In April 2008, the School of Medicine’s Department of Ophthalmology received the largest gift in its history from 1939 UNC alumnus David Kittner in partnership with the Samuel and Rebecca Kardon Foundation to establish an endowed innovation fund for the department’s future. On June 12, 2008, in recognition of Kittner’s and the foundation’s generosity, the department’s facility at UNC’s Ambulatory Care Center was dedicated and named the Kittner Eye Center. Kittner’s nephew, Sam Kittner, a 1985 Carolina alumnus, gave a special presentation honoring his uncle and remarks were offered by Chancellor James Moeser; Dr. Etta Pisano, Vice Dean of Academic Affairs for the UNC School of Medicine; and Dr. Travis Meredith, Department Chair and the Sterling A. Barrett Distinguished Professor of Ophthalmology.

“Our future is much brighter now,” Meredith said when the gift was first announced. “The need for ophthalmology services is increasing, and this endowment will help us provide even more advanced and technologically sophisticated services for our patients.”

For Kittner, the gift represents his strong love for Carolina and his deep appreciation for good vision, particularly after witnessing how various members of his family and others benefited from advanced eye care. “I thought that the gift would be a great way to help people well into the future,” he said. “I look forward to seeing the advancements the center will continue to make.”

Annual expendable funds earned from the endowment will be used for patient care projects such as the purchase of state of the art equipment, technology, clinical research, education and other focused projects. The specific use of funds will be approved annually by the department’s chair.

continued on page 3
This issue of the UNC Eye newsletter features a recent major gift to UNC Eye from David Kittner and the Samuel and Rebecca Kardon Foundation. Their generosity has endowed an innovation fund that for years to come will provide income to support the growth and development of our department.

As a physician you are aware of the importance of having an academic referral center that remains on the cutting edge of knowledge and technology. Additionally, you seek to have us serve you with improved communications and follow up once your patients are seen. We recognize the challenges and your needs. Our goal is to be that resource for your patients and for you.

North Carolina is blessed with excellent resources but the population of our state continues to grow in record numbers. Each academic center must step up and increase its ability to serve in order to keep pace with the progress in technology and the growth of the population. Private philanthropy will play a critically important role in our ability to meet the demands.

Therefore UNC Eye and its Kittner Eye Center are building a strong development program and we have increased our communications with our alumni, referring physicians and statewide eye care providers. We are truly committed to caring for your patients and to all of you as alumni, referring physicians and eye care providers. To improve communication about your patients you are now able to access their patient record on the UNC Webcis electronic record over the web. Instructions for how to accomplish this are found on the back of the notes we fax to you.

To provide our area doctors with outstanding education in eye diseases we have established a Visiting Professor program to add to our annual Spring CME event. The Visiting Professor program will bring six outstanding national leaders to our campus during the academic year representing the six core areas of ophthalmic knowledge. Each will give a Grand Rounds on Saturday during their visit for which CME credits will be awarded. Please be sure to check our upcoming CME schedule on page 11. We want to see you throughout the year.

We have a new name for our Low Vision program and are now referring patients whose sight cannot be restored medically to our “Living with Low Vision” program. The program’s emphasis is on helping our patients live life to the fullest. We are in the early stages of learning from our patients and listening to their needs in orientation and mobility as well as the tools that help them function fully in their lives.

Finally, it is our goal to increase the amount of feedback we receive from all the eye care providers in our state. You are a valued partner. Please contact me throughout the year with your suggestions or thoughts.

—Travis A. Meredith, MD
The goal of the ophthalmology department’s research and education activities is to increase knowledge of patient care options that will ultimately lead to improved vision or cures for blinding eye diseases, while at the same time training the next generation of ophthalmologists. Major multicenter national clinical trials are currently underway at UNC on diseases such as macular degeneration, diabetic retinopathy and retinopathy of prematurity. The department is also pursuing internationally recognized translational glaucoma research, with the goal of improving patient care after testing new discoveries in clinical trials.

Patient visit numbers per year for eye care at UNC have more than doubled from 1993 to 2007. The needs for ophthalmologic care are expected to continue increasing as more baby boomers retire and North Carolina’s population continues to grow. Over the next three to four years, it is estimated that annual patient visits will increase by more than 25 percent.

