I hope you enjoy this issue of the Searchlight. We are excited to tell you about our new initiatives as well as our desire to eliminate blindness from Glaucoma in the Greater Philadelphia Area. Through early detection and treatment, we know that we can improve the quality of life for many.

We have a powerful team guiding our work. Ms. Sheila Williamson joined the Glaucoma Service Foundation as Executive Director last fall. Ms. Williamson has extensive experience in fundraising and community education. Her years of success at the American Cancer Society will translate into significant growth for us. Furthermore, we have added new board and committee members who have been touched by glaucoma directly or indirectly through a family member or friend.

As we ramp up our activities, we are engaging in a robust campaign to raise funds to pursue more research, community education and engagement, and patient empowerment. Now more than ever we need your support as a donor and bridge to others who might be likely to help. You can make direct contributions using the envelope in this newsletter. There is an article on page 3 that shares how others have contributed through bequests and you can as well if you are so inclined.

I have heard so many stories from families that are coping with the challenges brought on by glaucoma, many of which could have been avoided. The Glaucoma Service Foundation, in cooperation with the Glaucoma Research Center and the Glaucoma Service at Wills Eye Institute, has deep commitments to serving and working with you.

Please visit our website at www.willsglaucoma.org to learn more about what you can do to fight this disease that takes so much from so many. Together we can end the tragedy of vision lost to glaucoma.

Sincerely,
Jeremiah J. White, Jr.
President

Marc S. Goodman, CPA is a member of Bush Tecosky Goodman Feldman LLC (BTGF). He has more than 30 years of public accounting experience. Marc has a vast array of talents and has significant experience in the areas of audit, review, and compilation services, small business consultation, and corporate and individual tax planning.

Karen Palenstini, Esquire is a partner at Dilworth Paxon LLP. She concentrates her practice on mergers, regulatory matters, acquisitions and joint ventures. Karen has particular experience in the healthcare, wellness and education areas of commerce.
Note from the Executive Director

As the newly appointed Executive Director of the Glaucoma Service Foundation to Prevent Blindness, I am honored to be a part of an organization whose mission is to train tomorrow's glaucoma specialists, support research, educate the public about glaucoma and the importance of vision screening and provide support to those living with glaucoma.

Over the next few months, look for a new and improved website that will offer more information about disease management and living with glaucoma. We will also take our message of education and awareness into the community and we will launch an aggressive campaign to raise funds to support glaucoma research and our sight-saving programs and services. We intend to reconnect with old friends and supporters and develop new partnerships along the way.

We want the Glaucoma Service Foundation to be the recognized leader in the fight to prevent blindness from glaucoma. I am truly interested in your thoughts on how we can better serve you and the community, so I invite you to give me a call at 215 928-3283 or send me a note at swilliamson@willseye.org.

We thank you for your continued support and I look forward to partnering with you in the fight to end blindness from glaucoma.

Yours in the fight,
Sheila Williamson,
Executive Director Glaucoma Service Foundation.

Glaucoma Service Foundation’s 6th Annual CARES Conference

The 6th Annual Glaucoma Service Foundation’s CARES Conference was held on September 22, 2012 at Wills Eye Institute. This year we had over 175 attendees. In addition to lectures by world renowned Wills Eye glaucoma physicians, attendees had the opportunity to speak with those physicians in a relaxed atmosphere and visit vendors to learn about low vision services and patient assistance programs. Guest speakers included Jule Ann Lieberman from the EZ2C Foundation: “Using Tools and Techniques to Expand Your World.” Vivian Werner, Webmaster for the Glaucoma Service Foundation, presented “Navigating the New Website.” Brittany Morgan, Chat Room volunteer presented “My Glaucoma Story.” Free glaucoma screenings were also available.

The Glaucoma Service Foundation also thanks the Wills Eye Institute Glaucoma Service physicians and fellows who shared their time and knowledge with us.

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The Foundation is extremely grateful for the many volunteers who made this event possible: Glaucoma Service staff members and their families, clinical and research fellows and observers, Wills Eye and Jefferson residents and medical students, members of the

Glaucoma Service Foundation sponsored fellows give eye screenings at the 6th annual CARES Conference on September 22, 2012.

Photo: Roger Barone

Foundation’s Board of Trustees, Villanova’s Delta Gamma Sorority, and Jack Scully, Roger Barone, Bill Romano, and Mike Wurster for overseeing the video, photography, and security.

The Robison D. Harley Fund for Glaucoma Education and Research once again sponsored this event. The following generously provided gifts-in-kind: Allergan, Carl Zeiss Meditec, DeVitis Design, Subway, Philly Soft Pretzel, The Bagel Factory, Associated Services for the Blind and Visually Impaired, EZ2C Foundation and the Wills Eye Glaucoma Research Center. Information on our 7th Annual CARES Conference will be posted on our website and our Facebook page.

