Seeing beyond the chart...
Improving and preserving vision around the globe
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On the Cover:
View of the Chesapeake Bay from the banks of the Severn River in Annapolis. Overlay: Snellen Eye Chart.
Photo by Laurette Hankins.

The View from Wilmer Development

We hope you enjoy Sightline’s new look. As Wilmer’s raison d’etre is to preserve and restore vision, it seemed only right and appropriate to enhance our magazine with the entire spectrum of color!

As this issue’s cover implies, the eye chart is merely a tool by which we measure a patient’s vision. However, recognizing letters on a chart is only the beginning. It doesn’t convey the thrill of being able to appreciate the view on a balmy, sail-filled afternoon on the Chesapeake Bay, nor the sense of comfort and well-being we get from recognizing the faces of loved ones and dear friends.

Making all of this possible — everything the precious gift of vision encompasses — is what Wilmer’s doctors, scientists, nurses, and staff are working to achieve. This is what inspires and drives us to succeed.

Right now, our chief initiative is to complete funding for a new research and eyecare building — one that will enable our scientists to collaborate more easily within “research neighborhoods” in the most advanced vision research laboratories in the world, as well as enable our surgeons to work in a more efficient and patient-friendly state-of-the-art surgical facility. We are almost there, but need additional support to make it happen. You may visit our website at www.wilmereyeinstitute.net to see a brief video that outlines the critical need for this facility that will transform Wilmer.

Our thanks to all of the grateful patients and friends who continue to provide the financial support needed to further the extraordinary work done at Wilmer. We fully recognize and appreciate the difference you are helping all of us to make!

Laurette L. Hankins
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For Those Who Will Come After Us

After Mrs. Aida Breckenridge met Dr. William Holland Wilmer and he performed sight-saving surgery on her, she was inspired.

Her inspiration was that the world would be a better place if this gifted diagnosticon and surgeon could pass his knowledge onto a new generation of ophthalmologists. She took it upon herself to raise over $3 million to establish the Wilmer Institute here at Johns Hopkins in 1925, with Dr. Wilmer as its leader. As a result, Dr. Wilmer's legacy was not limited to his own discoveries and the patients he was able to help, but that legacy was multiplied several hundredfold. His legacy includes the contributions of hundreds and hundreds of trainees who have gone on to leadership roles throughout the world after training at Wilmer. History has proven the wisdom of Mrs. Breckenridge's inspiration.

Today, the pride and joy of the Wilmer Institute continues to be its trainees. Young people come to us from around the world (medical students, residents, fellows, Ph.D. candidates, post-doctoral fellows) to learn in our clinics, operating rooms, and laboratories. Our faculty know that their work will not only live on in the careers of the people now in training, but that it will be amplified by the contributions of those who come after us. The new Wilmer building, currently being designed, will provide a state-of-the-art facility in which our physicians and scientists will work shoulder-to-shoulder, helping to find new cures while teaching tomorrow's leaders.

That is why we are so gratified by the recent gift from Wilmer alumnus Dr. Eugene de Juan, Jr. of a professorship to support education at Wilmer. A former Wilmer resident and faculty member, Dr. de Juan enjoys an international reputation as an outstanding clinician and surgical innovator, and in many ways he embodies the type of person Mrs. Breckenridge believed the Wilmer Institute would produce. Named in honor of his father, also an ophthalmologist, the professorship donated by Dr. de Juan and his family will support the training of our nation's top medical students and residents. Wilmer faculty believe our educational program is second to none, and the Institute invests major resources to provide a superlative experience for our trainees. Because government support for medical education is dwindling in response to our society's demands that healthcare expenditures be trimmed, this gift will help tremendously, ensuring that our legacy of excellence continues. Coupled with the new clinical and research facilities being planned, this type of support for our educational program will position Wilmer stronger than ever to fulfill the vision of our initial benefactress.

Dr. Wilmer's legacy includes the contributions of hundreds and hundreds of trainees who have gone on to leadership roles throughout the world after training at Wilmer.
Momentum Grows for New Building

Researchers are eagerly looking at the best ways to optimize space and ensure collaboration across disciplines as progress continues in planning the new Wilmer Eye Institute building. Two nationally recognized architectural firms, Ayers/Saint/Gross, Architects+Planners (ASG) and Wilmot/Sanz, are combining their expertise to design the facility, which will support the creation and sharing of knowledge at Wilmer.

“Several faculty committees are now planning their transitions to the new building and are excited about the possibilities for collaboration the new environment will provide,” says Peter J. McDonnell, M.D., Wilmer’s Director and William Holland Wilmer Professor of Ophthalmology.

As construction costs continue to rise, it is all the more important that Wilmer remain on schedule for the building groundbreaking, set for Spring 2007. “With construction costs escalating rapidly, we cannot afford to delay the groundbreaking and the construction of the building. To maximize our resources, we must continue to accelerate our progress,” adds Dr. McDonnell.

Members of the Wilmer Eye Institute Advisory Council recognize the vital role the new building will play in advancing current research. “We urgently need to move ahead with the construction of the new Wilmer building in order to provide much-needed space for research on chronic eye diseases, such as age-related macular degeneration, glaucoma, and diabetic retinopathy,” says Rick Forsythe, co-chair of the Wilmer Institute Advisory Council. “Our facilities must be enhanced if Wilmer is to remain the number one eye care and research center in the world.”

