the past several years. Far ahead of its peers, the Department announced in 1985 the nation’s first endowed pediatric ophthalmology chair, held then and now by Dr. Monte Del Monte. Since then we’ve added faculty and many more patients and today our children’s clinics are filled nearly to capacity. When the Eye Center Expansion opens in 2010 we will have a new spacious clinic, thanks to the Carls Foundation. Read about that organization’s generous support in this report.

The recurring theme of growth, of course, is what has created the need for a new facility. And so this year, we celebrate the progress made toward the completion of the Eye Center expansion. In late fall we gathered to celebrate the completion of the steel structure and the traditional Topping Out ceremony. Before long the structure was completely enclosed. Now, as the clinics take shape inside and brick and glass appear outside, the new building is beginning to resemble the models and renderings we have viewed for the past couple of years. Each phase of construction brings us nearer to the day when we can realize our goal of having one of the finest, most advanced Eye Centers in the nation.

So many individuals and organizations have supported our goals. Our new Fralick Society was formed to recognize annual partners in giving. And organizations like the Towsley Foundation are helping us build and name key components of the building.

Take a minute, also, to run through the honor rolls in this report. We recognize and thank our supporters—friends, alumni, faculty and staff—who are committed to the growth of the Eye Center and believe in the power of its research programs to find new treatments for people with blinding eye disease.

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
In 1985 the W.K. Kellogg Eye Center opened. This ultra-modern eight-story building allowed us to expand our research and education efforts and our ability to care for patients needing advanced eye care. The new building also allowed us to bring our vision research scientists to a facility where they could easily exchange ideas with clinicians, nurturing the concepts of collaborative and translational research. That same year, 1985, the Eye Center employed 90 faculty and staff. If you follow the expanding circles on the charts below, you’ll see that we grew—in patient visits and in staff and faculty to serve them—beyond our greatest expectations.

In the late 1990s, Chair Paul R. Lichter, M.D., realized that we would outgrow this still seemingly brand new eye care facility. He commissioned a study and by 2005, the Regents of the University of Michigan had approved plans for expansion. When the U-M Kellogg Eye Center expansion opens in 2010, we expect that year’s tally of patient visits will approach 140,000. At the same time, the numbers of faculty and staff will increase to accommodate our patients and the urgent need to accelerate research efforts toward a cure for eye disease.
Growth in research spurred the expansion of the Kellogg Eye Center. While our new building will enable us to accelerate efforts toward more effective treatments and cures for eye disease, it will also provide space for the growing number of individuals seeking eye care. Patients, faculty, staff, alumni, and the community have generously supported the building campaign. Reaching our fundraising goals will ensure we can make the most of this unique moment in our history.
Through collaboration and individual effort, our scientists are achieving new insights into eye disease and treatment strategies. Their goal is to bring the best new therapies—and hope—to our patients and their families.
FEMTOSECOND LASER COULD CHANGE CORNEAL TRANSPLANT SURGERY

Early results show laser—developed at U-M for eye surgeries—improving corneal transplant outcomes

Nearly 15 years ago, researchers at Kellogg were first to discover that the ultrafast or femtosecond laser, then used for industrial purposes, had great potential for eye surgeries that traditionally required a surgical blade. Faculty from Kellogg and the College of Engineering explored the laser’s surgical applications, and today it is used worldwide for LASIK surgery.

Now, faculty hope for the same success in applying this exceptionally fast and precise laser to corneal transplant surgery.

Physician–scientists at Kellogg are conducting a two-year pilot program—called the FLAK (Femtosecond Laser-Assisted Keratoplasty) study—which uses the femtosecond laser to perform full thickness corneal transplants.

“We hope that with the use of the femtosecond laser, patients will have better vision, faster recovery of vision, and stronger wound construction that will provide more resistance to injury in the future,” says Shahzad I. Mian, M.D., assistant professor and Principal Investigator of the FLAK study.

While lasers have been effective in eye surgeries for decades, they were not used for corneal transplants until the femtosecond laser was shown to be a superior cutting tool to the trephine, the cookie cutter-like knife currently used for transplants. “The advantage of this laser is that it allows the surgeon to focus the laser energy at a particular depth and then rapidly cut the tissue at that depth without causing any injury to the surrounding tissue,” says Dr. Mian. “It also allows the surgeon to pattern these cuts into shapes—such as a mushroom, a top hat or a zig zag—that allow for customized overlap between the donor’s corneal tissue and the patient’s corneal tissue.”

Because of the speed and precision of the femtosecond laser, the study results to date for corneal transplant surgery have been very encouraging, according to Dr. Mian. If these results hold true, a larger, multicenter clinical trial comparing this procedure to the traditional method could follow.

The cornea is the clear, dome-shaped tissue covering the front of the eye. It is about the size of a dime and the thickness of a credit card. If the cornea becomes distorted in shape, or scarred or hazy from disease or injury, the light rays passing through it are distorted and vision is reduced. In some cases, corneal transplant surgery is necessary to replace the damaged cornea with a healthy donor cornea to restore good vision.

Ophthalmologists perform more than 35,000 of these sight-saving procedures each year in the United States and, of all transplant surgeries done today, corneal transplants are the most common and most successful. Donor corneas are provided by eye banks and come from deceased individuals who arranged for donation prior to death or whose families gave consent.

"We hope that with the use of the femtosecond laser, patients will have better vision, faster recovery of vision, and stronger wound construction ..."
— Shahzad I. Mian, M.D.

Corneal transplant patient, Gary Abud, with clinic coordinator, Satavisha Dutta.
For years, U-M Kellogg Eye Center faculty have played a significant role in corneal transplantation. Kellogg ophthalmologists helped to establish the Michigan Eye-Bank in 1957, which resided in the Kellogg Eye Center until 2006. Faculty members have long collaborated with the Eye-Bank on research. In one recent example, Alan Sugar, M.D., cornea surgeon and professor of ophthalmology, led the Kellogg arm of a national study on cornea donor tissue.

The study, sponsored by the National Eye Institute with tissue provided by the Midwest Eye-Banks, found strong support for raising the age limit for donors. A key finding of the study: the pool of corneal transplant donors — often limited to those 65 years of age and younger — should be expanded to include donors up to 75 years of age.

According to the Cornea Donor Study, the success rate was the same whether the transplants were performed with corneas from donors ages 12 to 65 years or from donors ages 66 to 75.

“This study indicates that corneas from older individuals are just as successful for corneal transplantation as those from younger donors,” said Dr. Sugar. He observes that in addition to expanding the pool of cornea donors, the study will help surgeons learn more about the procedure itself. “The study team is analyzing additional data that will help us understand more fully the factors involved in a successful cornea transplant,” he said. The Cornea Donor Study will continue for another five years, allowing more time to follow patients and interpret data.

At the same time, cornea specialist Roni M. Shtein, M.D., is looking at another important aspect of corneal transplantation. One of the biggest concerns for patient and physician is that the new tissue will be rejected. In her study, Dr. Shtein will identify the characteristics of a patient’s cornea that could predict rejection of the new tissue. Specifically she will examine patterns of corneal neovascularization — the growth of blood vessels in the cornea — which is normally clear. In the first phase of the study she will determine the best way to measure these patterns. In the next and larger portion of the study, Dr. Shtein will develop ways to analyze characteristics of corneal neovascularization that can predict rejection or failure of the transplant.

“This study is very specific in that it will allow us to identify high risk blood vessels,” says Dr. Shtein. “There is a great deal of interest now in medications used to treat excessive blood vessels in retinal diseases like diabetic retinopathy and wet macular degeneration. Perhaps these drugs, with some modification, could one day help reduce the risk of corneal transplant rejection,” she adds.

“Kelogg’s historical role in corneal transplantation
Expanding the donor pool, improving success of transplants

Dr. Sugar led a team that studied age of cornea donors.

Dr. Shtein searches for ways to predict whether a cornea will be rejected after a transplant.

“This study indicates that corneas from older individuals are just as successful for corneal transplantation as those from younger donors.”
— Alan Sugar, M.D.
SCREENING FOR DIABETES WITH RETINAL IMAGING
“Snapshots” of the eyes may give early warning of diabetes and related eye disease

A new vision screening device could give physicians and patients a head start on treating diabetes and its vision complications. The instrument, invented by two Kellogg scientists, captures images of the eye that show metabolic stress and the tissue damage that occur before the first symptoms of disease are evident. The camera-like instrument can detect this damage earlier than any current clinical method.

For people with diabetes—diagnosed or not—the new device could offer potentially significant advantages over blood glucose testing, the “gold standard” for diabetes detection. It is non-invasive and takes about five minutes to scan both eyes. Used as a first-line screening test, the device would indicate whether a patient should proceed with additional testing.

In the July issue of Archives of Ophthalmology, Victor M. Elner, M.D., Ph.D., and Howard R. Petty, Ph.D., report on the potential of the new instrument to screen for diabetes.

“Technology that can detect the earliest signs of diabetes gives us a new way to tackle a growing public health concern,” says Dr. Elner. “Early detection and treatment are critical in controlling the disease and its many complications.” He points out that 24 million Americans have diabetes and an additional 57 million have abnormal blood sugar levels that qualify as pre-diabetes. Some of these individuals will develop diabetic retinopathy, an eye disease that affects 4.1 million people and can cause blindness.

The instrument can detect metabolic stress, and therefore disease, by measuring the intensity of cellular fluorescence in retinal tissue. This is the second study in which Drs. Petty and Elner reported that high levels of flavoprotein autofluorescence (FA) are reliable indicators of eye disease.

Dr. Petty, a biophysicist and imaging expert, explains that hyperglycemia—or high blood sugar—is known to induce cell death in diabetic tissue soon after the onset of disease but before symptoms can be detected clinically. “Increased FA activity is the earliest indicator that cell death has occurred and tissue is beginning to break down,” says Dr. Petty.

People with diabetes might take better care of themselves once they receive results from this kind of testing, suggests Dr. Petty. “A patient who understands that body tissue is being destroyed may be newly motivated to step up efforts to manage the disease,” he says.

