John R. Heckenlively, M.D., sees many patients with retinal diseases for which there are no cures and few treatments. Perhaps that is why, in his 25 years of academic medicine, he championed the concept of translational research—moving scientific findings forward to serve patients—long before it became a catchphrase among scientists.

Dr. Heckenlively, one of Kellogg’s newest faculty members, is a world authority on inherited retinal disease. For many years he has invited his patients to participate in research so that he and others could gain knowledge about the nature of retinal dystrophies. One of his many goals is to obtain a molecular diagnosis for each of his patients.

Dr. Heckenlively’s patients have many rare forms of retinitis pigmentosa (in fact, he wrote the book on the subject), cone–rod dystrophies, age-related macular degeneration, and other retinal dystrophies. Retinitis pigmentosa (RP) is a group of inherited eye diseases in which photoreceptor cells degenerate over time. A person with this disease gradually loses vision.

“Many retinal conditions look alike,” Dr. Heckenlively observes. “You hope to look in the patient’s eye and see a distinctive diagnostic pattern, but in RP this seldom is the case.” For certain rare diseases, the best you can do is narrow the possible conditions to a short list.” Dr. Heckenlively performs diagnostic electrophysiologic testing and pedigree analysis to further refine the diagnosis. When he has narrowed the list of possible causes, see translating research on page 5

Dave Bing has won many honors, first at Syracuse University where he was named Athlete of the Year, then as a high-scoring NBA guard and, later, as a successful Detroit businessman who is deeply engaged in his community.

By the early 70s, he was at the top of his game as a playmaker and guard for the Detroit Pistons. Mr. Bing’s career could very well have ended right then, if not for the eye surgeons at the UM Department of Ophthalmology.

During a preseason game in 1971, a guard for the Los Angeles Lakers suddenly cut in front of Mr. Bing and unintentionally poked the Piston guard in his right eye. Although in pain, Mr. Bing assumed the injury was only a scratch and went on to play in the season’s opening game a few days later. The next day, he realized the seriousness of the injury when he awoke with noticeably dimmed vision.

The Pistons arranged for Mr. Bing to come to UM Hospitals where surgeons from the Department of Ophthalmology

Leaders and Best
Pioneers in hereditary eye disease

In 1941, more than a decade before the structure of DNA was described by Watson and Crick, the University of Michigan established a “Heredity Clinic” on its medical campus. It was the first of its kind in the United States. On its staff was a young physician, Harold F. Falls, M.D., who was in the midst of completing his residency in ophthalmology. Over the next 50 years Dr. Falls would come to be known as the “founder of medical genetics.”

Dr. Falls’ achievements gave Michigan’s Department of Ophthalmology an early competitive edge in genetics. The Department started to recruit the top scientists and physicians in ophthalmic genetics, and it hasn’t stopped since.

With joint appointments in the Department of Ophthalmology and the Heredity Clinic (which later became the Department of Human Genetics, again, the first in the country), Dr. Falls had a unique perspective from which to conduct research on inherited eye diseases. By bringing together clinical signs and genetic characteristics of a variety of retinal disorders he defined a rich collection

see leaders on page 2
Kellogg Offers Hope to Patients with AMD

When Briana Daudert lost her vision to age-related macular degeneration (AMD), the UM Kellogg Eye Center offered her hope. It came in the form of a pea-sized telescope that was surgically implanted in her eye.

In AMD, a condition that affects 13 million Americans, the central part of the retina, or macula, deteriorates and becomes scarred. “Over time, scarring of the macula can make it difficult to see fine detail in the center of the visual field, leading to problems with reading, driving or seeing features on a face,” explains Paul R. Lichter, M.D., Chair of the Department of Ophthalmology and Visual Sciences.

Although not a cure, the miniature telescope can improve the vision of those suffering from AMD. The telescope magnifies an image two to three times, allowing the unscared outer edges of the retina to process the image.

Before AMD, Mrs. Daudert enjoyed reading, cooking and taking care of her grandchildren. After her vision started to deteriorate she no longer could read; then she was unable to drive; eventually she could not even see the face of her youngest grandchild. “This was very difficult,” she says, “because even though I was 60, I didn’t feel old. AMD affected almost every aspect of my daily life.”