Momentum for the new building, to be located at the corner of Broadway and Orleans Street, continues to grow. “The outpouring of donor support for the new building doubles our resolve to use funds as wisely as possible,” says Dr. McDonnell. “The significance of every gift is magnified as we move ever closer to the groundbreaking.”

To learn more about giving opportunities for the new Wilmer building, please contact Laurette Hankins, Director of Development, at lhankin2@jhmi.edu.

“Our facilities must be enhanced if Wilmer is to remain the number one eye care and research center in the world.”

Rick Forsythe, Wilmer Advisory Council Co-chair
PENSION PROTECTION ACT OF 2006 (PPA)

An Incentive to Make an Outright Gift to Johns Hopkins University from Your IRA

On August 17, 2006, President Bush signed the PPA into law. The section of the law relating to tax-free distributions from traditional or Roth Individual Retirement Account (IRA) assets can prove to be beneficial to Hopkins’ benefactors. You should consult with your own financial advisor to see how the PPA can be beneficial to you.

WHAT ARE THE BENEFITS OF THE PPA?

• The Act allows a donor to transfer up to $100,000 a year directly from an IRA to a qualified charity, like Johns Hopkins University, and not pay taxes on the funds.

• The gift to the charity excludes the contribution from the donor’s adjusted gross income (AGI) and is not subject to the 50 percent of AGI deduction rule.

• A distribution under the Act can satisfy your minimum distribution requirement.

WHO IS ELIGIBLE FOR THE PPA?

• The donor must be 70 1/2 years of age or older;

• The distribution must go directly from the IRA to Johns Hopkins University;

• Gifts cannot exceed $100,000 per taxpayer year in 2006 and then again in 2007; and

• Gifts must be outright (not to a donor-advised fund, support organization, charitable trust, pooled income fund, or charitable gift annuity).

WHO CAN BENEFIT FROM THE PPA?

• Donors who are required to take minimum withdrawals, but do not need additional income, can satisfy the distribution requirement with a transfer to Johns Hopkins.

• Donors who have already taken the maximum charitable income tax deduction (by giving up to 50 percent of their adjusted gross income) can now give up to $100,000 more from their IRA accounts because the IRA distribution is not subject to this limitation.

• Donors who receive no tax benefit when they make charitable gifts, because they do not itemize their deductions.

• Donors who are concerned that their IRA withdrawals will increase their AGI causing more of their social security income to be taxed.

• Donors who want to support Johns Hopkins and have major assets residing in their IRAs.

Please call the Office of Gift Planning for additional information at 1-800-548-1268 or 410-516-7954 or visit our website at www.jhu.plannedgifts.org
Renowned Retinal Surgeon and Entrepreneur Funds Professorship

Eugene de Juan, M.D., Professorship of Ophthalmology Inaugurated

If you ask Eugene de Juan, Jr., M.D., about his prolific career, his answer is surprisingly simple. “I really am someone who is dedicated to establishing new treatments for patients,” he explains. “The role of the academic physician is to make research practical, and sometimes you need to go into the for-profit world to do that. I take pride in being a person dedicated to improving the quality of life for people with serious eye disease.”

Dr. de Juan’s dedication and commitment to improving patient outcomes have been the driving force behind his 100 product innovations, the five companies he founded, and the establishment of the Eugene de Juan, M.D., Professorship of Ophthalmology.

Dr. de Juan was directed to Wilmer early in his education by his father, a recognized ophthalmologist in Mobile, Alabama, for whom the professorship is named. “When I was deciding to be a doctor and choosing my specialty, my father told me the best place in the world to study was Wilmer,” recalls de Juan, who received his M.D. at the University of South Alabama, where he also served an internship before completing his residency at Hopkins.

A member of the Wilmer faculty between 1992 and 2001, Dr. de Juan was the Joseph E. Green Professor of Ophthalmology, co-director of the Vitreoretinal Service, and director of the Microsurgery Advanced Design Laboratory. He has founded five companies including Second Sight, InnoRX (bought by Surmodics in 2005), and NeoVista, Inc., and holds patents on 40 medical devices.

Currently, Dr. de Juan is chairman of ForSight Labs, where he participates as an active inventor and advisor in next-stage ophthalmic device opportunities. He also holds the Jean Kelly Stock Distinguished Chair in Ophthalmology and sees patients at the University of California, San Francisco. Previously he was professor of ophthalmology at the University of Southern California and chief executive officer of the Doheny Retinal Institute, focusing on innovative techniques for treating blinding retinal disorders through retinal transplantation, macular translocation, robotic surgery, retinal implants, and other new procedures, medicines, and instruments.

Throughout his career, Dr. de Juan’s father served as his role model. “My father was dedicated to helping me and helping others,” recalls Dr. de Juan. “He always had a private practice, but he volunteered on the faculty of various residency programs and he was an attending physician for residents at the local hospitals.”