In the study, Drs. Elner and Petty measured FA levels of 21 individuals with diabetes and compared the results to age-matched healthy controls. The Kellogg scientists found that FA activity was significantly higher for those with diabetes, regardless of severity, compared to those who did not have the disease. Similarly, individuals with diabetic retinopathy had much higher FA activity compared to diabetic patients without any visible eye disease.

The study also suggests that FA levels can be used to monitor the severity of the disease and the ability of treatments to stem tissue damage.

Dr. Elner is a Research to Prevent Blindness Senior Scientific Investigator. The researchers have formed a company, OcuSciences, Inc., to commercialize the metabolic imaging instrument.
TRENDS IN HEALTH CARE Emerge from Claims Data

One troubling finding: many with glaucoma are not receiving treatment

It appears that many older adults are not getting the treatment they need for a common form of glaucoma, according to a recent study. And perhaps more troubling, the data suggest that both nonwhite and low-income individuals are less likely to receive treatment.

For glaucoma specialist and author of the study Joshua D. Stein, M.D., M.S., these numbers are disturbing. Prompt and sustained treatment is essential for preventing loss of vision from glaucoma, a group of eye diseases causing damage to the optic nerve. Once damage occurs, vision loss cannot be restored.

The findings come from an analysis of a database with information on services provided to Medicare beneficiaries over a ten-year period, from 1992 to 2002. Dr. Stein and his colleagues identified 6400 individuals, all 65 years of age or older, who had received a diagnosis of primary open-angle glaucoma (POAG). The most common form of glaucoma, POAG can silently and progressively destroy vision before symptoms are noticed.

The study is one of several of Dr. Stein’s research projects in which he analyzes data from large health care databases to flesh out patterns of health care. For example, by studying large groups he can determine how frequently people use medical services, which medications are prescribed for them, which tests have been ordered, and other factors important in shaping health policy. “There’s a wealth of information available in these data sets,” he explains. “We just need to tap into the data, make sense of the patterns, and, ultimately, use the information to improve care for our patients.”

Dr. Stein crunched the numbers in a national database to learn more about glaucoma treatment.

The current study, published in *Ophthalmology*, reported that nearly 30 percent of patients with glaucoma received neither medical nor surgical treatment. Dr. Stein further observed that those with Medicaid, a program for needy and low-income individuals, were 43 percent less likely to receive care for glaucoma. Another troubling statistic, he added, is that Hispanics, Asians and patients from other minority groups were all less likely than non-Hispanic whites to receive treatment.

Now, says Dr. Stein, we need further studies to explain why these individuals aren’t receiving proper medical care. “Is access to health care the biggest problem, or is cost the obstacle? Perhaps there are barriers to communication,” he says. The answers to these questions could help more people with glaucoma get the care they need.

The study also examined which glaucoma drugs are most frequently prescribed. And Dr. Stein says there is always debate about new and preferred treatments. But, he adds, “As important as it is to look for new glaucoma therapies, if we could just concentrate on getting people to take advantage of the treatments we already have, we would save a lot of vision.”
CONSORTIUM SEeks
ANSWERS ON RP

Is there more than one way to rescue a photoreceptor?

Scientists and physicians from three universities are teaming up to develop therapies for an inherited retinal degenerative eye disease. Funded by the Foundation Fighting Blindness (FFB), the project brings together the best minds from various disciplines and perspectives to collaborate on treatments for X-linked retinitis pigmentosa (XLRP). A patient with XLRP has generously underwritten the research. Together the team will explore a variety of therapeutic approaches, all intended to replace or rescue dying photoreceptors.

Of the seven team members, five are from the U-M Kellogg Eye Center. Collaboration is becoming an increasingly favored approach in research, says Debra A. Thompson, Ph.D., who will direct one section of the study. She points to recent results of a small study in which patients regained some vision after receiving gene therapy for a degenerative eye disease. “With this stunning success for patients with the RPE65 mutation, we now have evidence that similar approaches could work for a larger group of patients whose vision is compromised by other genetic mutations.”

Retinitis pigmentosa is a group of diseases that cause slow but progressive loss of vision usually over decades. The designation “X-linked” means that the mutation responsible for the disease is carried on the X chromosome. Simply stated, this disorder results in the loss of photoreceptors, the rods and cones responsible for vision. Scientists who make up the FFB Consortium will explore different strategies for restoring the function of photoreceptors and preventing their loss.

The project initially centers on a mouse model of XLRP identified by Kellogg’s John R. Heckenlively, M.D., in collaboration with the Jackson Laboratory. The model, known as rd9, has the same gene and type of mutations as seen in humans with XLRP.

Using this mouse model, Hemant Khanna, Ph.D., and David N. Zacks, M.D., Ph.D., will explore whether cell-replacement therapy is an effective strategy for restoring lost vision. They will transplant healthy photoreceptor rods into the retinas of the diseased mice, with the goal of achieving at least partial recovery of the rods’ ability to function. This builds on the work of Anand Swaroop, Ph.D., now a senior scientist at the National Eye Institute, whose work at Kellogg led to successful transplantation of rod precursor cells into blind mice in 2006. Dr. Swaroop, whose lab identified a key mutation in the RPGR gene, was the driving force behind the creation of the Consortium.

Taking another tack, researchers at the University of Pennsylvania and the University of Florida will seek to repair photoreceptor damage by delivering therapeutic or “healthy” forms of the RPGR gene into the retina. They will investigate strategies using modified viruses that act as vectors to carry a replacement copy of the affected gene. The replacement genetic material was constructed at Kellogg by Dr. Khanna’s laboratory.

While gene delivery using viral vectors has been successful in treating certain degenerative eye diseases, Kellogg’s Dr. Thompson observes that there are still lingering concerns about the safety of the approach. She is exploring alternate methods, involving the delivery into the eye of small molecules expected to rescue failing photoreceptor physiology affected by the RPGR mutation.

Dr. Heckenlively, who sees patients with a range of inherited retinal diseases, and whose project found over 100 mouse models of human eye disease, will evaluate the effectiveness of each approach. Dr. Heckenlively will review fundus photographs and ERG recordings to see how close each approach has come to the collective goal of rescuing photoreceptors.
Investing in Education

By expanding our educational and training programs, we attract the best and brightest residents, clinical fellows, and postdoctoral research fellows. They go on to careers in ophthalmology and vision science, serving as leaders here and around the world.

Christine C. Nelson, M.D. and Raymond Cho, M.D.
KELLOGG FELLOW IS BATTLE TESTED

Physician who served in Iraq comes to Kellogg to hone his ophthalmic plastic surgery skills

Lieutenant Colonel Raymond Cho, M.D. served in Iraq from November 2005 through April 2006. During that time, more than 90 percent of Dr. Cho’s patients were trauma victims—soldiers and civilians with ruptured eyes, facial fractures, and soft tissue trauma. After an intense time repairing eye damage caused by roadside bombs and improvised explosive devices, Dr. Cho came to Kellogg in 2007 to advance his clinical and surgical skills. He is now Kellogg’s fellow on the Eye Plastic, Orbital and Facial Cosmetic Surgery Service.

Kellogg’s fellowship programs, among the best in the nation, allow physicians to train in a clinical program known for depth and excellence in each subspecialty. During the two-year oculoplastics program, fellows gain extensive experience in diagnosis, surgical management, pre- and postoperative care and management of patients with eye plastic and orbital disorders and diseases.

“This fellowship at Kellogg has been a perfect fit for me,” says Dr. Cho. “I am particularly grateful for the time and effort which all of the faculty continually invest in my development as an oculoplastic surgeon. It has been an excellent program which will undoubtedly prepare me for the cases I will see in the future.” That training has included unusual and complex cases referred to Kellogg from far and wide.

Dr. Cho’s mentors and colleagues at Kellogg are quick to praise him. “He is a compassionate physician, superb surgeon and has a humanitarian outlook,” says Christine C. Nelson, M.D., associate professor. “He is an inspiration to us all. His calm demeanor is refreshing, he is a pleasure to work with, and he is a wonderful teacher and mentor to the residents.”

Before coming to Kellogg, Dr. Cho chose to follow the path of his father and brother and enrolled in the United States Military Academy at West Point for his undergraduate degree. The Ohio native went on to the University of Cincinnati for medical school and completed his surgical internship at Brooke Army Medical Center in San Antonio. He then spent three years in the 82nd Airborne Division at Fort Bragg, North Carolina.

He returned to Brooke for his residency, after which he was assigned first to Fort Knox, Kentucky, and later to West Point. As the only ophthalmologist at these military bases, Dr. Cho handled a variety of cases. “Working as the lone ophthalmologist taught me valuable organizational skills and helped me build a strong base in ophthalmology before moving on to a subspecialty,” says Dr. Cho.

When the military introduced its Warfighter Refractive Eye Surgery Program in 2001, Dr. Cho’s ophthalmology repertoire expanded. He started a laser surgery program both at Fort Knox and at West Point.

Once Dr. Cho completes his fellowship at Kellogg in 2009, he will go to one of the Army’s academic medical centers to train residents and handle the oculoplastics needs of the Army, including reconstructive eye surgeries for soldiers returning from combat.

West Point graduate, Dr. Raymond Cho, served in Iraq before joining Kellogg for his two-year ophthalmic plastics fellowship.
Looking back at their residency training, most ophthalmologists remember, somewhat fondly, the “fluorescein conference” as an effective way to learn about retinal diseases. At professional meetings, retina specialists have found the same kind of forum to be among the most popular and thought-provoking. Physicians present interesting cases of retinal disease and then engage in animated discussions on possible diagnoses and treatments.

David N. Zacks, M.D., Ph.D., a retina specialist at the Kellogg Eye Center, is creating the same spirit on a new web site—RetinaDx—with nearly 140 retina cases accompanied by spectacular images. For each case there is a brief history and presentation of findings, followed by retina photographs and diagnostic images and studies. In addition to the diagnosis and the differential diagnosis, key teaching points—that is, “take home” messages that can be applied when the physician encounters patients with similar symptoms—are included. Each case also has a section where users can post their comments.