When Mrs. Daudert heard about the implantable miniature telescope (IMT) from a neighbor in Gobles, Michigan, she acted quickly.

“The whole thing happened very fast and I was thankful for that,” she explains. “When I heard about the trial, I hoped I would be assigned to Kellogg because of its great reputation.” Kellogg is one of 20 universities and clinical centers to participate in the trial.

Mrs. Daudert admits to being scared before the surgery. “I thought they were going to stick this big telescope in my eye,” she explains. “But when I found out the procedure was basically cataract surgery and the telescope was only the size of a pea, all my fears disappeared.”

After the one-hour outpatient procedure, Mrs. Daudert had several follow-up appointments with Dr. Lichter and Kellogg occupational therapist, Cheryl Frueh, who suggested exercises to help her adjust to the IMT. During these visits both Dr. Lichter and Mrs. Frueh worked with Mrs. Daudert to help her adapt to her new vision. She will continue to meet with them for two years.

“The recovery has been easy and exciting,” says Mrs. Daudert. “I am using the smallest print size on my closed-circuit TV monitor. I can use a computer without too much trouble and I am able to read and write in smaller fonts.”

Now, at 65, Mrs. Daudert can read labels, newspapers and recipes and she can see the faces of her 11 grandchildren. “The quality of my life really has improved,” she says.

She describes the care she received at Kellogg as the best of the best. “I felt really good about coming to Kellogg,” says Mrs. Daudert. “I can’t say enough about Dr. Lichter and Cheryl and all they’ve done for me. I feel I had the best care anyone could receive.”

leaders, from page 1

of ophthalmic pedigrees that is still being studied today. He presented some of the best and earliest descriptions of genetic retinal disorders, particularly X-linked diseases, including juvenile retinoschisis, ocular albinism, retinitis pigmentosa, and blue cone monochromacy.

As Dr. Falls approached retirement, the Department began its search for someone who could continue his groundbreaking research. The clear choice was a young clinician–researcher, Paul A. Sieving, M.D., Ph.D. Dr. Sieving had just completed a two-year fellowship in retinal physiology and a subsequent year in a medical fellowship devoted to inherited retinal degenerations. He had grant funding, a growing list of publications, and a reputation as an exceptional thinker. He quickly joined the ranks of retina specialists who were charting a pathway through the heretofore unknown territory of the genetics of retinal degenerations.

Dr. Sieving developed into a premier diagnostician and became a world authority on retinoschisis and retinitis pigmentosa. In 1990 he was named the inaugural Paul R. Lichter Professor of Ophthalmic Genetics and the following year established the Center for Retinal and Macular Degeneration, which is now the hub for international collaborative research. Dr. Sieving was able to take the foundation built by Dr. Falls and not only increase our understanding of particular retinal degenerations, but also create a dynamic research environment at Michigan that brought researchers and patients from around the world to Kellogg.

One of those promising researchers was Anand Swaroop, Ph.D., who joined our Department in 1990. Together, Drs. Swaroop and Sieving extended the parameters of what scientists know about the workings of the retina on a molecular level. They garnered grants, awards, honors, and patients until they had one of the finest collections of pedigrees for world researchers to study. What makes Kellogg stand out, according to Dr. Swaroop, is that we have a “very important group of people in the middle—those who work in translational science. These are physicians–scientists who are thinking about drugs and delivery systems to target the genes and cellular pathways that we scientists have identified. This is how we will bring research results to our patients.”

In 2001, Dr. Sieving was named Director of the National Eye Institute (NEI) at the National Institutes of Health. Upon his departure Dr. Swaroop became Director of the Center for Retinal and Macular Degeneration, and, two years later, in honor of his exceptional accomplishments in elucidating the genetic basis of age-related macular degeneration, was named the inaugural Harold F. Falls Collegiate Professor of Ophthalmology and Visual Sciences.

That same year, the Department welcomed John R. Heckenlively, M.D., to its retina faculty. When Dr. Sieving moved to NEI, the Department started to look for a clinician–scientist of stature who would continue our then 60-year history of excellence in clinical treatment of and laboratory research into inherited retinal disorders. Dr. Heckenlively is a world renowned expert in X-linked retinal diseases, especially retinitis pigmentosa. He is recognized among fellow clinicians and scientists as having made significant contributions to the clinical study of retinal degenerations, ophthalmic genetics, retinal electrophysiology and research in mouse models of human eye disease.