“This professorship is a good way to honor his contributions to my family and to the field of ophthalmology, his great dedication, and his style of mentoring and teaching,” says Dr. de Juan. “The responsibility of teaching residents is one that is not often fully acknowledged for its importance. Huge decisions are made during those formative years, so I thought it was timely and appropriate that a professorship be established for teaching and mentorship. I am pleased the entrepreneurial effort has come full circle to enhance the academic environment.”
James P. Dunn, M.D., inaugural recipient of the Eugene de Juan, M.D., Professorship of Ophthalmology has served as the residency program director at Wilmer since 1998. “This professorship is a wonderful honor and I am humbled. It reflects Wilmer’s commitment to resident education,” says Dunn, who notes that the Wilmer residency program has produced more department chairs than any ophthalmology program in the country. “It is easy under the current climate, with so much pressure to generate clinical revenues, to put education on the back burner. To produce the caliber of residents we train, we must make an investment of time and energy in teaching and residency training.”

In addition to directing the residency program, Dr. Dunn is also clinical director of Studies of the Ocular Complications of AIDS and clinical director of the Multicenter Uveitis Steroid Treatment (MUST) trial. He has co-authored more than 45 publications in the area of immunologically-mediated ocular disease and the ocular complications of AIDS.

“When I joined Hopkins in 1991, one of my immediate goals was to get involved in resident education,” says Dr. Dunn. “You are constantly challenged — the residents are so smart, so enthusiastic, and so good at what they do.”

“This chair provides a strong stimulus and incentive to live up to what Dr. de Juan would want: to be at the forefront of residency education across the country,” says Dr. Dunn, who anticipates increased interaction with other ophthalmology departments in creating new and exciting ways to teach residents. “For many years, the role of the residency program director was that of a ‘caretaker.’ The establishment of this professorship shows how that role has changed and its importance to Wilmer.”
**Dr. Patz Inducted into Hall of Fame**

On October 13, 2006, Arnall Patz, M.D., Director Emeritus of the Wilmer Eye Institute was inducted into the Hall of Fame for Leaders and Legends of the Blindness Field along with Anne Sullivan Macy (posthumously). Macy is known as a miracle worker for being the teacher of Helen Keller. Dr. Patz was also presented with the American Printing House Wings of Freedom Award, which is given to an individual who has achieved something outstanding or provided exemplary leadership in service to education or rehabilitation in the field of blindness with a long-term impact. These honors are the latest of many in Dr. Patz’s decorated career in ophthalmology.

The Hall of Fame for Leaders and Legends of the Blindness Field was founded in 2001 and is housed at the American Printing House for the Blind in Louisville, Kentucky. It is dedicated to preserving the tradition of excellence manifested by specific individuals through outstanding services provided to people who are blind or visually impaired in North America.

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**Rick and Sandy Forsythe To Co-Chair the Wilmer Advisory Council**

Rick and Sandy Forsythe have graciously agreed to serve as co-chairs of Wilmer’s Advisory Council. The Forsythes, from Winnetka, Illinois, have been active members of the Wilmer Advisory Council since 2002. They have provided funding for age-related macular degeneration research and related lab equipment, and have also been leadership supporters of the new Wilmer building project.

Rick Forsythe is the non-executive chairman of the board of Forsythe Technology, a company he founded in 1971 and sold in 2006. He has been a member of the Johns Hopkins Medicine Board of Trustees since 2005. He is a director of Prentice Women’s Hospital, and Northwestern University School of Medicine, as well as a director of the Page Center for Entrepreneurship at the Miami University of Ohio. Sandy Forsythe is a director of the Chicago Lighthouse for the Blind and Visually Impaired, and is a member of the Hadley School for the Blind Women’s Board.

“The Wilmer family is thrilled and grateful that people of the caliber of Rick and Sandy Forsythe are willing to serve in this important capacity,” says Dr. Peter McDonnell, Wilmer’s Director. “Aside from their tremendous philanthropic support of vision research here and elsewhere, the Forsythes have been extraordinarily generous with their time and real-world expertise in helping Johns Hopkins and the Wilmer Institute grapple with the key issues that face academic medical institutions today. They inspire all who work with them.”

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**Dr. Arnall Patz**

**Sandy and Rick Forsythe**
Wilmer Doctor Receives Research to Prevent Blindness Award

Richard D. Semba, M.D., M.P.H., of The Johns Hopkins University School of Medicine, has been granted a $55,000 RPB Lew R. Wasserman Merit Award by Research to Prevent Blindness (RPB). Established in 1995, the Merit Awards provide unrestricted support to mid-career M.D. and Ph.D. scientists who hold primary positions within departments of ophthalmology, and who are actively engaged in eye research at medical institutions in the United States. Dr. Semba is one of 84 scientists at 37 institutions who have been honored with the award.

Dr. Semba’s research focuses on vitamin A deficiency, the leading cause of blindness among children worldwide, affecting an estimated 350,000 children annually. He conducts his research on the prevention of vitamin A deficiency in developing countries in Southeast Asia and sub-Saharan Africa, and his investigations are aimed at understanding the risk factors and biological mechanisms that lead to vitamin A deficiency and blindness.

“In developing countries, thousands of children are still needlessly going blind from vitamin A deficiency — a preventable cause of blindness,” notes Semba. “The support from RPB will be crucial for future investigations to pinpoint ways in which programs and policies could be improved to reduce childhood blindness from vitamin A deficiency worldwide.”