Dr. Zacks’ original intent was to create an educational site for medical students, residents and retina fellows. He believed that a comprehensive review of retina cases would be especially helpful during their training or when studying for Boards.

But as the site evolved he envisioned yet another use—a forum where specialists could share insights and problem cases. “So often physicians see a rare, isolated case and would benefit by talking with others who have encountered the same,” he says. “Now they can submit the one-of-a-kind case and invite comments from their peers.”

An additional unforeseen benefit is the ease with which physicians will be able to collaborate on publications. As clusters of cases on rare conditions appear on RetinaDx, the contributing doctors could seek out each other and collaborate on case reports for ophthalmology journals.

The site has grown since fall 2005 when Dr. Zacks first asked residents to submit cases during their rotation in Kellogg’s Retina Clinic. As favorable feedback came in, Dr. Zacks sought ways to make the site bigger and better. He reached out to his colleagues in other ophthalmology departments and has gathered an impressive Advisory Board. With feedback from the Board and users of the site, he expects RetinaDx to generate discussion and serve as a central gathering place for the retina community.

Students, trainees and ophthalmologists are encouraged to view the site and to join in the discussion by offering feedback and posting comments on cases at www.kellogg.umich.edu/retinadx.

“So often physicians see a rare, isolated case and would benefit by talking with others who have encountered the same.”

— DAVID N. ZACKS, M.D., PH.D.
Kellogg expansion leads to dedicated, high-tech space for residents

With a goal of providing the best possible education to future ophthalmologists, the Department’s residency training program is designing a new 2,000-square-foot center that will feature state-of-the-art educational and communications technology as well as spaces to learn and interact with colleagues.

“This project will create a cohesive, comprehensive space for resident education, and that’s important,” says Residency Director Shahzad I. Mian, M.D. “We have one of the top residency programs in the country, and enhancing our teaching environment will help us build on that. We are bringing together resources and technology that will enable residents to get the most out of their training here.”

The Resident Education Center, which will be housed on the sixth floor of the current Kellogg Eye Center tower, will include:

- A large conference room equipped with a variety of communication technologies and flexible furnishings that will accommodate conference table, classroom, or lecture-style seating
- A surgical skills laboratory and surgery simulator
- A pathology teaching laboratory
- Laboratory space for research and educational training
- A residents lounge and work area
- Close proximity to Kellogg’s John W. Henderson Library and to the residency program’s administrative offices

“The teaching part of this center, including the surgical skills laboratory and surgery simulator, will be very helpful during all aspects of a resident’s training,” says Sunir J. Garg, M.D., who completed his training at Kellogg in 2002 and now serves on the Department’s Alumni Advisory Board. He is an assistant professor of ophthalmology at Wills Eye Hospital in Philadelphia.

“Faculty members always appreciate when residents invest time in their own surgical development and research efforts.”

The new center also includes a comfortable space for independent study or small group meetings as well as space for rest during on-call duty. The residents lounge will have a direct video link to Kellogg’s operating rooms, so residents can view surgeries at any time, without having to add traffic to the operating room environment.

“Part of the experience of a residency is making friends with your classmates, many of whom you will see at meetings for the next 35 years,” Dr. Garg says.

“Having a place to congregate as a group, both to trade notes on diagnostic and surgical techniques, and to have a chance to relax, makes training that much more memorable.”

“We have one of the top residency programs in the country, and enhancing our teaching environment will help us build on that.”

— Shahzad I. Mian, M.D.

Newly designed space for residents and fellows can be adapted for a variety of learning experiences and will include state-of-the-art instructional laboratories.
Alums Care for Children Worldwide

Residents and fellows who train at the Kellogg Eye Center see a wide range of challenging pediatric cases. The experience enables them to gain the skills they need to treat childhood eye diseases in rural and urban areas in the United States and around the world. Those profiled here offer a snapshot of that impact.

Jennifer Simpson, M.D.
Associate Professor
Chief of Pediatric Ophthalmology and Adult Strabismus, and Residency Director
University of California Irvine Eye Institute
Completed fellowship in 1999

Restoring or preserving vision in children has an impact that lasts a lifetime for patients, and that’s extremely rewarding, says Dr. Simpson. As residency director at the University of California Irvine Eye Institute, she is training others to make that kind of difference as well.

Dr. Simpson credits Kellogg with helping her build a strong residency program in her growing department. “Learning in an environment with such high standards for patient care, education, and teaching provided me with a template from which to build my own academic practice,” she says. In addition to her teaching and clinical duties, Dr. Simpson’s research involves the evaluation of novel therapeutics for cystinosis, a rare disease affecting children’s vision.

Michael A. Pachtman, M.D.
Arizona Pediatric Eye Specialists
Mesa, Arizona
Completed residency in 1982

Dr. Pachtman’s drive to do his best for patients has its roots in Ann Arbor, he says. “We were encouraged to constantly strive to provide the highest level of care in a compassionate and professional manner.” Today the managing partner of a 9-physician group practice that specializes in pediatric ophthalmology and adult strabismus, Dr. Pachtman is proud that his practice makes subspecialty pediatric ophthalmic care easily accessible to children in Arizona, regardless of their socioeconomic or immigration status.

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Dr. Simpson credits Kellogg with helping her build a strong residency program in her growing department. “Learning in an environment with such high standards for patient care, education, and teaching provided me with a template from which to build my own academic practice,” she says. In addition to her teaching and clinical duties, Dr. Simpson’s research involves the evaluation of novel therapeutics for cystinosis, a rare disease affecting children’s vision.
It was during a rotation in Kellogg's pediatric ophthalmology clinic that Dr. Lee realized that working with children would keep her smiling—even routine tasks were fun. “It was a kick to examine kids and be entertaining at the same time,” she says. “I enjoy children because interaction with them is unscripted and they are often delightfully funny.” With only three pediatric ophthalmologists in Idaho, Dr. Lee provides a wide breadth of services so that her young patients don’t have to travel too often for care. She also serves on the executive committee for the National Eye Institute’s Pediatric Eye Disease Investigator Group and has taken on leadership positions in professional organizations.

Dr. Estes is one of three pediatric ophthalmologists at Vanderbilt Eye Institute. He has won four resident teaching awards in the last nine years. Because he trains others, he is able to pass on the commitment to excellence that is emphasized at the University of Michigan, multiplying our reach many times over. “My residency experience at the University of Michigan is the foundation on which my career has been based, intellectually, technically, philosophically, and ethically,” he says.

Coming from Singapore to Michigan to complete a fellowship at the Kellogg Eye Center wasn’t easy for Dr. Leo because of paperwork and family ties. But the clinical and surgical experience she gained made the effort more than worthwhile, she says. In Singapore, she leads a pediatric ophthalmology and strabismus service for the National Healthcare Group, a public health care entity that serves 3 million people. “I enjoy helping patients, especially the very young ones, who really depend on the doctor’s clinical acumen to diagnose and treat them,” she says. Dr. Leo also holds an academic position at the National University of Singapore.
Our patients have come to expect exceptional care and access to the newest and best treatments for eye disease. At Kellogg they will find doctors who are leaders in their subspecialties and who also have time to offer a smile and words of encouragement.
GETTING IT STRAIGHTENED OUT

Pediatric ophthalmologist improves the vision of Kellogg’s youngest patients

No parents want to hear that their child needs surgery. However, when a child has strabismus—a visual disorder in which the eyes are misaligned and point in different directions—sometimes surgery is the only treatment that works. Such was the case for Derek and Rebecca Najarian and their 21-month-old daughter, Olivia, from Pinckney, Michigan.

“It was the first surgery on our first child and we were scared,” says Mrs. Najarian. “But Dr. Levin treated us well every step of the way. She answered every question and explained each step of the process. We grew more and more comfortable, and, in the end, she really put our minds at ease.”

Erika M. Levin, M.D., a pediatric ophthalmologist at Kellogg, first saw Olivia in May 2003, when she was just 16 months old. Olivia’s pediatrician noticed the strabismus at her 15-month well-child visit and referred her to Dr. Levin in Kellogg’s Brighton office.

“When I first met Olivia, she was crying,” says Dr. Levin. “I wasn’t sure if she was nervous or scared, but we were able to work through the tears. I sang to her, worked quickly and we got the job done.”

Even though Olivia was too young to read an eye chart, Dr. Levin was able to examine her using finger puppets, mechanical toys and other equipment. Olivia had esotropia (inward turning of the eyes), amblyopia (a “lazy eye” or poorly-seeing eye) and some far-sightedness.

Dr. Levin first recommended glasses because they can sometimes help straighten the eyes in children with esotropia and farsightedness. This was not the case with Olivia. Dr. Levin also patched Olivia’s stronger eye to strengthen the vision in her weaker eye. Once her vision was equal and her misalignment was stable, Olivia was ready for surgery.

The goal in treating strabismus—a condition affecting 4 percent of children in the United States—is to straighten the eyes so they can be used together. With normal alignment, both eyes aim at the same spot. When one eye is out of alignment, two different images are sent to the brain. While adults would suffer from double vision, a child’s brain simply ignores the image from the misaligned eye. Correcting the misalignment early increases the chances of developing or regaining stereoscopic vision. If glasses aren’t effective, surgery—or a combination of glasses and surgery—is recommended.

In September 2003, when Olivia was 21 months old, she underwent successful strabismus surgery with Dr. Levin repositioning her inner eye muscles. She went home the same day, without any special bandages or patches, and returned to normal activities within a few days. Two months later, Olivia’s eyes were perfectly aligned. Her amblyopia hadn’t returned so she didn’t require further patching.

Now, at 6 years old, Olivia sees 20/30 in each eye without glasses and her eyes remain straight. She returns to Kellogg once a year for a follow-up appointment, a visit Dr. Levin eagerly awaits.