A 1939 UNC graduate with a business administration degree, Kittner now practices law in Philadelphia. In addition, he has two brothers, three nieces and two nephews who all have degrees from UNC. Previously of the university, primarily to the Rose and Louis Kittner Scholarship Fund, which provides need-based scholarships for undergraduate students.

**I thought that the gift would be a great way to help people well into the future. I look forward to seeing the advancements the center will continue to make.**

— David Kittner
For alumni and other physicians, planned giving can be the best way to support the mission of a university that holds a lifelong interest. Such gifts can be made through your estate by donating from retirement plans, leaving a bequest, or donating appreciated property. In leaving a lasting legacy, you may also reduce estate taxes.

The gift of appreciated property to establish a trust during your lifetime brings you the joy of partnering with an organization that reflects your interests and values, and it can also provide additional retirement income.

Your gift can become a productive and meaningful part of your financial planning while also supporting Kittner Eye Center at UNC. To explore the many choices of planned giving, you can contact Sandy W. Scarlett in the Development Office at 919-843-1299 or by email at Sandy_Scarlett@med.unc.edu.

Partners and Visionaries

Together with our alumni, ambassadors, volunteers, and donors, the faculty and staff of Kittner Eye Center work diligently to bring patients the most up-to-date medical care. Our mission is generously supported through individual, foundation, and corporate gifts such as these.

David Kittner, class of ’39, and The Samuel and Rebecca Kardon Foundation
The landmark Innovation Endowment for annual support of the Kittner Eye Center, the largest gift in the history of the Department of Ophthalmology

The North Carolina Lions Foundation and The A.E. Finley Foundation
Support for the purchase of state-of-the-art equipment to diagnose and evaluate retinal diseases in premature infants

Anonymous Donors
Establishment of a Visiting Professors Program to attract nationally recognized leaders who will work directly with residents and fellows teaching the latest scientific knowledge and technique.

Gift of a Patient
Monthly giving by a loyal Annual Fund donor, a resident of Clinton, North Carolina

We invite you, our referring physicians and alumni, to join us in supporting our exciting progress. Your generosity greatly benefits the vision of your patients, the future of our training programs, and the health of our citizens in North Carolina.

For information on giving, please contact me at 919-843-1299 or Sandy_Scarlett@med.unc.edu.

Many of you will be hearing from me throughout the year as I prepare to travel our state and beyond. I look forward to learning how we can work together to serve our patients. It is the patients who are our focus and with you we can make a positive difference.

Sandy W. Scarlett, M.A., M.B.A., CFRE
Development Director
UNC Eye Recruits for Clinical Trials

UNC is actively recruiting patients from physician and self referrals for a number of studies that include multi-center clinical trials in diabetic retinopathy, age-related macular degeneration, posterior vitreous detachment and retinopathy of prematurity.

We are recruiting for several studies in the Diabetic Retinopathy Clinical Research Network Group funded through the National Institutes of Health. UNC Eye is currently enrolling patients with macular edema associated with diabetic retinopathy or with proliferative (or close to proliferative) diabetic retinopathy. Treatments to be tested include standard of care versus a steroid injection or an anti-VEGF (vascular endothelial growth factor) injection, similar to those that have shown promise in age related macular degeneration. Any patient with diabetic eye disease may qualify as a subject.

UNC is one of 45 US centers to compare the effectiveness and dosage schedules of Lucentis and Avastin in the Comparison of Age-Related Macular Degeneration Treatments Trials (CATT).

Other studies include Longitudinal Study of Ocular Complications of AIDS (LSOCA-now in year 21 of funding) and Vitreosolve, which tests to treat posterior vitreous detachments (PVDs). Details and contacts for entering patients may be found at www.unceye.org or by calling research coordinators Sandy Barnhart at 919-843-0076 or Fatima N’Dure at 919-843-0087.

Research

UNC Eye Presents Research at ARVO

UNC Ophthalmology was well represented at the 2008 annual meeting of the Association for Research in Vision and Ophthalmology held this past spring. UNC Eye’s extensive research was highlighted through fifteen presentations by faculty, residents, fellows, and researchers.