Dr. Semba was recently promoted to professor in the Department of Ophthalmology at the Wilmer Eye Institute. He is co-editor of the highly acclaimed textbook Nutrition and Health in Developing Countries (Humana Press), which is appearing in a second edition in 2007, and author of Handbook of Nutrition and Ophthalmology (Humana Press, forthcoming, 2006).

Research to Prevent Blindness is the world’s leading voluntary organization that supports eye research. Since RPB was founded in 1960, it has provided hundreds of millions of dollars of support to medical institutions throughout the United States for research related to all blinding eye diseases.

Solomon Named as Katharine Graham Professor

Sharon D. Solomon, M.D., was named as the Katharine Graham Professor of Ophthalmology at the Wilmer Eye Institute, Johns Hopkins University School of Medicine. A retina specialist and board-certified ophthalmologist, Dr. Solomon’s clinical expertise includes medical and surgical treatment of age-related macular degeneration, diabetic retinopathy, epiretinal membranes, macular holes, and retinal tears and detachment.

“I am truly honored to have been named to the Katharine Graham professorship,” says Dr. Solomon. “I am dedicated to representing both the Graham family and Wilmer in a continued tradition of excellence.”
Unraveling the Genetics of Ocular Melanoma

S
 hannath Merbs, M.D., Ph.D., has spent the better part of her medical career at the intersection of two fields: ophthalmology and oncology. After taking time off to spend time with her three young daughters, Dr. Merbs returned to Wilmer in 2005 to resume her research and her clinical practice. Her research has been supported, in part, by a National Eye Institute re-entry grant designed to encourage women researchers returning to the workforce.

To further accelerate her research progress, Dr. Merbs recently received an award from the Morton F. Goldberg, M.D., Director’s Discovery Fund. The fund, created in 2003 by the friends and colleagues of Wilmer’s former director, enables the current director to provide critical funding to a select number of research projects with the greatest promise for pioneering breakthroughs. Dr. Merbs previously received a five-year Mentored Clinical Scientist Award (K08) from the National Eye Institute for her work on the molecular genetics of primary uveal melanoma.

“We need to learn how to better treat these patients and to identify those with melanoma that has already metastized to some other area,” says Dr. Merbs. “I will be working with researchers in the lab of Donald J. Zack, M.D., Ph.D., the Guerrieri Family Professor of Ophthalmology, to extrapolate from his work in cancer and genetics and apply it to the expression of genes in the retina.” Knowledge of the genetic changes that lead to cancer formation can improve diagnosis, facilitate detection of cancer in other areas of the body, and aid in the development of new treatments.

Dr. Shannath Merbs

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Dr. Merbs is also interested in improving the quality of life in patients who must have an eye removed. When that procedure is required, Dr. Merbs implants a temporary catheter in the back of the eye’s orbit. Family members can then deliver pain medication directly
to the site and patients are able to leave the hospital the day of surgery. Dr. Merbs is currently looking at improved implants for orbital fracture repairs and a technique to couple an orbital implant with a magnetized prosthesis to make the implant more attractive.

This past summer, Dr. Merbs traveled to Ethiopia on a project sponsored by the World Health Organization to look at ways to improve surgical techniques for scarred cornea, which can cause blindness. On a previous trip to observe patients in Tanzania, Dr. Merbs helped to identify a major contributing factor to recurring problems following surgery: incisions that were too short.

“Dr. Merbs exemplifies the clinician-scientist for which the Wilmer Institute is known,” says Peter J. McDonnell, M.D., Wilmer Director and William Holland Wilmer Professor of Ophthalmology. “She is an accomplished ophthalmic plastic surgeon who has recently helped develop a new operation and surgical instrument to improve the care of patients with the disease trachoma in Africa. In addition, her laboratory work promises to help us understand how gene regulation in the eye contributes to the onset of disease.” Dr. McDonnell added that Dr. Merbs is a “real triple threat — physician, scientist, and teacher for young trainees — and is a deserving recipient of the fund.”

Morton F. Goldberg, M.D., Director’s Discovery Fund Contributors

To date, leading contributors to the Morton F. Goldberg, M.D., Director’s Discovery Fund have committed more than $2.47 million toward a goal of $3 million. As of 10/01/2006, commitments of $5,000 and greater include:

$500,000 and above
Abraham* and Virginia Weiss

$250,000 to $499,999
Ms. Helen E. Day*
Mr. and Mrs. William T. Young, Sr.*

$100,000 to $249,999
Alcon Foundation, Inc.
Anonymous
Paula and William Bell
Mr.* and Mrs. Leonard L. Greif, Jr.

$50,000 to $99,999
Patricia and David Bernstein
Mr. and Mrs. Howard Brownstein
Charles J. Blair, M.D.
Paula Brooks and Robert Cook
Lee* and Albert H. Halff
Mr. and Mrs. Charles Krasne
Mr.* and Mrs. Donald Levinson
Mr. and Mrs.* Leonard Newman

$25,000 to $49,999
Fred Brown
Michael Elman, M.D.
Dr. and Mrs. James Gills, Jr.
Mr. and Mrs. Robert Katz
Beatrice C. Mayer Fund
Dr. and Mrs. Kenneth Merlau
Dr. Arnall and Ellen Patz
Norman Raab Foundation
Maureen A. and Albert T. Robinson

$10,000 to $24,999
Anonymous
Edmund F. and Virginia B. Ball Foundation
George and Dolores Eccles Foundation
The Funger Foundation, Inc.
The Hultquist Foundation
Arlene S. and Robert P. Kogod
Alicia and Robert Kunisch, Sr.
Jean M. and Edward B. Lipkin
Dr. and Mrs. Albert T. Milauskas
Helena Rubinstein Foundation
Dr. and Mrs. Louis Slesin
Robert H. Smith Family Foundation
Jennifer S. and William J. Wood, M.D.