“One of the best things about being a pediatric ophthalmologist is seeing patients like Olivia grow and develop over the years,” says Dr. Levin. “It’s so rewarding to know that I’ve had a positive impact on my patients’ lives and on their families’ lives, too. I’m thrilled I can do that for them.”
THE ROAD TO INDEPENDENCE
Low Vision Clinic helps patients make the most of their limited vision

In 1992, Jeff Crawford came to the U-M Kellogg Eye Center’s Low Vision Clinic with one goal: he wanted to improve his vision so he could earn his driver’s license. He was tired of taking the bus or relying on family and friends to drive him where he needed to go. After working with low vision specialist Donna M. Wicker, O.D., Mr. Crawford achieved his goal and—at age 28—obtained his first license. He promptly bought a bright yellow Jeep Wrangler. “I figured that if I had any trouble seeing other drivers, at least they would be able to see me,” Mr. Crawford says, laughing.

Kellogg’s Low Vision Clinic helps patients with vision loss ranging from mild impairment to legal blindness. These people typically suffer from macular degeneration, diabetic retinopathy, glaucoma and retinitis pigmentosa. Mr. Crawford is typical of many patients with low vision—a term that denotes vision that is 20/70 or less with the best conventional glasses prescription.

Many come to their first appointment with specific goals, such as improving their ability to tackle tasks like meal preparation, reading, driving, writing checks and paying bills.

“When patients come to our clinic, we discuss specific tasks they would like to accomplish or the ones that give them trouble,” explains Dr. Wicker. “Our job then is to test their vision and optimize their remaining functional vision with the use of optical devices, electronic devices and training techniques.”

What patients need most are devices that can magnify the objects and material they encounter every day. Among these are high-power reading glasses, telescopes, and handheld and stand magnifiers. Other devices include special telephones and modified closed circuit televisions that enlarge reading material and project it onto a TV monitor. Non-optical devices include large-print items and talking clocks and watches.

It was the telescope that allowed Mr. Crawford to get that first driver’s license. Because he is legally blind due to congenital cataracts and aniridia (an absent or partially absent iris), he uses bioptic telescopes—minia-
RECONSTRUCTING THE ORBIT — AND A YOUNG BOY’S FUTURE
Oculoplastics service built on teamwork, tough cases

Taiwo Bilesanmi, now a teenager, lost his eye to cancer when he was just one year old and living in Nigeria. His family did not have access to a surgeon who could rebuild the child’s orbit, the bones and muscles that form the eye’s support. The proper supporting structure was essential if Taiwo were, one day, to have a new prosthetic eye created for him.

Reconstructive surgery can make a big difference in people’s lives, observes Kellogg oculoplastic surgeon Alon Kahana, M.D., Ph.D. At first, Taiwo was too young to care about the loss of his eye, according to his father. But as he grew older, he became sensitive to comments from his friends about his appearance. By the time Taiwo came to the Kellogg Eye Center for orbital reconstruction, the young boy was anxious, but ready for surgery that would allow him to have a new eye.

Dr. Kahana was aware the surgery would not be simple. Taiwo, whose family now lives in Detroit, had gone for some 12 years without an eye or prosthesis, and as a result, the orbit had become malformed. Much of the supporting tissue was lost, and the bony structure had grown inward, displacing a silicone implant from an earlier surgery and making it impossible to fit a prosthetic eye.

There was one more obstacle, this one concerned with safety. Before Dr. Kahana would consider surgery, he insisted that Taiwo begin to wear polycarbonate glasses. Like his Kellogg colleagues, Dr. Kahana tells his patients they must protect their “good” eye with shatter-resistant lenses.

Dr. Kahana then presented his plan: replace the earlier implant with tissue from Taiwo’s thigh to create the supporting structure. There are several techniques a surgeon can use to reshape the orbit, and many nuances in performing the surgery, says Dr. Kahana. “The ultimate goal is to have good reconstruction that is long lasting and allows for a good prosthetic fit,” he says. “Orbital reconstruction can be easy to do but hard to do well.”

Despite many doctor’s appointments and surgeries, Taiwo is very positive. His father offered strong encouragement, and Taiwo, now 15 years of age, says, “It was easy except for the surgery. It’s all OK now.”
ON THE ROAD AGAIN

Big Ten eye doctors go to Vietnam

In March, five-year-old Vee, who lives in a small village outside Da Nang, Vietnam, had surgery to correct a tendency for his eyes to turn inward and upward. Vee’s surgeon was pediatric ophthalmologist Monte A. Del Monte, M.D., who had come to Vietnam with ORBIS, an organization that brings a Flying Eye Hospital and ophthalmologists to countries where eye care and modern techniques are scarce.

There was added commotion, as cameras followed Vee and Dr. Del Monte to film a televised special featuring ophthalmologists from Big Ten universities teaching local ophthalmologists and providing surgical treatment in developing countries. Michigan was represented by Dr. Del Monte and alumnus Keith C. Carter, M.D., who completed his residency at Kellogg and today is chair of the University of Iowa’s Department of Ophthalmology.

By the end of the week, Dr. Del Monte had performed 15 surgeries on children and adults with strabismus, a condition in which the eyes are not properly aligned. His young patient Vee had a form of strabismus called esotropia with overacting inferior oblique muscles, causing inward turning or crossing and vertical upshooting of his eyes, the most common condition Dr. Del Monte saw during his stay in Da Nang.

At the heart of ORBIS is the goal of training local doctors, nurses, and other health workers in state-of-the-art ophthalmic diagnostic and surgical techniques. This is vital in a country like Vietnam where just 10 ophthalmologists are available per million people.

Dr. Del Monte. “But when we use this technique, we see kids opening their eyes and smiling immediately after surgery. They have less pain, and they can be outside playing the next day.”

Sure enough, when Dr. Del Monte visited Vee in his home after the surgery, the young boy was doing just fine, playing with a friend.

When not performing surgery, Dr. Del Monte lectured to ophthalmologists who had come from all over the country. Again stressing its educational mission, ORBIS asks volunteer physicians to bring several educational lectures when they travel.

Dr. Del Monte has participated in a number of international programs, but this one had special meaning for him. His son, Derek, who completed his medical training at Michigan and is now a first-year ophthalmology resident at Duke University, accompanied him on the trip. “The experience sold him on the excitement and rewards of international ophthalmology, and in a few years I expect to see him pursue the ORBIS program for third-year residents.”

“One of the greatest rewards is that the families are so grateful,” adds Dr. Del Monte. “You know how frightened the patients are before surgery, and then you see big smiles on their faces after they become aware of the results.” Dr. Del Monte was especially touched by a unique personal gift he received from several of his patients’ families: an intricately carved marble tray, dragon pitcher and matching cups, each engraved with the name of one of his surgical patients.

Dr. Del Monte will be featured in a televised special to air this fall. Check our web site for details.
“You know how frightened the patients are before surgery, and then you see big smiles on their faces after they become aware of the results.”

— Monte A. Del Monte, M.D.
Celebrating Philanthropy

By endowing professorships, providing support for expansion, and making annual gifts to research, individuals and foundations are helping the Kellogg Eye Center reach new levels of excellence.

Victor M. Elner, M.D., Ph.D.
ENDOWING A LEGACY
Ophthalmic pathologist Dr. Victor Elner honored as Ravitz Foundation establishes a professorship that recognizes a little-known specialty

When Detroit native Edward Ravitz began a Foundation to help improve the health of his fellow citizens, he decided to support efforts that sought good over glory, says Burton R. Shifman, president of the Ravitz Foundation.

Mr. Shifman and his fellow trustees followed that mission in establishing the Ravitz Foundation Professorship in Ophthalmology and Visual Sciences at the Kellogg Eye Center this year. Victor M. Elner, M.D., Ph.D., is the first to hold the professorship. His specialty of ophthalmic pathology is essential to treating and understanding eye disease, but it receives little notice. There are only ten ophthalmic pathologists in the U.S., working to identify the correct source of disease.

“In many ways, it’s a dying area of expertise, and I commend the Ravitz Foundation for recognizing its importance and working to ensure it continues to benefit patients,” Dr. Elner says.

As an ophthalmologist and a pathologist, Dr. Elner examines eye tissue to draw connections between the underlying disease process and the most effective approaches to diagnosis and treatment. He plays a central role in training new ophthalmologists. “His appointment as Ravitz Professor will benefit both our Department and the entire field of ophthalmology,” says Paul R. Lichter, chair of the U-M Department of Ophthalmology and Visual Sciences.

Dr. Elner has been on the Kellogg faculty since 1988. He received his medical degree, residency training, and fellowship training in pathology from the University of Chicago and completed additional fellowships in pathology and ophthalmic plastic and reconstructive surgery. His research has shown that inflammation is often a cause of eye disease or its complications, and he has described the chain of events that results in the destruction of cells leading to vision loss. He also collaborated with Kellogg scientist Howard R. Petty, Ph.D., in developing a state-of-the-art camera system that detects eye disease long before the first symptoms occur (see p. 7).

Dr. Elner’s clinical specialties include the evaluation and treatment of eyelid and orbital tumors, thyroid eye disease and disorders affecting the eyelid and tear ducts. He has published more than 150 articles on pathologic entities and advances in eye plastic surgery.

Mr. Ravitz, a businessman who oversaw the building of more than 25,000 single-family homes and apartments in Michigan and other states, would have appreciated the steady, groundbreaking progress Dr. Elner has made. From his hardworking immigrant parents, Mr. Ravitz learned ethics and responsibility. He became a decorated combat army officer in World War II, after which he overcame many obstacles in building a company that ultimately grew to 600 individuals. Though Mr. Ravitz passed away in 1999, his Foundation continues to pursue his vision of supporting medical research and initiatives that eliminate prejudice and further a sense of community and shared humanity.

At U-M, gifts from the Ravitz Foundation have established a professorship in the U-M Department of Pediatrics and Communicable Diseases and the Ravitz Foundation Phase 1 / Translational Research Center at the U-M Comprehensive Cancer Center. The Foundation has also supported C.S. Mott Children’s Hospital, the U-M Depression Center, the Medical School, the School of Public Health, the Dental School, the Department of Molecular and Integrative Physiology, and the Division of Kinesiology.
A NEW ERA OF PEDIATRIC EYE CARE

The Carls Foundation Pediatric Ophthalmology Clinic will have more space, resources to help children battle eye disease and trauma

Children with vision problems come from throughout Michigan and around the world to see pediatric ophthalmologists at the Kellogg Eye Center. Those physicians will be able to care for even more young patients when the addition, which will house the new Carls Foundation Pediatric Ophthalmology Clinic, opens in the spring of 2010.