Presenters included Chief Resident Isaac Porter, MD who presented “Are There Predictive Factors for Pseudophakic Pseudoaccommodation,” a project sponsored by Dr. Kenneth Cohen. From the lab of Terete Borras, PhD, “Elevated Concentrations of Q368X Myocilin Mutant Elicit Specific Changes in the Transcriptome of the Human Trabecular Meshwork” presented by A. Sigamani, M.A. Carbone, G. Li, R.R.H. Anholt, and T. Borras.

All presentations from this year’s meeting can be viewed at the ARVO website at www.arvo.org and for more information on current research at UNC Eye, please visit www.unceye.org.

Resident Conferences

UNC Eye Hosts 2008 Tri-Residency Conferences

Each year, Ophthalmology residents from UNC Eye, Wake Forest University Eye Center, and Duke Eye Center come together for joint conferences in the subspecialties of Glaucoma and Retina. In 2008, UNC Eye served as the host of these two events.

On February 23rd, residents from each institution convened in Chapel Hill for the 2008 Tri-Residency Glaucoma Conference. Joined by faculty, fellows, regional ophthalmologists, and optometrists, the conference included follow-up case presentations from the previous year along with six new interesting glaucoma continued on page 6
Chairman Emeritus David E. Eifrig Honored

David E. Eifrig, MD, former Professor and Chair of the UNC Department of Ophthalmology was honored in portrait at the Tri-Residency Retina Conference in April. Dr. Eifrig was appointed Chair of UNC Eye on September 1, 1977 and remained in that position until his retirement on June 30, 2000.

As an ophthalmologist, Dr. Eifrig was a proponent of bringing new and sometimes controversial surgical techniques to UNC. Early in his career as Chairman of the department, Dr. Eifrig was an advocate of intraocular lens implant surgery and was instrumental in having it available at UNC Hospitals. At the time, the technique was a contentious topic amongst his peers, but now it is the standard of care for patients with cataracts. Through Eifrig’s leadership, UNC Eye grew into a nationally recognized ophthalmology program, which has continued to grow and prosper under the guidance of the current Chair, Dr. Travis Meredith.

Spotlight

Dr. Mary Elizabeth Hartnett, a Clinician-Scientist with Scientific Insight

Beyond the exquisite complexities of her research and the full-throttle demands of a clinical practice, ask Dr. Mary Elizabeth Hartnett, MD, what drives her, and her answer is elegantly uncomplicated. “My patients,” she said.

Her patients are at two extremes: those 60 and older, who suffer from age-related macular degeneration, and the very young—premature babies afflicted with a disorder called retinopathy of prematurity. Each is the principal cause of blindness for that age group.

“I can’t tell you how many sleepless nights I have had about an infant. My goal is always to try to have vision develop in both eyes, or at least to get one eye,” Dr. Hartnett said. “I feel the same way about the elders. If we can do something to provide sight to a person so they don’t feel they’ll lose their independence, that’s very important.”

Dr. Hartnett is one of only two surgeons in North Carolina to perform microscopic surgery on tiny patients who may weigh scarcely three pounds, where the safe zone to enter the eye is only a single millimeter. There’s more. She also is among the few US surgeons fellowship trained in both adult and pediatric vitreoretinal surgery. She served as chief editor of the first text to address pediatric retinal diseases. This fall, she was awarded full professorship in the Department of Ophthalmology.

Moreover, Dr. Hartnett is the only surgeon in the UNC system to have received not one, but two RO1 research grants.
from the National Institutes of Health. The translational research she conducts brings laboratory discoveries to bear on clinical practice, and takes observations in patients into the lab for investigation. Dr. Hartnett “is a true clinician-scientist, with a combination of scientific insight, persistence, and true dedication,” said Department Chair Travis A. Meredith, MD. “She is absolutely determined to make a contribution to this work.”

“I am trying to understand why blood vessel growth goes awry, because that is what causes vision loss,” Dr. Hartnett said, describing the work supported by the two NIH grants, which are from the National Eye Institute.

Retinopathy of prematurity is a disorder experiencing a comeback because babies are being saved at younger gestational ages. The National Eye Institute estimates that in the US, about four hundred to six hundred infants each year become legally blind from retinopathy of prematurity.