$5,000 to $9,999
William Finglass
James H. Gray, M.D., P.A.
Susan B. and Sanford D. Greenberg, Ph.D.
Laurette L. Hanks
Mr. and Mrs. Raymond Kwok
Harriet and Jeffrey Legum
Dr. and Mrs. Jan M. McDonnell
Mrs. Robert H. Nixon
Ralph O’Connor
T. Boone Pickens
Mr. and Mrs. Emanuel Shemin
Stephanie and Marshall Wishnack

*deceased
Guided by families with an unusual number of cases, scientists at the Wilmer Eye Institute have discovered the genetic origins of at least one form of Fuchs’ corneal dystrophy (FCD), the leading reason for corneal transplantation in the United States.

In one form or another, FCD’s trademark deterioration of the cells covering the clear, outermost layer of the eye affects more than four percent of the population over the age of 40. Late in life, the dystrophy causes swelling of the cornea and can severely affect vision, making it impossible to see well even with glasses or contact lenses. It is believed that various forms of FCD are due to multiple gene mutations.

In a report in the September issue of Investigative Ophthalmology, a team led by Wilmer ophthalmologist John Gottsch, M.D., says it was able to map a common form of Fuchs’, found most often in women, to chromosome 18.

“Finding this chromosomal locus is putting us in the right neighborhood to find culprit genes,” says Dr. Gottsch. “Now we have to start knocking on every door.”

He is heartened by success with earlier Fuchs’ gene-hunting studies. The Hopkins group tracked down its first FCD-related gene in a Virginia family with multiple, early onset cases. That gene, labeled COL8A2, was mapped to chromosome 1. Prior to that, a large Indiana family with FCD, including a 10-year-old boy, led the team to yet another gene mutation, on chromosome 13.

**Analyzing Inheritance Patterns**

The scientists use linkage analysis, a process-of-elimination gene-hunting technique that analyzes inheritance patterns in families with relatively large numbers of affected individuals and traces genetic traits co-inherited or “linked” with the disorder. Researchers search for a common location for all the linked traits until they identify a single chromosome address. “It’s a painstaking process of elimination, but now we are closing in on the gene that causes what we believe is the most widespread form of Fuchs’, not just the rare types in individual families. Our methods have clearly shown that Fuchs’ is not just one disease, but rather a disorder with several genetic flavors.”

Dr. Gottsch became interested in FCD more than six years ago when he treated a woman with a corneal dystrophy of unknown origin that looked remarkably similar to FCD. “I knew it wasn’t classic Fuchs’, but rather something new,” he recalls. “In the end, it wasn’t Fuchs’ at all, but a sort of mutated distant cousin of the disease. It made me wonder if there were more genetic variants of the disease out there.”

He stopped wondering a few years later when he examined the Indiana family and discovered what he
thought at the time was the youngest case of FCD ever described in the scientific literature, that of a 10-year-old boy. However, literature published 25 years ago described a Virginia family with a 3-year-old girl with the disease. Dr. Gottsch contacted the original investigator and was able to reexamine the family. He was then able to determine the gene that afflicted this family, resulting in a unique and severe form of FCD. “I knew Fuchs’ was not one but several diseases with multiple genes involved when I started comparing how the disease affected these two families,” Dr. Gottsch says.

Accelerating Research Progress

Dr. Gottsch is looking to accelerate his research progress through a center dedicated to the disease. “The Fuchs’ Dystrophy Center will be dedicated to finding the causes of the dystrophy, the best possible treatments, and, eventually, a cure,” he explains. He is hoping to raise $10 million to endow the Fuchs’ Center, which will support researchers and staff, fellows in training, and the sophisticated equipment required for patient evaluation and treatment.

“This center would be committed to improving the surgical techniques that could be used to restore the vision of Fuchs’ dystrophy patients and to train fellows in the latest surgical and medical treatments,” says Dr. Gottsch. He anticipates the future development and use of various gene therapies to suppress the mutations. At present, corneal transplantation is the only solution for those severely affected.

His work, to date, has generated increasing interest from families affected by the disease as well as a host of other benefactors. “I am deeply grateful for the generous support I have received for this important research. Without the thoughtful philanthropy of individuals, including the Faller Family LLC, The Commonweal Foundation, Inc., Irv and Ginger Gomprecht, Mr. Ernie Hudson, Dr. and Mrs. William Lake, Mrs. Raquel De La Torre, Mrs. Josephine Sutland, Dr. and Mrs. Lawrence Pakula, Mrs. Rose L. Shure, and Mr. and Mrs. Thomas Utz our continued progress would not be possible,” Dr. Gottsch acknowledges.