Dr. Heckenlively is now co-Director of the Center for Retinal and Macular Degeneration. He is able to offer his patients what Dr. Falls could not 60 years ago: the promise of treatment for their disease.

“In an unbroken march since Harold Falls, ophthalmology at Michigan has been at the forefront of genetics research in the country and the world,” says Dr. Sieving. “The commitment of this Department and that of many alumni to forging new medical knowledge and scientific insight will soon translate into preserving and restoring sight for those with limited vision.”
The Michigan Difference at Kellogg

The University of Michigan has launched its fundraising campaign with the theme, “The Michigan Difference,” to describe how the University’s discoveries in medicine, science, engineering, art, education, law, and much more, are making a difference in the lives of people everywhere. It’s not difficult to see what our own Department of Ophthalmology and Visual Sciences adds to this remarkable set of achievements. In our clinics, research laboratories, and classrooms, we are working to advance the science of saving sight in every way we can.

How are we making a difference?

We recruit the best of the best. In this issue of Advances, we feature Dr. John Heckenlively, who has made such a difference in the lives of his patients that they are calling from Texas, Alaska, and California to ask for appointments in Ann Arbor. His assistant, Jill Oviersier, who came with him to Kellogg, explains the attraction. “He understands the patients, their disease, and what they are going through. They know that he does research, and that they will be the first to know when he discovers something to help them.”

We build on our heritage in genetic research. In the early 1940s, Dr. Harold Falls gave the Department a head start in realizing the important link between genetics and disease. His discoveries set the stage for the great scientists and physicians who followed him: Dr. Paul Sieving, now director of the National Eye Institute; Dr. Anand Swaroop, who has advanced our understanding of AMD, and now, Dr. Heckenlively, a world authority in inherited retinal diseases.

We provide outstanding training for residents and fellows. A resident once told me that she selected our program because the Department not only offered every subspecialty, but also provided depth in each of them. Our neuro-ophthalmology service is one of the best examples of this. Dr. Jonathan Trobe and his colleague Dr. Wayne Cornblath are widely recognized experts in the field. In this issue you’ll see how Dr. Trobe has shaped the program with his great talent for teaching and his insight into the diagnostic challenges of diseases that involve the eye and the brain.

The Michigan Difference, to describe how the University’s discoveries in medicine, science, engineering, art, education, law, and much more, are making a difference in the lives of people everywhere. It’s not difficult to see what our own Department of Ophthalmology and Visual Sciences adds to this remarkable set of achievements. In our clinics, research laboratories, and classrooms, we are working to advance the science of saving sight in every way we can.

Friends and advisors make a difference. We can’t do it alone. People like Dave Bing, who serve their communities in so many ways, have stepped forward to help us. Mr. Bing and other members of our advisory board bring an invaluable outside perspective to our mission. His own story inspires us all. He had great success in his athletic career, and then brought his many talents to serve a business, the Detroit community, and now the Kellogg Eye Center.

We have a great story to tell about Kellogg. This collection offers one small part of it.

Paul R. Lichter, M.D., Chair
F. Bruce Fralick Professor of Ophthalmology

Eyelid Cancers – Early Treatment Saves Sight

Two years ago Mary Harden received a diagnosis we all dread: “You’ve got cancer.” It was a basal cell carcinoma, the most common form of cancer, in the corner of her eye. According to Christine C. Nelson, M.D., Associate Professor of Ophthalmology, basal cell carcinoma around the eye is especially tricky. “Once it invades the eyelid tissue and has gone deeper than the skin it’s more difficult to isolate and remove, especially if it extends into the orbit.” The goal, then, is to make sure these cancers are treated as early as possible.

Mrs. Harden, a charming and energetic woman of 81, was recently referred to Dr. Nelson for a second opinion. She had already undergone several surgeries at home in Saginaw and yet the tumor persisted. Dr. Nelson acknowledges that these particular cancers can be difficult, explaining, “It’s like trying to get rid of a dandelion. You can pick off the top but you know those roots will still be there.”

Mrs. Harden was understandably apprehensive at having to meet a new physician and possibly face more surgery. However, she was immediately put at ease. “As soon as I met Dr. Nelson I felt better. She has a way about her that made me feel special.”