“We are nearly doubling the space we devote to children’s eye care and to pediatric vision research and training programs,” says Monte A. Del Monte, M.D., Skillman Professor of Pediatric Ophthalmology and a Professor of Pediatrics and Communicable Diseases.

The Carls Foundation, based in Detroit, is proud to be a part of the effort. The Foundation has pledged $2 million to support the expansion and sees the mission of the pediatric ophthalmology clinic as very close to its own, says Executive Director Elizabeth A. Stieg. “One of our main goals is to help make children’s lives better, and we understand how important it is to correct a child’s vision problems as early as possible.”

The new 4,000-square-foot clinic will be on the first floor of the Kellogg addition and will include 10 examination rooms, each with the required 22-foot examination lane needed to accurately measure a child’s eye alignment. The clinic will also be equipped with advanced diagnostic technology as well as a special procedures room, a clinical trials and digital imaging room, and a multi-media patient education room where families can learn more about eye diseases.

The new space will enable Kellogg to recruit two additional academic pediatric ophthalmologists who will see patients and conduct research. Kellogg faculty members today study conditions such as childhood glaucoma, retinopathy of prematurity, intraocular lens placement in children, thyroid-associated eye disease and strabismus, and many other vision diseases that affect children.

Scientific breakthroughs were important to Detroit industrialist William Carls, who started the Foundation in 1961 with his wife, Marie Carls. They had lost a child in infancy and became interested in helping children receive the best possible medical care, Ms. Stieg says. Mr. Carls took an active role in directing the grants of the Foundation until his death in 1995.

“He was a wonderful man, and he enjoyed seeing what resources matched with expertise could accomplish in a community,” says Ms. Stieg. “He liked to see things happen.”

An engineer by training, Mr. Carls was particularly interested in building projects and technology, she says. The Carls Foundation today supports pediatric health facilities and programs throughout the state, as well as youth activity programs and the preservation of natural areas and historic buildings. At the University of Michigan, the Carls Foundation has also supported the Mott Children’s Hospital construction, a diagnostic and treatment program for children at risk for profound hearing loss, and research in the area of jaw-related birth defects.
THE EYE CENTER EXPANSION MAKES RAPID PROGRESS

New building will help us improve the lives of our patients and achieve new levels of excellence in research and education

On a blustery November day, friends, faculty, alumni, and staff gathered to celebrate another milestone in the Kellogg Eye Center expansion. The “Topping Out” ceremony marks completion of the major structural steel in a construction project, and the safety of the crew who worked on it. The traditional signing of the last beam took place during the morning and, later in the day, the Kellogg community gathered to watch and cheer as the beam was hoisted to the top of the building. Since that day work has continued with great speed.

As the internal structure of this adjoining building takes shape, we can begin to see just how much space we will gain. The 8-story building will provide 230,000 square feet of additional space, allowing each of Kellogg’s seven clinics to expand patient care, as well as offer patients larger and more comfortable waiting areas. The facility will also include new surgical suites, new and innovative research space, and a unique diabetes research center: the Delores S. and William K. Brehm Center for Type 1 Diabetes Research and Analysis.

This substantial increase in space means that we can recruit new faculty who, together with current faculty, will make the Department a formidable force in ophthalmology and the visual sciences. The educational benefits for our fellows, residents, and vision scientists will be immeasurable. The Eye Center will serve many more patients, and will be known as a destination for those seeking the most advanced care available. New research laboratories will accelerate progress toward treatments for debilitating eye disease.

“Our essential mission is clear,” says Department Chair Paul R. Lichter, M.D. “We will discover treatments and cures to improve the lives of our patients. With growth and new resources, and the dedicated support from friends, we can offer hope to patients and their families that cures for eye disease and blindness are just ahead.”
**Kellogg Eye Center Expansion Honor Roll**

We thank the following individuals for making gifts and multi-year pledges in support of the construction of the new Kellogg Eye Center building.

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A NEW IMAGE
Photography faculty and staff look forward to the creation of the Harry A. and Margaret D. Towsley Ophthalmic Imaging Center

With more than 70 years of combined experience in medical photography, the faculty and staff of the Harry A. and Margaret D. Towsley Ophthalmic Imaging Center are preparing to make the most of their new space when the addition to the Kellogg Eye Center opens in 2010.

The Harry A. and Margaret D. Towsley Foundation has agreed to make a $1.5 million grant to the Kellogg Eye Center expansion campaign and will name the ophthalmic imaging center. The gift builds on the Towsley family’s longtime support of vision care at the University of Michigan.

“It is a family tradition to be involved with the Kellogg Eye Center, but more importantly we are thrilled and excited about the work they are doing today,” says Margaret Ann Riecker, Chairperson of the Foundation and one of Harry and Margaret Towsley’s daughters.

The center will be completely digital, allowing photos to be a central part of Kellogg’s new electronic medical record. It will feature individual procedure rooms for patients and will be located on the second floor near the retina and glaucoma clinics, two specialties that use photography services the most.

“The new space will be better for patients because of its proximity to the clinics, and it will encourage more communication between physicians and our staff,” says ophthalmic photographer Linda Goings.

Ophthalmic photographers at Kellogg are involved in patient care as well as research. They use special equipment to take photos of the retina, cornea, and other parts of the interior of the eye as well as perform dye- and laser-based testing. Images of the eye are important to diagnosing and treating disease, as well as for research and teaching purposes. Kellogg photographers have also worked with Drs. Howard R. Petty and Victor M. Elner to develop a camera that can detect eye disease in its earliest stages.

“Our new space will be conducive to those kinds of projects, and we are looking forward to doing more research,” says Richard E. Hackel, Director of Ophthalmic Photography and assistant professor in the U-M School of Art.

Supporting medical progress is a priority of the Towsley Foundation. “The whole idea of good science and research is so important to health care, and the University of Michigan is certainly the place for that,” says Mrs. Riecker.

Both Harry and Margaret Towsley were graduates of U-M. Harry Towsley, M.D., served the U-M as professor of pediatrics and chairman of the post-graduate medicine department. The Towsley Foundation’s wide-ranging support at U-M has included leadership gifts toward the construction of the Charles R. Walgreen, Jr. Drama Center and the Athletic Department’s Stephen M. Ross Academic Center, as well as to the Harry A. and Margaret Towsley Policymaker in Residence program in the Gerald R. Ford School of Public Policy.
ANNUAL GIVING PROPELS VISION RESEARCH FORWARD

Fralick Society recognizes donors who partner with Kellogg

Discovering how the brain processes visual information, how zebrafish repair their own retinas, and what takes place when cells essential to sight begin dying—these are all areas of research that were supported by contributions to the Kellogg Eye Center’s annual funds this year.

The Annual Fund and the Alumni and Faculty Annual Fund are the cornerstones of the philanthropic giving that helps Kellogg fulfill its mission. As unrestricted research funds, they support the most innovative and promising studies, sustain strong research programs between grants, and provide extra resources to projects in key stages of discovery.

To recognize and celebrate annual gifts to research of $100 or more, Kellogg has created the F. Bruce Fralick Society. Named in honor of the Department’s fifth chair, the Society sponsors an annual luncheon where Chair Paul R. Lichter, M.D., and other faculty members share news of scientific advancements. The forum provides an opportunity for donors to interact with scientists and to meet one another. Members who support Kellogg’s programs at the Benefactor level ($1,000 or more) or above are also invited to special tours of our research laboratories. More than 600 individuals are members of the Fralick Society, including many alumni.

Fralick Professor Paul R. Lichter, M.D., Receives Top Ophthalmology Award

Paul R. Lichter, M.D., received the Lucien Howe Medal from the American Ophthalmological Society (AOS) for his distinguished service to ophthalmology. The Howe Medal, first awarded in 1922, is one of the highest honors in the field of ophthalmology.

Dr. Lichter is Chair and F. Bruce Fralick Professor of the U-M Department of Ophthalmology and Visual Sciences. He is also Director of the W.K. Kellogg Eye Center.

Recipients of the Howe Medal are “individuals who have made powerful marks on our ophthalmic heritage,” said Dennis J. Robertson, M.D., Professor Emeritus of Ophthalmology at the Mayo Medical School, who presented the award on behalf of the AOS. He cited Dr. Lichter’s service to professional organizations, his pivotal role in clinical studies involving patients with glaucoma, and his research on the genetics of glaucoma. “His leadership and tenacity helped spearhead a number of studies, including one that was uniquely dear to his heart, involving quality-of-life issues among glaucoma patients,” said Dr. Robertson.

Dr. Lichter’s leadership and vision have left their mark on every important ophthalmological organization, beginning with the American Academy of Ophthalmology (AAO), which he served as President during its centennial year. However, his influence on policies was also felt in other organizations where he was president, from the Association of University Professors of Ophthalmology to the Pan American Association of Ophthalmology.

Dr. Lichter was recognized for having authored over 200 publications and for giving numerous named lectures. He served as Editor-in-Chief of the AAO’s journal, Ophthalmology, and on editorial boards of several major journals. Dr. Robertson noted that Dr. Lichter wrote many “thought-provoking editorials” and was never afraid to take on a controversial issue.

Chairman F. Bruce Fralick, M.D., broadened the mission of the Department to include investigations into the basic science of sight.
Annual Honor Roll of Donors

With heartfelt thanks to donors who made gifts from July 1, 2007, to June 30, 2008. Included in this listing are contributors whose donations are part of multi-year pledges.