Alcon Foundation Commits $1.5 Million to Wilmer

The Alcon Foundation, Inc. has committed $1.5 million to the Wilmer Eye Institute in support of research for age-related macular degeneration and retinal diseases.

“We are hopeful that Wilmer will receive this gift as further demonstration of Alcon’s recognition and appreciation for the innovative research and inspirational teaching that generates continued world-class patient care,” said Cary Rayment, Alcon chairman, president and CEO, “and for Wilmer Eye Institute’s leadership and excellence in eye health care.”

“The Alcon Foundation shares our goal of restoring vision and serving patients afflicted with eye disease,” said Peter J. McDonnell, M.D., Wilmer’s Director and William Holland Wilmer Professor of Ophthalmology. “Our partnership is significant as we develop our new research laboratories and expand our facilities for patient care.”

Alcon, Inc. is the world’s leading eye care company, with sales of $4.37 billion in 2005. Alcon, which has been dedicated to the ophthalmic industry for more than 50 years, researches, develops, manufactures, and markets pharmaceuticals, surgical equipment and devices, contact lens care solutions and other vision care products that treat diseases, disorders, and other conditions of the eye. The Alcon Foundation, Inc. supports organizations in the field of eye health care, leadership programs, research, education, and community responsibility.”
At a time when few women entered the military or pursued careers outside the home, Mary Hutcheson was the exception. A graduate of Emory University and Louisiana State University, she entered the U.S. Army in 1946 as a special service librarian. She supervised 45 Army libraries throughout Europe until she settled in Beacon, New York, where she was the librarian at the Texaco Research Center for nearly three decades.

“She was the kind of lady who liked to be in charge,” remembers her sister, Sue Wilson. A loving sister and a doting aunt, Miss Hutcheson “believed in paying back people with random acts of kindness in return for the many kindnesses she had received throughout her life.” Mrs. Wilson recalls how her sister would send packets of information to friends and family members around the country on topics or hobbies of particular interest to them.

When she was diagnosed with age-related macular degeneration (AMD), Miss Hutcheson encouraged her extended family to participate in Wilmer’s age-related macular degeneration eye study. “She was interested in establishing a fund at Wilmer in the hopes that researchers would take advantage of new discoveries and find a solution for macular degeneration before it struck her nieces and nephews and their children,” says Mrs. Wilson.

In September, Mrs. Wilson and family members were among those attending Wilmer’s Legacy Society Luncheon, where the inaugural Mary Hutcheson Fellowship in Ophthalmology was awarded to Margaret Chang, M.D., for the study of AMD.

“The award was a wonderful surprise for me,” says Dr. Chang, a third-year resident who has been selected...
as Assistant Chief of Service following completion of her retina training in 2008. “This is an amazing honor and I am humbled.” The fellowship will support Dr. Chang’s clinical training and her current research efforts.

Along with colleagues at Wilmer, she is currently involved in a long-term public health study to gain a greater understanding of which members of a test population are most at risk to form AMD and why. The Salisbury Eye Evaluation study is attempting to identify risk factors for progression of the disease and preventive practices that could reduce the likelihood of contracting it. Dr. Chang is also working on a study to test the effectiveness of the drug Lucentis in treating patients with hemorrhagic choroidal vascularization, or blood under the retina. The drug has proven to be effective in treating other types of choroidal vascularization. She is also researching the latest prototype for high-resolution optical coherence tomography, an imaging technique used with AMD patients that allows clinicians to view cross-sectional layers of the eye.

Earlier this year, Dr. Chang received an award from the Morton F. Goldberg, M.D., Director’s Discovery Fund and a fellowship from the Heed Ophthalmic Foundation.

“When everyone surrounding you is at the top of their game, it makes it that much easier to strive to be the best and excel at what you do,” she says.

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**Lincy Foundation Supports Macular Degeneration Research**

The Lincy Foundation has made a $3.5 million commitment to fund the research of Neil M. Bressler, M.D., the James P. Gills Professor of Ophthalmology and Chief of Wilmer’s Retina Division, in advancing the treatment of macular degeneration.

“We recently looked into eye research and the Wilmer Institute was an organization recognized for its particularly strong reputation in the field,” says a spokesperson for the foundation. “This is an area of interest to us and the work of Dr. Bressler was highly recommended.”

A new drug introduced last year, ranibizumab (Lucentis), holds great promise in treating macular degeneration — the most common cause of vision loss in individuals over age 50. But, as Dr. Bressler describes, “Only one third of patients treated see any type of improvement in their vision. We need to identify when the condition is just beginning so we can treat people more effectively.”

To address this need, Dr. Bressler is overseeing a study in six sites around the country and several colleagues at Wilmer to monitor the vision of some 300 patients at risk of developing advanced stages of macular degeneration over the next two years. Patients will regularly undergo tests to measure the structure and function of the retina in an attempt to identify the advanced stage just at its onset. “The Lincy Foundation support will allow us to definitively determine if these measures can help us identify the onset of advanced stages of macular degeneration and save the vision of millions of people with this disorder before significant vision loss has occurred.”

Dr. Bressler also realizes that not everyone can be helped with these treatments, including many who have lost vision from significant scarring of the retina before ranibizumab (Lucentis) was available. Additional support is being used to explore ways of restoring vision lost from such scarring.