The UM Kellogg Eye Center has a great deal of experience with basal cell carcinomas in and near the eye. Our physicians on the Eye Plastic, Orbital and Facial Cosmetic Surgery Service treat six or seven patients each week with that form of cancer. This wealth of experience was another thing that gave Mrs. Harden peace of mind. “To have confidence in your doctor – that’s the most important thing, isn’t it?”

During her examination, Dr. Nelson explained the upcoming procedure. While Mrs. Harden was under anesthesia, Dr. Nelson would remove as much of the cancer as she could see. Then, while the tissue was being analyzed, Mrs. Harden could rest in the recovery room with her family. If cancer cells remained, Mrs. Harden would return to the operating room, where Dr. Nelson would remove more tissue. This would be repeated until the margins of the tumor were clear. Dr. Nelson explains that the tissue layers behind the eye are treacherous territory for isolating and removing cancer cells. Unlike cells on the skin where the margins remain fixed, the tissues behind the eye are somewhat mobile.

Dr. Nelson likens it to the movement of sand. “As soon as you scoop out a handful of sand, the grains that are left behind start moving around.” Her job during this procedure is to make sure that no cancer remains before she lets Mrs. Harden leave the Eye Center. For her part, Mrs. Harden likes the explanation. “I appreciate Dr. Nelson’s approach. She’s very direct. She doesn’t beat around the bush.”

“We can do so much for these patients,” says Dr. Nelson, “by removing all the cancer cells and making them healthy.” Take Mrs. Harden, for example. “She can go home and continue to enjoy her husband, her children, and her grandchildren. We will watch her closely over the next five years to monitor healing and check for any recurrence.”

Right now, Mrs. Harden has two reasons to smile: she is free from cancer and she still has her sight. “I am so grateful that someone sent me to Dr. Nelson.”
The cause of the degeneration could be either the absence of sufficient healthy protein or the presence of abnormal protein. In theory, scientists could add healthy genes or remove the product of the defective gene. "The more we learn about this misrouting," notes Dr. Ayyagari, "the more we will know about how the genetic mutation causes the macula to degenerate and the closer we will be to interventions."

**Children With Strabismus – It’s Not Just about Vision!**

Thousands of children born in the United States suffer from strabismus, a condition in which the muscles of the eye do not work together properly. The consequences are both functional – left untreated, many of these children will not develop binocular vision – and psychological – the eyes of these children are misaligned. Ophthalmologists have always been most concerned about correcting the problems relating to vision: eliminating double vision and preventing amblyopia. Fortunately, surgery to correct strabismus is quite successful. However, the psychological challenges facing these children can be severe. Any parent knows that children are sensitive to looking different from their peers, and that other children are quick to point out differences.

Kellogg Eye Center faculty are collaborating with colleagues from the UM School of Public Health to investigate the extent to which strabismus surgery can alleviate this burden. Pediatric ophthalmologists Steven Archer, M.D., and Monte Del Monte, M.D., joined Kellogg epidemiologist David Musch, Ph.D., to study the parents of 98 children who underwent strabismus surgery at Kellogg. Currently, only anecdotal evidence exists to support the positive impact that surgery can have on a youngster. This study demonstrated that there are valid ways to measure a parent’s perception of the social and emotional effects that corrective surgery has on a child’s life. According to Dr. Musch, “the data showed substantial and statistically significant improvement in the social and emotional well-being of the children after surgery.”

Dr. Musch plans to pursue this research with colleagues in the School of Public Health and pediatric ophthalmologists across the country. Their work will determine the extent to which children can recover from or even avoid the social and emotional scarring that can result from misalignment of the eyes.
he sends a DNA sample to one of several labs, including our own at Kellogg, to confirm the diagnosis. 

The molecular diagnosis is the starting point for developing genetic and other therapies. Dr. Heckenlively notes that our knowledge about hereditary disease is rapidly evolving. “Some 154 hereditary retinal diseases have chromosomal localization, and the gene has been identified in 109 of those,” he says. “The first retinal degeneration gene was identified in 1987, and I suspect we will eventually find 700 such genes, perhaps in the next five to ten years.”