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Elmer and Sylvia Sramek Charitable Foundation

$50,000 to $99,999
Brian P. and Mary Lincoln Campbell
Gloria P. and William E. Dean, Jr.
Michael A. Wainstock, M.D.
Mary June Wilkinson

$10,000 to $49,999
Anonymous donor
Nancy Bender
Adena D. Butler
Jean E. Craig
Ann and Joseph W. Edwards
Rita Jane Edwards Estate
Robert and Cassandra Estes
Douglas P. and Shelley Felt
Elaine Frick
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National Glaucoma Research
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Mildred E. Swanson Foundation
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John R. Heckenlively
Pege Harvey-Matthews
Barry and Mary Ann Hoffman
Helen and Richard Kerr
James G. and Carolyn Knaggs
Michael Petersen and Elizabeth Binasio
Marina and Edwin C. Schilling, Jr.
Barbara and Anthony Stone
Alan and Gail Sugar

$1,000 to $4,999
James and Kathryn Adams
Ann Arbor Area Community Foundation
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Henry A. Boldt, Jr., M.D.
Thomas W. Breakey
Jason M. Burgett, M.D.
Keith D. and Cheryl D. Carter
Janet and Bill Cassebaum
Mark and Janet Cichowski
Mark and Judith Cohen
William and Carol Cutler
Monte A. and Kristen G. Del Monte
J. McGregor and Christine Dodds
Frances Dupont
Frederick E. Dupont, Jr.
Robert G. Fante, M.D.
Fight for Sight
Margaret E. Gallup
Larry and Mary Gerbens
E. Paul and Lillian Gieser
Joanne R. Gradowski
Robert and Teresa Grosserode
Kenneth Alan Haller
William P. Haney, M.D.
Robert O. and Carolyn S. Hoffman
Kathy and Jim Holmes
Bret and Laura Hughes

Couple Makes Research a Priority

Hope and empowerment are behind the enthusiasm with which Jim and Kathy Holmes support vision research. “Giving is a way for us to do something active to fight eye disease, and because such wonderful research is being done, we are able to hope for the future,” says Mrs. Holmes. She and her son have retinitis pigmentosa, an inherited disease that causes the degeneration of light-sensing rod and cone cells. While she has vision difficulties associated with the condition, she believes the progress being made will help her son.

Mrs. Holmes began coming to the Kellogg Eye Center in her mid-20’s. “Kellogg has been a blessing,” she says. Mr. and Mrs. Holmes make annual gifts to the laboratory of David N. Zacks, M.D., Ph.D., a clinician–scientist who studies the biological chain of events that results in the death of rod and cone cells.

“As Jim and I were able to make gifts, we decided to set priorities, and eye research was at the top of the list,” says Mrs. Holmes. “Vision is a gift. We would like to see more treatments and cures, and we want to do what we can toward that goal.”
Alum Is Proud to Support Growth

When Larry J. Gerbens, M.D., finished his ophthalmology residency at the University of Michigan in 1978, the program was well respected but small. To watch it evolve into one of the top residency programs in the country has been exciting, he says. “I’m very proud of what I have seen happen.”

The generosity of Dr. Gerbens and his wife, Mary, has helped support the Department’s growth over the years. They contributed to the initial building campaign for the Kellogg Eye Center in the early 1980s, and they made a gift to the current expansion effort. They also contribute to the Alumni Annual Fund for research, which Dr. Gerbens co-chaired this year, and they have included the Kellogg Eye Center in their estate plans. Dr. Gerbens is also a member of the Alumni Advisory Board.

“Philanthropy has always been very important to us,” he says. “There’s a real joy that comes from giving.”

Dr. Gerbens is grateful for his training, which enabled him to earn a good living and help so many of his patients, he says. He practiced general and pediatric ophthalmology for years in Grand Rapids before retiring this past spring.

“This institution gave me the chance to become an ophthalmologist, to enjoy the success that brings, and to develop a skill that I could use to help others,” he says. “It provided many opportunities for me and for my family.”
Donald F. Baty, Jr.
James C. Beachum
Roy W. Beck
Lois Bereza
Dr. and Mrs. W.G. Bergen
Rhoda L. and Roger M. Berkowitz
Thomas A. Bersani and Joan Christy
Mary Lee Beuerle
Mike Bishel and Clarita Guerrero-Bishel
Myrtle B. Bonem
Stephen Boorstein, M.D.
Nancy S. Boutell
Daniel L. Braden
Carl A. Brauer, Jr.
Betty Jean Brown
Jeremy and Barbara Brown
Margaret C. Brown
Wilbur and Carolyn Burkett
Irving F. Burton
Donald V. Calamia
Carola Caroselli
James W. Cavett
William and Marilyn Chandler
Anne M. Chase
Lillian V. Choate
Joan M. Christy
Hideki and Tomomi Chuman
Marilyn L. Citron
Shirley CoeBeck and David Beck
Donald L. Cole
Clare R. Coles
Carl and Maria Constant
Patrick J. Coppens
Ellen L. Coulthard
MargaretAnn Cross and
James Van Fleteren
Speers M. Crumrine
Lyubica Dabich
James E. Davies
William and Virginia Dawson
Delta Gamma Fraternity Ann Arbor
James R. Devine
Helen DeWolfe
Norma Diamond
Marlene and Paul Dodge
Donald A. Dodick
Richard and Patricia Donahue
Gregory and Dottie Dootz
Mr. and Mrs. Kenneth R. Dornbrook
Donna M. Duffy
Cathlynn Duncan and George Watson
Mrs. Lois A. Dyer
Ms. Alice Engibous
Bita Esmaeli-Gutstein, M.D.
Hal and Donna Estry
Blaine and Jean Evans
Barbara Fazio
Mrs. M. J. Feener
Bryn A. and Suzanne M. Fick
Carol and Paul Finch
Jerome and Polly Finkelstein
Dennis and Christine Fornal
Jacqueline A. Forrest
Stephen and Rosamund Forrest
Ralph N. Funk
Charles A. Gallup
Patricia M. Gardner
Sunir J. Garg, M.D.
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David and Sylvia Good
Anitra and Jesse Gordon
Star Guest
Besondy and Margaret Hagen
Jane Hakken
Charlotte Hanson
Hugh and Janet Harness
Laurelyne D. Harris
Michael and Carolyn Harris
Helen F. Hatch
Ruth Heyn, M.D.
Frederick J. Heyner
Milton and Geraldine Higgs
Carolyn and Larry Hiss
Richard and Jane Hiss
Charles F. Hoiata
Janet Woods Hoobler
John and Barbara Hoshaw
Hsin-Hong Huang
Christy Bole Hughes
Bernice E. Hyne
Illinois Tool Works Foundation
Johnson Controls Foundation
Mr. and Mrs. Kenneth B. Johnson
S. Preston and Betty B. Jones
George H. Jury
Daniel and Rose Kachnowski
Jill Taft Kaufman
Robert B. Kaufman, M.D.
Rosemary S. Kaye
Kellogg’s Corporate Citizenship Fund
Michael A. Kipp, M.D.
Robert and Toby Kleinberg
William L. and Betty G. Knapp
J. David Koter
Mrs. Harry Krashen
Tommy Kromer
Gerald and Dorothy Kurtz
Marie Lane
Louis and Gail LaRiche
Gloria A. Lehman
Jeanne M. Lerchen
Danute Leveckis and Timothy VanEvery
Bobbie and Myron Levine
Robertson A. Lewis
Susan L. Lichter
Kim Lindemuth and Matthew Bueche
Thomas J. Long
Dr. A. Leititia Loveless
Helen Price Luckham
Raymond W. Lumley
Angelo Maeso
Steven Manikas
Edna F. Manns
Terrence and Joyce McCool
Donna Rita McNally
Donald and Diane Meitz
Professor George E. Mendenhall
Carolyn E. Mesara
Robert and Margery Mesler
Herbert R. Metzger
Mary L. Meyer
William M. Michaluk
Helen Mitchell
Ms. Marlene M. Moleski
Sayoko Morii and Mike Fetters
Jock Morrison
Richard G. Mosteller
Dr. and Mrs. Joseph Mottillo
Dr. Patrick J. and
Mrs. Jacquelyn P. Mulrow
William J. Mundus
Dr. Dave and Jan Musch
Dr. Michel and Alice Nasif
Christine Nelson and Willis Lillard
Jonathan P. Niemczak
Edward Nishon
Kenneth E. Oettle
Charles I. Ojielo
Paul L. Olson
Gale and Yehuda Oren
John Orr
Mohammad and J. Elizabeth Othman
Karen L. Pacer
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Harriet Parsons and John Brundage
Carol M. Paul
Joseph F. Pavka
Gordon E. Peckham, Sr.
Sheryl and Douglas Podlewski
Carol J. Pollack-Rundle and Family
Rebecca and Eric Priebel
Donald and Debra Puro
Drs. Douglas J. and Leslie E. Quint
William M. Redfield
Mr. and Mrs. Walter F. Redmond
Robert and Alice Reisig
Charles S. Remenar
CELEBRATING PHILANTHROPY

Rita and Robert Reske
Thomas R. Riggs
Mr. and Mrs. Arthur C. Rocco
Horace and Yvonne Rodgers
Carl D. Roe
Lucille and Harold Roper
K.J. and P.J. Roper
Rose Metal Recycling
Beverly L. Rosenthal
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Jonathan A. Rowe, M.D., and Robin L. Rowe
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Loretta D. Sammet
Stephen and Kim Saxe
John and Dorothy Schaef er
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Larry and Barbara Scherer
Leonard T. Schmidt
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David and Elvera Shappirio
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Pauline Skinner
Slauson Middle School PTSO
E.H. Newel and Rosemary Smith
Jeanne F. Smith
Kenneth S. Smith
Sue-Ellen Smith
Becky and Doug Spaly
Walter and Nesta Spink
Mr. and Mrs. John Strand
Thomas and Jane Stratford
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Scott E. Szalay
F. Brian Talbott
John and Joan Tedford
Dewey Tennent
Edward and Karen Tenner
Roger C. Thibault
Karen and Michael Thomas
James B. Thompson
Edward Thornhill
A. Richard Tischler
Pat and John Tongus i
Margaret J. Tuomari
Nelly S. Ullman
Frank Veres
Claudia M. Wagner
David R. Wagner
A. Phyllis Wallace
Sidney Warschausky and Lorraine Nadelman

Joyce Muriel Weber
Lee S. Webster
Carol and Jack Weigel
Carolyn Jean Weigle
Dr. and Mrs. William W. Wells
Avis L. White
Dr. Patrick T. and Mary White
E. Suzanne and Keith Williams
Jean A. and Richard C. Wilson
Jeneane Wise
Ford L. Wright
Michael and Kathleen Yang
Dr. Wen-Jei Yang
Harry and Miriam Yukelson
Henry and Dorothy Zelisse
Jennifer Ziehm-Scott
Jeff and Kate Zink
Thomas and Delle ZurSchmiede

In Memory Of
The Kellogg Eye Center is honored to have received gifts in memory of the following individuals.