In this disorder, oxygen exposure causes the development of blood vessels in the retina to become abnormal. The exact cause is unknown. “That’s why we’re using an animal model that has similarities to what actually occurs in preterm infants,” she said. Her laboratory research exposes animals to fluctuations in oxygen at levels similar to what human preterm infants experience in neo-natal intensive care units.

At the other end of the spectrum are patients over 60 suffering from the wet form of age-related macular degeneration. “One of the things they develop is blood vessels that invade the neurosensory retina, and that then causes vision loss.”

Her current studies spring from research done about a decade ago, during fellowship training in Boston. Dr. Hartnett was using infrared light to image the maculas in patients with macula degeneration, a new technique at the time that produced a three-dimensional perspective that “looks like the topography of the moon.”

“We found we could detect what appeared to be newly formed or abnormal choroidal vessels before they became apparent through the standard imaging method. The choroid is often where the blood vessels originate, then they grow into the neurosensory retina. We found that some people who had abnormal blood vessels did develop changes, and those people had vision loss,” she said.

From those observations, she developed a hypothesis to test in the lab. Today her lab is using an in vitro cell co-culture she developed and animal models to study what causes the blood vessels to grow from under the choroid into the neurosensory retina.

What the two investigations share, she said, “is that rather than inhibiting blood vessel growth, we’re actually interested in redirecting it. Either having it grow into the retina, in the case of retinopathy of prematurity, or, in the case of macular degeneration, having it not grow into the retina.”

Why did she choose her field? “I find surgery challenging and technically interesting, and when it goes well, extremely rewarding. It seems valuable for me to offer sight to someone who otherwise would not have it. It was the combination of that and the idea that there was so much more to be done. The same for macular degeneration. I guess every person I saw was older and struggling. My heart goes out to them, especially those who lived through World War II and the Depression. They have worked so hard and have great values. They are really special.”

Dr. Hartnett is the only surgeon in the UNC system to have received not one, but two RO1 research grants from the National Institutes of Health.

Research awards, grants, and gifts from our contributors help support important advancements like these.
Resident Update

New Residents

Dr. Graham Lyles joins the Kittner Eye Center and the UNC Department of Ophthalmology after completing an Internship year in Internal Medicine at the Moses H. Cone Memorial Hospital in Greensboro, NC. Born in nearby Winston-Salem, NC, Dr. Lyles completed his undergraduate studies at the University of Pennsylvania graduating Cum Laude with a degree in Biology. He then went on receive his medical education from the University of North Carolina at Chapel Hill School of Medicine.

Dr. Kathleeya Stang joins the Kittner Eye Center and the UNC Department of Ophthalmology after finishing an Internship year in Internal Medicine at the Wake Forest University Baptist Medical Center. Originally from Indiana, Dr. Stang received her undergraduate education at the University of Chicago where she majored in Biology and Psychology. She then received a Masters in Health Management and Policy from the University of Michigan School of Public Health before attending Rush Medical College in Chicago to receive her medical education.

Dr. David Sutton joins the Kittner Eye Center and the UNC Department of Ophthalmology after completing a Transitional Year at the Methodist University Hospital in Memphis, Tennessee. Born in Dallas, Texas, Dr. Sutton attended the University of North Carolina at Chapel Hill for his undergraduate studies where he majored in Biology and Philosophy. Following completion of his undergraduate work, Dr. Sutton remained in Chapel Hill where he received his medical education at the UNC-Chapel Hill School of Medicine.

Graduated Residents

Dr. Michael Wells completed his residency in June, 2008. Dr. Wells is currently in his first year of a Retina fellowship at The Ohio State University in Columbus, Ohio.

Dr. Kenneth Mathys completed his residency in June, 2008 and began his one-year cornea fellowship with the Eye Consultants of Atlanta. Dr. Mathys will be working with Alan Kozarsky, MD, Steven Hamilton, MD, and Barry Lee, MD and learning from them such surgical techniques as DESAEK, LASIK, and complex anterior chamber reconstruction.

Dr. Michael Tanner joined the Greensboro Ophthalmology Associates of Greensboro, NC after completing his residency in June, 2008. Dr. Tanner will be specializing in Comprehensive Ophthalmology and joins in practice fellow alumni of UNC Ophthalmology Hal Rollins, Jr., MD and Christine McCuen, MD.