Patients seeking answers

There are only a handful of doctors in the nation who specialize in hereditary retinal diseases. And that is why some of Dr. Heckenlively’s West Coast patients—he was previously with the Jules Stein Eye Institute at UCLA—have decided to follow him to Ann Arbor.

Chris Fendrick, from Bakersfield, California, explained why he made the trip to Ann Arbor. “I’ve been with Dr. Heckenlively for 23 years. He’s one of the world’s best retina doctors, and he brings everything—knowledge, philosophy, research—to his patients,” said Mr. Fendrick, who was diagnosed with RP at age 7. “I’ve had the chance to be involved in research trials, another advantage of working with someone like Dr. Heckenlively.”

Many patients come to Dr. Heckenlively after several visits to other doctors who have delivered discouraging news. By contrast, Dr. Heckenlively tells his patients that while a few of the RP types can result in blindness, most progress slowly and do not lead to total blindness. “Part of the job of the ophthalmologist is to boost the spirit of the patient. We don’t mislead anyone, but instead of telling a person, ‘You’re going blind,’ I try to explain, ‘This is a slow disease and you have lots of vision left.’ It’s better to focus on the positive than the negative; this allows people to get on with their lives,” he says.

Creating models of eye disease

In the mid-1980s Dr. Heckenlively formed a productive collaboration with scientists at the Jackson Laboratory in Maine. It has resulted in an extensive set of mouse models that have already helped scientists identify retinal genes and their effect on vision.

He explains that the mouse is a very good model for understanding human eye disease because it has a 95% overlap with human genes. “We have over 100 models of hereditary ocular diseases that mimic humans in the course of disease.” He says, “The mouse is turning out to be extremely useful in looking for mechanisms underlying eye disease.” That knowledge is important because it forms the basis for a variety of treatments. “Once you know the molecular mechanism,” says Dr. Heckenlively, “there is a high likelihood that pharmacological intervention will be possible.” It is a matter of knowing which pathways are involved in the disease process, and then intervening with a medicine or molecule that interrupts or otherwise circumvents the disease.

One area that deserves more scientific scrutiny, according to Dr. Heckenlively, is apoptosis, the process by which retina cells die and thus cause vision loss. “If you can block the pathway involved in cell death, you might not cure the disease, but you should be able to slow it down,” he explains.

Dr. Heckenlively is finding great enthusiasm among his new colleagues at Kellogg. Anand Swaroop, Ph.D., Victor Elner, M.D., Ph.D., and David Zacks M.D., Ph.D., are all investigating treatments based on apoptosis.

“The great thing about Kellogg is that much of the research here is focused on moving to treatments. The research has a connection to the disease and ultimately to the patient.”

Moving toward treatments

With a view toward results, Dr. Heckenlively is engaged in several other research initiatives. Using funds donated by a patient, he and Dr. Swaroop have initiated a fellowship for graduate students who will pursue translational research; two students have already been selected for 2004-2005. He is also working with Radha Ayyagari, Ph.D., as medical advisor to Kellogg’s molecular diagnostic testing service.

After his first half year at Kellogg, Dr. Heckenlively is optimistic about the direction he and his new colleagues are headed. Attracted by the reputation and expertise of Kellogg scientists, he now looks forward to working with them to drive vision science toward molecular therapies. “The problem with science is that there are literally hundreds of ways of looking at a problem,” he observes. “The great thing about Kellogg is that much of the research here is focused on moving to treatments. The research has a connection to the disease and ultimately to the patient.”
When seeing is not always believing advice from a master teacher

One of the first things Jonathan D. Trobe, M.D., tells new residents in neuro-ophthalmology is to disregard the maxim, “What you see is what you get.” “On this service,” he says, “it’s what you don’t see that is important.” His patients often experience a complex mix of symptoms, from headaches to double vision, that do not conform to an easy diagnosis.

The Kellogg professor of neuro-ophthalmology has practiced medicine for 35 years and taught at Kellogg for 18 years, and he has helped to create a service that is a draw for patients and residents alike. There are only a handful of services in the country that so completely integrate neurology and ophthalmology.

“Specialists in this field need to develop a different set of diagnostic skills,” says Dr. Trobe. “I explain to residents that it’s important to look beyond the patient’s initial complaint, to find out what else is going on in that person’s life.”