“Without the Lincy Foundation funding, we would be unable to move so quickly and to answer these pressing questions right away,” says Dr. Bressler. “This type of support gives us the flexibility to respond immediately to these research challenges and that shortened timeframe means we could potentially save the vision of many more people.”
Regenerating the Optic Nerve

Leonard Wagner Trust Makes $1 Million Gift to Fund Glaucoma Research

When the Leonard Wagner Charitable Trust in New York disbursed its final gifts earlier this year, Trust co-director Paul Eichler placed the Wilmer Eye Institute at the top of the recipient list. For more than a decade, the Trust has supported the research of Harry A. Quigley, M.D., A. Edward Maumenee Professor of Ophthalmology and director of both Wilmer’s Glaucoma Service and the Dana Center for Preventive Ophthalmology, culminating in a $1 million gift this spring.

Through his research, Dr. Quigley is looking to reverse the devastating affects of glaucoma, which strikes more than three million people in this country alone and is one of the leading causes of blindness throughout the world. “We have supported his work on regeneration of the optic nerve, which could ultimately help return vision to millions of people living with glaucoma,” says Mr. Eichler.

“About a decade ago, we began talking about regenerating the optic nerve,” recalls Dr. Quigley. “Many esteemed researchers at Hopkins told me it could not be done.”

“If Leonard was alive, this was a project he would want to support. He was losing his vision and he watched a great friend lose her sight due to glaucoma and other vision problems.” At the time of his death, several weeks short of his 100th birthday, Mr. Wagner, a former Wall Street financier, was the oldest living member of the New York Stock Exchange and was still a partner in Wagner Stott, the securities firm he helped to found.

Wilmer’s relationship with the Trust began when the president of Rockefeller University referred an Eichler family member to Dr. Quigley for treatment. “We became very interested in his work and we knew he needed additional funds to get parts of his research underway. The glowing reports of his progress have been highlights for the Trust,” says Eichler.

Dr. Quigley has employed a number of advanced techniques, including stem cell research, genetic engineering, and growth factors in his work on optic nerve cell regeneration. Currently, humans do not have the ability to regenerate the optic nerve, which connects the eye with the visual centers of the brain through millions of fibers from the retina.

“About a decade ago, we began talking about regenerating the optic nerve,” recalls Dr. Quigley. “Many esteemed researchers at Hopkins told me it could not be done.” A note from one colleague detailing 48 reasons the regeneration could not occur has served as a road map for Dr. Quigley in his pursuits.

Some 1.2 million to 1.5 million retinal ganglion cells exist in the human retina and Dr. Quigley and his term are searching for ways to stimulate the regrowth of retinal ganglion cells, which die in glaucoma, and restore transmission of visual information to the brain. “Frogs and fish grow nerve cells constantly in their eyes, and the genome of their retinal ganglion cells is not that much different from humans.”

Adult stem cells may hold the key to replacing retinal ganglion cells, explains Dr. Quigley, who traveled to the laboratory of noted stem cell researcher, Derek Van der Kooy at the University of Toronto to observe firsthand how his team removed this special type of stem cells, called progenitor cells, from the eyes of adult mice.
“These cells were not repressed, but required stimulation with growth factors to begin producing new cells.”

Back at Wilmer, Dr. Quigley and his team found that they could grow even larger cultures of these cells in the lab using growth factors. When inserted into the affected eye of mice, the transplanted progenitor cells travel to the areas of the retina damaged by the glaucoma and begin repairing that tissue. If the process works as well in humans, the possibility of rejection would be eliminated because these cells would come directly from the patient.

“We have supported his work on regeneration of the optic nerve, which could ultimately help return vision to millions of people living with glaucoma...”

Looking ahead, Dr. Quigley foresees a biocompatible capsule containing genetically modified cells from humans and a growth factor that could be inserted in the eye to stop or reverse the damage from glaucoma. He notes that a feasibility study is now in progress in human patients with retinitis pigmentosa to slow down or stop the progression of that disease with an implanted growth factor.

“Gifts such as this one from the Trust allow us to explore exciting new ideas and look outside our established ways of thinking,” offers Dr. Quigley. In addition, the promise of private funding motivates junior investigators to enter the field and enables researchers to offer job security for key laboratory personnel, particularly between grant funding periods, he adds.

“Wilmer is one of a number of organizations that have benefited from the Trust, and we will continue to follow Dr. Quigley’s work,” explains Mr. Eichler. “We have been meaningful contributors to Wilmer and the staff at Wilmer has been more than appreciative.”
Returning the Favor

A Grateful Patient Provides Support

In the spring of 2004, a referral to the Wilmer Eye Institute changed the life of William Stewart, who was convinced he was going to lose his eyesight. “My vision was deteriorating and I was told by a doctor at a leading eye clinic that I would be blind in two to two and a half years. After learning this, a good friend of mine quickly made connections with a former Johns Hopkins board member, who arranged an appointment for me with Neil Bressler, M.D., at Wilmer,” states Mr. Stewart.