James Daniel Benore
Fred Church
Patrick Mathew Davis III
Fred E. Dupont
Jane G. Elliott
Sylvia Goode
Pailoon Jevaharian
Dr. Kemmick
Marjorie McDonald
Edward W. Meyer
Charles F. Moore, Sr.
Madeline Pellerin
Eileen Perault
Harold A. Roper
Madeline L. Vantine
Dorothy Jane Williams
Betty Yendall

In Honor Of
The following individuals were honored through gifts to the Kellogg Eye Center.

Monte A. Del Monte, M.D.
Ernest and Linda Dunn
Jerome I. Finkelstein, M.D., FACS
F. Bruce Frollick, M.D.
Martin Goode, D.D.S.
John R. Heckenlively, M.D.
Walter Hungerford
Ida L. Iacobucci, C.O.
Paul R. Lichter, M.D., FACS
Shahzad I. Mian, M.D.
Sayoko E. Moroi, M.D., Ph.D.
Stephen J. Saxe, M.D., FACS
K. P. Sogoian Manufacturing
and its employees
Gabriella Stone
Susan S. Thom s, M.D.
Andrew K. Vine, M.D.
David N. Zacks, M.D., Ph.D.

Bequests and Other Planned Gifts
It is with deep gratitude that we recognize the following individuals for making the Kellogg Eye Center a part of their estate plans.

Frank J. and Helga Arnold
Nancy Bender
Anne S. Benninghoff
Rhoda L. and Roger M. Berkowitz
Robert D. Biggs, M.D.
Ruth F. Clarke
Gloria P. and William E. Dean, Jr.
Ralph M. Fox
Helen A. (Poorbaugh) Freedman
Larry and Mary Gerbens
Ed and Sue Gorney
Ida Lucy Iacobucci
Mrs. Harry Krashen
Harry and Eva McGee
Marvin Joe and Beverly McKenney
Bruce L. and Roberta Oliver
Mrs. Shirley M. Schaalbe
William Seleznik, M.D.
E.H. Newel and Rosemary Smith
Russell A. Stephens and Phyllis A. Capogna
David and Jayne VerLee
Michael A. Wainstock, M.D.
Jean A. and Richard C. Wilson

Only those who gave their permission are included above. If you have a bequest and were not contacted, please call us at 734-615-0243.

Special Thanks
With appreciation to Myron Hepner and Delta Gamma Fraternity for their volunteer fundraising activities.

We make every effort to ensure the honor roll is as accurate as possible. Please let us know if you note any errors.
Steven M. Archer, M.D.

Awards/Honors/Leadership
• Best Doctors in America
• Election to the Squint Club

Publications


Radha Ayyagari, Ph.D.

Grants
see grants, page 44

Awards/Honors/Leadership
• Scientific Advisory Board Member, Foundation Fighting Blindness
• Reviewer, Foundation Fighting Blindness
• Member, Steering Committee, National Ophthalmic Diagnostic Genotyping Network (eyeGENE), National Eye Institute, NIH

Publications


Grant M. Comer, M.D.

Awards/Honors/Leadership
• 2007 Kellogg Eye Center Resident Teaching Award

Publications


Theresa M. Cooney, M.D.

Awards/Honors/Leadership
• Representative of the Michigan Society of Eye Physicians and Surgeons to the Michigan State Medical Society

Publications

Wayne T. Cornblath, M.D.

Awards/Honors/Leadership
• Best Doctors in America
• Member, Education Liaison Committee, American Academy of Ophthalmology

Publications


Monte A. Del Monte, M.D.

Grants
see grants, page 44

Awards/Honors/Leadership
• Best Doctors in America
• Special Invited Guest Speaker, III Congresso Brasileiro de Estrabismo e Ophthalmologia Pediatrica, IV Congresso Nacional de Oftalmologia da SBO, Rio de Janeiro, Brazil
• David Friendly Award and Lecturer, Costenbader Pediatric Ophthalmology Society
• Special Invited Guest Lecturer, 57th Annual Postgraduate Course, Syracuse University
• Chairman, Program Committee, American Orthoptic Council
• Chairman, International Affairs Committee, American Association for Pediatric Ophthalmology and Strabismus
• Review Panel, Journal of Pediatric Ophthalmology and Strabismus
• Medical Advisory Board, Knight’s Templar Eye Research Foundation

Outreach
• ORBIS International Flying Eye Hospital, Pediatric Visiting Professor and Mentor, Big Ten Challenge, Da Nang Eye Hospital, Da Nang, Vietnam

Publications


Susan G. Elner, M.D.

Grants see grants, page 44

Awards/Honors/Leadership
- Best Doctors in America
- Rockvitz Foundation Professor of Ophthalmology & Visual Sciences
- Board of Directors, American Association of Ophthalmic Pathologists

Publications


Victor M. Elner, M.D., Ph.D.

Grants see grants, page 44

Awards/Honors/Leadership
- Best Doctors in America
- Raised Foundation Professor of Ophthalmology & Visual Sciences
- Board of Directors, American Association of Ophthalmic Pathologists

Publications


**FACULTY HONORS, RECOGNITION, AND PUBLICATIONS**

**Victor M. Elner, cont’d**


**Bruce A. Furr, C.O.**

**Awards/Honors/Leadership**
• President-elect, American Association of Certified Orthoptists

**Publications**


**Philip J. Gage, Ph.D.**

**Grants**
see grants, page 44

**Publications**


**Bartley R. Frueh, M.D.**

**Awards/Honors/Leadership**
• Best Doctors in America
• Associate Editor, Eye
• Editorial Board, Documenta Ophthalmologica
• Editorial Board, Journal of Ocular Biology
• Editorial Board, Diseases and Informatics
• Editorial Board, Clinical Ophthalmology

**Publications**


**Richard E. Hackel, C.R.A.**

**Awards/Honors/Leadership**
• Section editor, “Blink,” Eyenet
• Editorial Board, Journal of Ophthalmic Photography
• Editorial Board, Eyenet
• Editorial Board, Journal of Neuro-Ophthalmology

**Publications**


**John R. Heckenlively, M.D.**

**Grants**
see grants, page 44

**Awards/Honors/Leadership**
• Best Doctors in America
• Associate Editor, Eye
• Editorial Board, Ophthalmologica
• Editorial Board, Journal of Ocular Biology
• Editorial Board, Diseases and Informatics
• Editorial Board, Clinical Ophthalmology

**Publications**


Mark W. Johnson, M.D.

Grants
see grants, page 45

Awards/Honors/Leadership
• Best Doctors in America
• Guide to America’s Top Ophthalmologists
• Member, Periodic Ophthalmic Review Tests (PORT) Panel, American Board of Ophthalmology
• Chairperson, Nominating Committee, Macula Society
• William H. Knabloch Lecturer, University of Minnesota, Minneapolis
• Moderator, Fluorescein Angiography Conference, Macula Society Annual Meeting, London
• Member, Data and Safety Monitoring Committee: Comparison of Age-related Macular Degeneration Treatments Trials (CATT), National Eye Institute, NIH
• Editorial Board, American Journal of Ophthalmology
• Editorial Board Member, Retina
• Editorial Board Member, Retinal Physician

Publications


Chong DY, Johnson MW. Vitelliform macular detachment associated with basal laminar drusen is unresponsive to vascular endothelial growth factor blockade. Ret Cases Brief Rep 2008 [in press].

Alon Kahana, M.D., Ph.D.

Grants
see grants, page 45

Awards/Honors/Leadership
• Member, American Society of Ophthalmic Plastic and Reconstructive Surgery
• Member, University of Michigan Comprehensive Cancer Center
• Member, Scientific Advisory Committee, International Thyroid Eye Disease Society

Publications


Naheed W. Khan, Ph.D.

Publications


Thellea K. Leveque, M.D., M.P.H.

Grants
see grants, page 45

Publications

Erika M. Levin, M.D.

Grants
see grants, page 45

Publications

FACULTY HONORS, RECOGNITION, AND PUBLICATIONS

Hemant Khanna, Ph.D.

Grants
see grants, page 45

Awards/Honors/Leadership
• RD2008 Young Investigator Award, Travel Fellowship, XIII International Symposium on Retinal Degenerations
• Reviewer, Fight for Sight
• Reviewer, Italian Telethon Foundation for Curing Genetic Diseases
• Member, Proposal Review Committee, University of Michigan Undergraduate Research Opportunity Program
• Member, Professional Development and Education Committee, Association for Research in Vision and Ophthalmology
• Organizer, Special Interest Group Meeting: Ciliary Proteins and Retinal Degeneration: New Perspectives and Future Directions; Association for Research in Vision and Ophthalmology

Publications


Paul R. Lichter, M.D.

Grants
see grants, page 45

Awards/Honors/Leadership
• Best Doctors in America
• Lucien Howe Medal, American Ophthalmological Society
• Associate Editor, American Journal of Ophthalmology
• Secretary General, Academia Ophthalmologica Internationals
• Roger P. Mason Lecturer, National Medical Association

Publications


Michael J. Lipson, O.D.

Grants
see grants, page 46

Awards/Honors/Leadership
• Invited lecturer, CLAO Educational Research Foundation
• Invited lecturer, Illinois College of Optometry

Publications

Shahzad I. Mian, M.D.