Dr. Bonnie Henderson delivers the 2008 S. Dace McPherson, Jr. Memorial Lecture

Dr. Bonnie Henderson, an Assistant Clinical Professor of Ophthalmology at Harvard Medical School and partner at the Ophthalmic Consultants of Boston, presented the 2008 S. Dace McPherson, Jr. Memorial Lecture at this year’s Residents’ Day. Invited by the residents to be their guest lecturer, Dr. Henderson presented “Astigmatism Correction with Cataract Surgery and Postoperative Cataract Surprises.”
Dr. Cohen Presented with 2008 Arthur C. Chandler Teaching Award

Dr. Mathew Aschbrenner, a 2nd year resident, presented Dr. Kenneth Cohen with the 2008 Arthur C. Chandler Resident Teaching Award at the Annual Residents’ Dinner and Award Ceremony. Selected by the residents, this award is presented to the attending physician they feel has contributed most strongly to their teaching during the year. Dr. Aschbrenner remarked that, “It is obvious to all of us as residents that Dr. Cohen loves teaching us and this is one reason why he has been at UNC for the past 30 years. His passion for residency education is clear to anyone involved with UNC.”

Drs. Porter and Russell Presented with the Frederick W. Stocker Award

Dr. Kenneth Cohen presented the 2008 Frederick W. Stocker Award for Outstanding Resident Research to both Dr. Isaac Porter (left) and Dr. David Russell (right) at this year’s Residents’ Dinner and Award Ceremony. Dr. Porter was honored for his research project titled, “Are There Predictive Factors for Pseudophakic Pseudoaccommodation?” and Dr. Russell for his project titled, “Astigmatism After Bimanual Phacoemulsification.” Both projects were sponsored by Dr. Cohen.

Fellows

Usha Pinninti, MD completed her medical retina fellowship at UNC in June, 2008. Dr. Pinninti is now an attending physician at the Portland Oregon VA Medical Center where she teaches and works with residents from nearby Casey Eye Institute in medical retina and cataract surgery.

Jan Niklas Ulrich, MD is beginning his surgical retina fellowship in early November, 2008. Dr. Ulrich attended Ludwig-Maximilians-University in Munich, Germany where he completed his undergraduate and medical training. He received his specialty training at Geisinger Medical Center in Danville, PA.

George Escaravage, MD is currently in his second year of an Ophthalmic Plastic and Reconstructive Surgery fellowship with Jonathan Dutton, MD, PhD. In late August, Dr. Escaravage and his wife Vaishali, celebrated the birth of their first child.
**Personal Notes**

**Kenneth L. Cohen, MD**, was honored for his 30 years with the UNC Department of Ophthalmology on September 13.

Over the last 30 years, Dr. Cohen has established himself, both nationally and globally, as one of the leading experts in cataract and intraocular lens surgery. He has been on the forefront of developing and promoting new surgical techniques and having them available to patients of UNC Eye.

Throughout his career with UNC Eye, Dr. Cohen has been an advocate for the education of resident physicians and his peers, locally and on the international level. In 2007, Dr. Cohen along with then Chief Resident Casey Mathys, MD, traveled to Hanoi, Vietnam on a trip sponsored by ORBIS International, a humanitarian organization dedicated to blindness prevention and treatment in developing countries. The mission of the trip was to teach corneal transplant surgery to the ophthalmologists at the Vietnamese National Institute of Ophthalmology.

UNC Eye would like to congratulate and thank Dr. Cohen for 30 years of outstanding service and dedication to his patients and the department.

**Henry Greene, OD**, optometrist and Professor in the Department of Ophthalmology at UNC, will receive the 2008 William Feinbloom Award from the American Academy of Optometry at its annual meeting this October in Anaheim, California. Dr. Greene directs UNC’s Low Vision rehabilitation service.

Dr. Greene is an internationally-known researcher and developer in the field of visual impairment. He has been the principal investigator on both the National Eye Institute and Canadian National Institute for the Blind funded projects to develop novel optical aids for those with macular degeneration and other visual disorders. With over $1 million in research grant awards, the devices are now prescribed worldwide and include the world’s only autofocusing bioptic telescope system.