Dr. Trobe asks residents to meet their patients in the waiting room so that they gain a little more insight into the person they are about to examine. “What do you observe about the dynamic between a father and son, or husband and wife?” he asks. “A headache may simply be a headache, but sometimes there is much more to it. Many factors can affect that person’s well-being. There could be spousal abuse, depression, or even a hankering for a disability.”

It is all a matter of perspective, according to Dr. Trobe. First, as in many medical specialties, a doctor must view the situation as if using a zoom lens, narrowing a set of symptoms. Then he or she has to back up to take in the bigger picture—all the factors affecting the patient’s life.

Residents also have the chance to form close relationships with specialists in radiology, neurology, and internal medicine. “You don’t have this kind of opportunity in other programs,” says Jeffrey M. Zink, M.D., a third-year resident in ophthalmology. “It is unique to be able to discuss interesting cases with other subspecialists. Dr. Trobe adds a new dimension to our education by having residents discuss the situation from the perspective of a neurologist or internist. It is through his teaching and multidisciplinary rounds that all of us become more complete physicians.”

Kellogg residents attend conferences and go on rounds at the hospital with neurology residents. They also take part in weekly conferences with a neuro-radiologist who reads MRI and CAT scans and discusses each case in detail.

Dr. Trobe is understandably proud of the program he has helped to shape. One of his former fellows directs a neuro-ophthalmology section at a hospital in Thailand, and she has become known as the leading practitioner in the field in that country. “We train residents and fellows from all over the world, and they go on to teach so many others. This ripple effect is one of the things that Kellogg and the University of Michigan do best.” It’s part of the Michigan Difference.

Alumni Class Notes

E. H. Newel Smith, M.D. (residency 1961) was honored at a dinner marking the closing of Grace Hospital in Windsor, Ontario. Dr. Smith was recognized as “one of the four physicians who served Grace best over the last 40-50 years.” He was an early supporter of corneal transplants in the Ontario area and, over the years, encouraged many of his patients to donate their tissue to the Eye Bank.

Clara E. de Uzcategui, M.D. (pediatric ophthalmology fellowship 1966) published “Identification of KIF21A mutations as a rare cause of congenital fibrosis of the extracocular muscles Type 3 (CFEOM3)” in the July issue of IOVS.

James G. Ravin, M.D. (residency 1974) is President-elect of the Academy of Medicine of Toledo and Lucas County as well as President-elect of the Toledo Surgical Society. Dr. Ravin published “Sir Frederick Treves and Sympathetic Ophthalmia” in the January issue of the Archives and “Representations of blindness in Picasso’s blue period” in April.


Barbara A. Blodi, M.D. (retina fellowship 1993; former faculty) published “Doctor, what vitamins should I take for my eyes?” in the April issue of the Archives.

Kimberly G. Yen, M.D. (residency 1999) published “Bilateral endogenous endophthalmitis secondary to endocarditis with negative transesophageal echocardiogram” in the July issue of the AJO.


Michael A. Kass, M.D., 32nd F. Bruce Fralick Lecturer, with Paul R. Lichter, M.D.,

Sunil J. Garg, M.D. (residency 2002) published “Optical coherence tomography of chronic solar retinopathy” in the February issue of the AJO.

In Memoriam

We mourn the passing of Raymond R. Petrauskas, M.D., who completed his residency in 1967.

Two great opportunities to catch up with fellow alumni this fall. Come back to Ann Arbor for Alumni Day and stay on for Michigan Homecoming weekend, with Michigan v. Minnesota. Then, join your colleagues for dinner in New Orleans during the AAO Annual Meeting. Mark your calendar today.

Fall Alumni Day — Ann Arbor
Friday, October 8

Annual AAO Alumni Dinner — New Orleans
Monday, October 25
NR2E3 functions as a transcriptional activator in rod optic nerves.

Swaroop A

binocular blindness from intracranial compression of the optic nerves.

Chan-Lau J

J Neuroophthalmol

ophthalmoplegia and numb chin in Burkitt lymphoma.

Chan-Lau J

human RPE MCP-1 and IL-8 expression.

Bian Z

2004;83:615-625.

the intracellular misrouting of the protein.

Ambasudhan R

Fighting Blindness, “Resource Facility for X-linked Retinitis Blindness. He also received a grant from The Foundation for the UM Institutional Review Board.