Grants
- see grants, page 46

Awards/Honors/Leadership
- Best Doctors in America
- Anthony Adams Prize for Outstanding Research in Ophthalmology and Visual Sciences, University of Michigan, W.K. Kellogg Eye Center
- Leadership Development Program, American Academy of Ophthalmology
- Employee of the Year, University of Michigan, W.K. Kellogg Eye Center
- Board of Directors, Midwest Eye Bank
- Program Directors’ Council – Teaching and Learning Symposium Committee, American Academy of Ophthalmology

Publications


Sayoko E. Moroi, M.D., Ph.D.

Grants
- see grants, page 46

Awards/Honors/Leadership
- Best Doctors in America
- Alpha Omega Alpha, Gamma Chapter of Ohio

Publications


David C. Musch, Ph.D., M.P.H.

Grants
- see grants, page 46

Awards/Honors/Leadership
- Editorial Board, Ophthalmology
- Editorial Board, Retina
- Scientific Advisory Board, Clinical and Translational Science Award, Michigan Institute for Clinical and Health Research
- Chair, Special Emphasis Grant Review Panel, National Eye Institute, NIH
- Methodologist, Cornea/Anterior Segment Panel, Ophthalmic Technology Assessment Committee, American Academy of Ophthalmology
- Methodologist, Cornea and External Disease Preferred Practice Pattern Panel, American Academy of Ophthalmology
- Reviewer, National Medical Research Council, Singapore
- Member, Advisory Group, Cochran Collaboration Eyes and Vision Group US Project
- Expert group core member, Vision and Hearing Loss Expert Group, Noncommunicable Diseases Cluster, Global Burden of Diseases Study
- Invited speaker, 10th Annual FDA-OCRA Educational Conference, Irvine, CA

Publications


David C. Musch, cont’d

Christine C. Nelson, M.D.
Grants
see grants, page 46

Awards/Honors/Leadership
• Best Doctors in America
• Top Doctor, Hour Detroit
• Guide to America’s Top Ophthalmologists
• Senior Achievement Award, American Academy of Ophthalmology

Publications


Howard R. Petty, Ph.D.
Grants
see grants, page 46

Awards/Honors/Leadership
• Winner, Great Lakes Entrepreneur’s Quest, OcuSciences

Publications


Donald G. Puro, M.D., Ph.D.
Grants
see grants, page 46

Awards/Honors/Leadership
• Best Doctors in America
• Editorial Board Member, Microcirculation
• Ad hoc member, Biology and Diseases of the Posterior Eye Study Section, Center for Scientific Review, NIH
• Ad hoc member, National Eye Institute Special Emphasis Panel
• Invited speaker, Physiological Society (United Kingdom) meeting concerning ion channels and the microcirculation


Julia E. Richards, Ph.D.
Grants
see grants, page 46

Awards/Honors/Leadership
• Reviewer, The Glaucoma Foundation
• Reviewer, Fight for Sight.
• Member, Scientific Advisory Board, The Glaucoma Foundation
• Member, Steering Committee, Multicenter Study to Map Novel Genes for Fuchs Corneal Endothelial Dystrophy, Case Western Reserve University
• Director, Glaucoma Research Center, U-M Kellogg Eye Center
• Module Director, Microarray Core Module, U-M Kellogg Eye Center
• Faculty Member, Genetics Interdepartmental Concentration, U-M School of Public Health
• Faculty Member, U-M Vision Science Training Program
• Faculty Member, U-M Genome Sciences Training Program
• Faculty Mentor, Kelloggians Trainee Group for Trainees in Vision Research
• Member, Glaucoma Research Society, International Congress of Ophthalmology
• Ad hoc member, Board of Scientific Counselors, National Eye Institute, NIH

Publications


**Frank W. Rozsa, Ph.D.**

**Awards/Honors/Leadership**
- Invited lecturer, Geriatrics Center Research Symposium, University of Michigan

**Publications**

**Stephen J. Saxe, M.D.**

**Awards/Honors/Leadership**
- Best Doctors in America

**Outreach**
- Special guest lecturer, physician, and mentor: Guatemala City, World Eye Mission

**Roni M. Shtein, M.D.**

**Grants**
see grants, page 46

**Publications**


**H. Kaz Soong, M.D.**

**Grants**
see grants, page 46

**Awards/Honors/Leadership**
- Honorary Diploma, Member of Bulgarian Union of Ophthalmology
- Invited speaker, 61st Annual Congress of Japanese Clinical Ophthalmology (Kyoto, Japan)
- Invited speaker and visiting professor, National Taiwan University Hospital (Taipei, Taiwan)
- Invited speaker, World Ophthalmology Congress

**Publications**


**Joshua D. Stein, M.D.**

**Awards/Honors/Leadership**
- Editorial Board, Evidence-Based Ophthalmology
- Judge, Ophthalmology Times Resident Writer’s Award

**Publications**


**Alan Sugar, M.D.**

**Grants**
see grants, page 47

**Awards/Honors/Leadership**
- Invited lecturer, International Ocular Inflammation Society, Paris, France
- Distinguished Alumnus Lecturer, Ethical and Regulatory Basis of Research in Ophthalmology, Department of Ophthalmology & Visual Sciences, Washington University School of Medicine, St. Louis, MO

**Publications**


Alan Sugar, cont’d

Anand Swaroop, Ph.D.

Grants
see grants, page 47

Awards/Honors/Leadership
• Editorial Board, Investigative Ophthalmology & Visual Science
• Editorial Review Board, Molecular Vision
• Reviewer, The Welcome Trust, London, UK
• Reviewer, Agence Nationale de la Recherche – Biotechnology and Biological Sciences Research Council

• 29th Annual Distinguished Faculty Lectureship Award, University of Michigan Medical School
• Invited lecturer, Bhubaneswar L V Prasad Eye Institute, Bhubaneswar, India
• Invited lecturer, Symposium, “Trends in Human Genetics,” Toshali Sands, Puri, India
• Invited lecturer, Department of Pharmacology, School of Medicine, Case Western Reserve University, Cleveland, OH
• Invited plenary talk, annual retreat, Comparative Medicine and Integrative Biology Graduate Program, Michigan State University, East Lansing, MI
• Invited lecturer, Save Sight Sunday Symposium, The Foundation Fighting Blindness North California Chapter
• Invited lecturer, Department of Genetics, Faculty of Biology, University of Barcelona
• Guest lecturer, Hospitales Universitarios Virgen del Rocio, Seville, Spain

Publications
Debra A. Thompson, Ph.D.

Grants
see grants, page 47

Publications

Susan S. Thoms, M.D.

Awards/Honors/Leadership
• Best Doctors in America

Outreach
• Training students for global outreach; a medical student worked in rural Mongolia and an undergraduate student worked in Ghana through Fight for Sight.

Jonathan D. Trobe, M.D.

Awards/Honors/Leadership
• Best Doctors in America
• Visiting Professor, Longwood Program in Neurology, Harvard Medical School
• Visiting Professor, Department of Neurology, Massachusetts General Hospital, Harvard Medical School
• Henry Van Dyke Lecturer, Department of Ophthalmology, Louisiana State University
• Keynote Speaker, Asian Neuro-Ophthalmology Society, Taipei
• Keynote Speaker, German Ophthalmology Congress, Berlin
• Visiting Lecturer, Birmingham Eye Hospital, Birmingham, England
• Editor-in-Chief, Journal of Neuro-Ophthalmology

Publications


Andrew K. Vine, M.D.

Grants
see grants, page 47

Awards/Honors/Leadership
• Best Doctors in America

Publications


Jennifer S. Weizer, M.D.

Awards/Honors/Leadership
• Director, Fellowship program, University of Michigan W.K. Kellogg Eye Center
• Invited lecturer, American Glaucoma Society, Washington, DC

Publications


Weizer JS. Acute angle-closure glaucoma. Up-to-Date 2008 [in press].

Rebecca A. Wu, M.D.

Publications

Dongli Yang, M.D., Ph.D.

Publications


David N. Zacks, M.D., Ph.D.

Grants
see grants, page 47

Awards/Honors/Leadership
• Section Moderator: Basic Science Section, 31st Macula Society annual meeting
• Co-Director, 80th Annual Spring Conference, University of Michigan Department of Ophthalmology and Visual Sciences
• Honorary Co-Chair, Foundation Fighting Blindness Eastern Michigan Vision-Walk
• Keynote speaker, VISIONS 2008
• Guest faculty, 3rd Annual Heed Ophthalmologic Foundation Faculty–Resident Retreat
• Section Moderator: Retinal Detachment– A Symposium in Honor of Charles L. Schepens, MD, 40th Annual Retina Society Meeting

Publications


Conrad PW, Zacks DN, Johnson MW. Intra-vitreal bevacizumab has initial clinical benefit lasting eight weeks in eyes with neovascular age-related macular degeneration. Clinical Ophthalmol 2008 [in press].
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<td>R01-EY13198-06</td>
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<td>Clinical and Molecular Analysis of Oregon Eye Disease Subcontract</td>
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<td>with De-Ann Pillers, M.D., Ph.D., Oregon Health and Science University</td>
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<td>Interactive and Integrated Genetic Databases for the Study of Age-Related Macular Degeneration</td>
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<td>Identification and Function of Molecular Cues for Photoreceptor Regeneration in</td>
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<td>B. Hughes, Ph.D.</td>
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<td>Core Center for Vision Research (four core modules)</td>
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<td>P. Lichter, M.D.</td>
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Source Abbreviations

- AHAF – American Health Assistance Foundation
- FFB – Foundation Fighting Blindness
- IRRF – International Retinal Research Foundation
- LMRI – Lowy Medical Research Institute
- MICHRI – Michigan Institute for Clinical and Health Research
- NIH – National Institutes of Health
- NSF – National Science Foundation
- RPB – Research to Prevent Blindness
OUR MISSION

TO SOLVE THE PUZZLES OF BLINDING EYE DISEASE,
TO IMPROVE THE QUALITY OF LIFE FOR OUR PATIENTS,
AND TO TEACH THE NEXT GENERATION OF VISION
SCIENTISTS AND CLINICIANS.

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Portrait of William Carls (p. 24) painted by Robert Maniscalco. Photograph
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