The William Feinbloom Award is given annually to an individual who has made a distinguished and significant contribution to clinical excellence and the direct clinical advancement of visual and optometric service, and thus the visual enhancement of the public.

**Jonathan Dutton, MD, PhD** was selected as the 2008 Washington University Ophthalmology Distinguished Alumnus. At their annual Fall Ophthalmology Update held in St. Louis on October 3 - 4, Dr. Dutton delivered the 18th Annual Distinguished Alumnus Lecture titled “Thyroid Eye Diseases: Immunological Considerations.” He also presented “Human Orbit – 50 Million Years in the Making.”

**Nuria Comes**, a third-year post-doc in the laboratory of Terete Borras, PhD, received one of the few “Young Investigator Travel Awards” from the International Society of Eye Research. This award allowed Nuria to travel to Beijing, China in September to attend the 2008 International Society of Eye Research meeting to present, “The molecular signature of pressure response shows calcification as one of the mechanisms regulating outflow facility,” a work co-authored by Dr. Terete Borras.

**Sandy W. Scarlett, MA, MBA, Development Director for UNC Eye**, was awarded certification as a Certified Fund Raising Executive (CFRE). As stewards of the public trust, CFRE International certifies fundraising professionals who demonstrate the knowledge, skills and commitment to the highest standard of ethical and professional practice in serving the philanthropic sector. The certification process is based on current and valid standards that measure competency in the practice of philanthropic fundraising.

**Sandy J. Barnhart**, a Social / Clinical Research Specialist in the Department of Ophthalmology at UNC, will lead and organize a local North Carolina chapter for Women’s Eye Health.org, for which Mary Elizabeth Hartnett, MD is a Board Member. Women’s Eye Health.org was formed in response to the troublesome reality that two-thirds of the world’s population of blind and visually impaired persons are women.
Terete Borras, PhD, Professor of Ophthalmology and the principal investigator for the Molecular Mechanisms of Glaucoma and Gene Therapy Program at UNC was a participant and session organizer at several international meetings this year. In June of 2008 in Hong-Kong at the World Glaucoma Congress, Dr. Borras organized the session titled, “Glaucoma Therapy: What is Under Development for the Future?”

Jonathan Dutton, MD, PhD and Kenneth Cohen, MD were invited guest speakers at the 40th Annual Conference of the Michigan Eye Society of Physicians and Surgeons in Mackinac Island on August 7-9, 2008. Dr. Cohen presented two lectures, “Evolution of DSEK” and “Trends in Cataract Surgery: Power Modulation.” Dr. Dutton presented two lectures as well, “Thyroid Eye Disease: Immunological Considerations” and “Uveal Malignant Melanoma: Cytogenetics and Clinical Implications.”

Travis A. Meredith, MD, Chair of the Department of Ophthalmology and Sterling A. Barrett Distinguished Professor was recognized by the American Academy of Ophthalmology with the Life Achievement Honor Award for his many years of distinguished service in the programs of the Society.

Ground Rounds & Visiting Professor Schedule

Grand Rounds and Visiting Professorships are held from 8:00 – 10:00am in 1131 Bioinformatics Building unless otherwise noted. Each session has been approved for two hours of CME Category I Credit. The NC Board of Optometry has also approved two hours of CE for optometrists. You can also view a list of past and future CME events at UNC Eye by visiting our website at www.unceye.org.

December 5, 2008 Oculoplastics Grand Rounds
January 10, 2009 Visiting Professor
Mark Johnson, MD
Professor of Ophthalmology & Visual Sciences
University of Michigan Kellogg Eye Center

February 14, 2009 Visiting Professor
Bartley Frueh, MD
Professor of Ophthalmology & Visual Sciences
University of Michigan Kellogg Eye Center

March 6, 2009 Cornea Grand Rounds

April 4, 2009 Visiting Professor
Eric Eggenberger, DO
Professor and Vice Chairman, Neurology
Michigan State University

May 1, 2009 Pediatric Ophthalmology Grand Rounds

June 5, 2009 General Ophthalmology / Residents’ Day

March 28, 2009 2009 UNC Eye Symposium
The Sunflower Room
William & Ida Friday Center
Chapel Hill, NC
THE UNIVERSITY
of NORTH CAROLINA
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