Within only two days, Mr. Stewart and his wife, Janet, traveled from Ohio to meet with Dr. Bressler, the James P. Gills Professor of Ophthalmology, who confirmed that Mr. Stewart did indeed suffer from a pattern dystrophy of the retinal pigment epithelium, but the long-term prognosis was more positive. “I would definitely not be blind in the near future,” exclaimed Mr. Stewart. At Dr. Bressler’s recommendation, a consultation was held with Walter J. Stark, M.D., The Boone Pickens Professor of Ophthalmology, who directs the Stark-Mosher Center for Cataract and Corneal Diseases at Wilmer. “Although I was concerned that removing my cataract would accelerate my disease, Dr. Stark determined it should be removed and should not advance my disease,” recalls Mr. Stewart. He adds, “I was impressed that both doctors shared with me that the research studies conducted at Wilmer supported their diagnoses. Following the cataract surgery my vision improved significantly. For the first time, I could look across the lagoon from my home and see branches on the trees. It was a gift!”

Mr. Stewart comes back to Wilmer for frequent check-ups. At some point, he would like Dr. Bressler to examine his sons and grandchildren to determine if his condition is hereditary. In the meantime, he has returned the favor paid to him by referring others to Wilmer. “Because of my experience, I have been able to introduce others, including a family member, to this truly remarkable Institute,” he notes.

Since his initial experience at Wilmer, Mr. Stewart was impressed by the level of professionalism the Wilmer faculty demonstrated to each other and to their patients. “Their decision-making is crisp and decisive, yet they tell it like it is in a very compassionate way,” he says. “I am very grateful to Drs. Bressler and Stark and to the talented, dedicated, and caring staff at Wilmer.”

Mr. Stewart has made philanthropic gifts supporting the work of Drs. Bressler and Stark, in large part because, “I am confident that if something can be done to prevent or reverse eye disease, it can be done at Wilmer.” He believes, “All gifts make a difference and ensure the continued research discoveries will have a positive impact on others who suffer with eye diseases.”
Andrew P. Schachat, M.D., Makes Gift to Robert Bond Welch, M.D., Professorship

Andrew P. Schachat, M.D., vice chairman for clinical affairs at the Cleveland Clinic Foundation Cole Eye Institute, and his wife Robin have provided additional support for the Robert Bond Welch, M.D., Professorship of Ophthalmology. Dr. Schachat previously served as assistant chief of service for two decades at Wilmer and is a former Wilmer resident. A world-renowned expert in treating retinal disorders, such as age-related macular degeneration and diabetic retinopathy as well as tumors in the eye, he is editor-in-chief of *Ophthalmology*, the journal of the American Academy of Ophthalmology.

“We wanted to honor Dr. Welch and what he has achieved for Wilmer and for Johns Hopkins,” says Dr. Schachat. “As a resident, I developed an interest in the retina due to the teaching and research efforts of retina faculty. Both Dr. Harrell Pierce and Dr. Welch went to great lengths to spend time with residents and their enthusiasm has rubbed off.”

Although Dr. Schachat recently left Wilmer to accept his current position at the Cleveland Clinic, “I have strong, positive feelings for the department and felt it was the right time to make this gift.” In addition, he believes the inaugural recipient of the professorship, Julia A. Haller, M.D., “epitomizes what is wonderful about Wilmer and about ophthalmology.”

“We are thrilled to participate in supporting this professorship. Robin and I hope to live long and prosperous lives, and we hope to be in a position to make future gifts to organizations that are important to us,” he says.

The Robert Bond Welch, M.D., Professorship of Ophthalmology is a lasting tribute to Dr. Welch, who graduated from The Johns Hopkins University School of Medicine in 1953, completed a residency in internal medicine at Duke University, and returned to Hopkins for an internship and residency at Wilmer. From 1959 to 1985, he co-directed the Wilmer Retina Service, where for 25 years, every Wilmer resident went through his training for three months. He also served as the chairman of ophthalmology at the Greater Baltimore Medical Center from 1985 to 1991, and was a retinal consultant to the Walter Reed Army Hospital and the Bethesda Naval Hospital.

Advanced Medical Optics Commits $500,000 to New Building

Advanced Medical Optics has committed $500,000 to the new Wilmer Eye Institute building, which is scheduled to break ground in 2007.

“As a global leader in ophthalmic surgical devices and eye care products, Advanced Medical Optics shares the passion of the Wilmer Eye Institute to provide the best possible eye care,” says Advanced Medical Optics president and chief executive officer Jim Mazzo. “We commend the Institute’s many contributions to the eye care community and are proud to support the development of the new Wilmer building for sustained excellence and success in the field of ophthalmology.”

“We are pleased that Advanced Medical Optics understands the importance of the education and research that occurs at Wilmer. They realize the more successful we are, the more successful the whole field of ophthalmology is,” says Peter J. McDonnell, M.D., Wilmer’s Director and William Holland Wilmer Professor of Ophthalmology.

Advanced Medical Optics is a global medical leader, focused on the discovery and delivery of innovative vision technologies that optimize the quality of life for people of all ages. Its products in the cataract/implant line include intraocular lenses, phacemulsification systems, viscoelastics, and related products used in cataract and refractive lenticular surgery.
The mission of the Wilmer Eye Institute is to contribute to ophthalmic knowledge and reduce suffering from blindness and vision loss at home and around the world, through leadership and excellence in research, education, and patient care.

Wilmer Services and Locations

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