Cornea Society. He was also chosen Vice-chair of the

Alan Sugar, M.D.

regression.”

“Ion channels in ocular microvessels: their role in apoptosis/

Donald G. Puro, M.D., Ph.D.

Collaboration Eyes and Vision Group US Project, as well as

David C. Musch, Ph.D.

also received grants from NEI, “Standard Care versus

Mark W. Johnson, M.D.

has been elected President of the

has received a grant from NEI to

Terry G. Bergstrom, M.D.

was granted emeritus status by the UM Board of Regents. Dr. Bergstrom, although retired,

Pfizer, “A Phase 1/2, Randomized, Masked, Placebo-Controlled, Single and Multiple-Dose, Sequential Dose-Escalation Study of the Safety and Efficacy of AG-013958 in Subjects with Subfoveal Choroidal Neovascularization Associated with Age-related Macular Degeneration.”

Paul R. Lichter, M.D.

has been named an Associate Editor of the AJO. He also received grants from Research to Prevent Blindness, Inc. and the Glaucoma Research Foundation.

David C. Musch, Ph.D.

has received a grant from NEI to analyze the visual field data collected over 11 years by the Collaborative Initial Glaucoma Treatment Study. He has been appointed to the National Advisory Cochrane Collaboration Eyes and Vision Group US Project, as well as asked to be a Consultant to the Ophthalmic Devices Panel of the Food and Drug Administration.

Donald G. Puro, M.D., Ph.D.

was asked to join the editorial board of Microcirculation. He also received a grant from the Midwest Eye Bank and Transplantation Center: “Ion channels in ocular microvessels: their role in apoptosis/ regression.”

Alan Sugar, M.D.

was also chosen Vice-chair of the UM Institutional Review Board.

Anand Swaroop, Ph.D.

received the Harrington Senior Scientific Investigator Award from Research to Prevent Blindness. He also received a grant from The Foundation Fighting Blindness, “Resource Facility for X-linked Retinitis Pigmentosa and Age-related Macular Degeneration.”


Laura Arthur hopes to make a difference in a child's life in the same way a University of Michigan Kellogg Eye Center physician made a difference in her life.

At 19, Laura is a sophomore at Xavier University, studying psychology and completing a pre-med program in hopes of becoming a pediatric ophthalmologist. At age 12, however, the last person she wanted to see was another pediatric ophthalmologist. After she underwent three surgeries and still had vision problems, her parents brought her to Kellogg.

Laura was nervous as she waited in the exam room, but then relaxed after meeting Monte A. Del Monte, M.D. Whether it was his Winnie-the-Pooh tie or warm smile and handshake, she knew there was something different about him.

"During my first visit with Dr. Del Monte, rather than getting down to business, he took a few moments to get to know me and my parents. He took time to explain things and answer questions," says Laura. "After discussing my condition and doing some preliminary testing, he told me 'I know you've been through a lot and I'm going to do everything I can to straighten your eyes and get you out of those bifocals.'"

Laura had been wearing bifocal glasses since she was less than a year old due to a condition called accommodative esotropia, which Dr. Del Monte explains is "a crossing of the eyes caused by farsightedness."

"Growing up, I saw many specialists and each would work with me for a while," says Laura. "But all of them reached a point where they said there was nothing more they could do for me."

Laura's parents, however, would not give up. The Arthurs contacted the UM Health System and, soon after, arranged an appointment with Dr. Del Monte. Within a few weeks, Laura was in surgery for the fourth time. "Laura's surgery was difficult, but successful, resulting in excellent alignment of her eyes," explains Dr. Del Monte. "Although she has become naturally nearsighted as she has grown older, she has continued to improve since surgery, maintaining excellent eye alignment. She also has developed much improved binocular vision and depth perception."

Today, Laura has almost normal straight eyes, and sees 20/20 with glasses. She visits Dr. Del Monte yearly for glasses and an eye alignment exam.

"From the very first visit, he offered so much encouragement," Laura says. "He was gentle, compassionate and understanding of all my fears. It was the first time in my life I had a doctor care so much about me. I have the kind of relationship with Dr. Del Monte that all patients should have with their doctors."

Laura adds, "After all my family and I had been through, Dr. Del Monte was the difference we needed. He is my inspiration. I want to have the impact on other children that Dr. Del Monte has had on me."