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E. B. Spaeth Oration – January 24, 2013

The E. B. Spaeth Oration lecture and dinner was held on January 24, 2013 at the College of Physicians in Philadelphia. Dr. Joan O’Brien, Chair of the Department of Ophthalmology and Director of the Scheie Eye Institute at the University of Pennsylvania School of Medicine, was the featured speaker this year. Her topic “Genetics of Uveal Melanoma” was a masterpiece, graphically showing how cells grow and how newer treatments may prevent or cure cancer.

This is the 36th year of the event which honors Edmund B. Spaeth, an internationally respected physician and teacher who died in 1976. The evening, devoted to celebrating great teaching and great teachers, brings together fellows, residents, medical students from Wills Eye, Temple, Jefferson, Scheie Eye Institute, Drexel, Children’s Hospital of Philadelphia, Philadelphia College of Osteopathic Medicine, and ophthalmologists from all over the Greater Delaware Valley. Alcon, Allergan, Bausch & Lomb, Carl Zeiss-Meditec, Glaukos, and Merck were joint sponsors for this wonderful and informative evening. The intent of this unique event is to broaden and deepen ophthalmologists’ understanding of the art and science of medical practice. It is an educational evening both academically and socially. The event is also part of the Greater Philadelphia Ophthalmic Society’s series of programs.

Bequests… Help for Today, Hope for Tomorrow

When you remember the Glaucoma Service Foundation in your Will, you know that you will be a partner in the campaign to make the world free from the miseries caused by glaucoma.

A gift designated in your will for the Glaucoma Service Foundation can be structured in a variety of ways.

- An **outright** bequest leaves a specific gift of cash, assets or property to the Foundation.

- A **residual** bequest leaves all, or portions of your estate to the Foundation after all disbursements, i.e. debts, expenses, taxes, etc. have been made.

- A **contingent** bequest results in a gift from your estate only if other beneficiaries do not survive you or cannot accept it.

- Your bequest can be designated for a preferred area like research.

- It can be used to create an endowed or named fund.

Making a planned gift to the Glaucoma Service Foundation is not complicated but is best left to trained professionals like a financial analyst or attorney. If you would like more information about legacy and planned giving, please call our office at 215-928-3190 to speak with our knowledgeable staff.
Wills Eye Glaucoma Research Center Awarded 2-Year CDC Community Outreach Project

In October 2012, the Wills Eye Glaucoma Research Center was awarded $1.8 million from the Centers for Disease Control and Prevention (CDC) to conduct a 2-year project entitled: Improving Access to Eye Care among High-Risk Persons for Glaucoma in Philadelphia. This truly revolutionary project mobilizes existing community partners in Philadelphia to implement a community-based intervention to improve detection, management, treatment, and follow-up care of individuals at high risk for glaucoma. By bringing eye exams, laser treatment, and follow-up care directly into the community settings, this project aims to improve access to eye care and reduce vision loss in high risk populations. The goals of the project are to: 1) identify and engage at least 5,000 adults (African Americans age 50+, older adults age 60+) in underserved communities in Philadelphia most vulnerable to glaucoma and provide on-site educational workshops to increase awareness about glaucoma and its risks, 2) perform 2,500 on-site complete eye exams to detect glaucoma in these high-risk individuals, and 3) provide on-site management, treatment, follow-up exams, and referrals in individuals diagnosed with glaucoma or identified as a glaucoma suspect. Wills Eye has partnered with the Philadelphia Corporation for Aging, Philadelphia Senior Center, Center in the Park, Health Promotion Council, Southeast Asian Mutual Assistant Associations Coalition, The Council of Spanish Speaking Organizations, Philadelphia Housing Authority, Thomas Jefferson University, Temple University, and the Philadelphia Health Department to conduct these screenings and follow-up exams. All participants will receive a complete eye exam by a glaucoma specialist, as well as testing of visual fields and photos of the optic nerve at no charge. Some individuals diagnosed with glaucoma will be offered laser therapy and several follow-up visits in the community setting. The long-term impact of this project is to reduce health disparities, disability, and economic burden from vision loss due to glaucoma.

Senior Outreach

Research Fellow Dr. Yi Sun has been volunteering Thursday afternoons at the Coffee Cup Senior Center (located at 247 S. 10th St, Philadelphia, PA) lecturing to local seniors about eye care. Dr. Yi is visiting from Chengdu, China where she is currently a colleague of former Research Fellow Dr. Hong Wei at Sichuan University. Due to its proximity to Chinatown, the majority of visitors to Coffee Cup Senior Center are of Chinese descent. Dr. Sun is able to lecture to them about common conditions and answer questions about eye health in their native language. She is currently working on several research projects, including one on angle-closure glaucoma under the supervision of Dr. Jonathon Myers.
Eye on Useful Research
By: George L. Spaeth, M.D.

There probably is a reality “out there” independent of us, if we weren’t around, that reality would still exist. Knowing about that reality allows us to understand it and to some extent manage it. There are various ways to learn about that reality, such as from teachers or reading, or the internet. However, such learning doesn’t increase what is actually known; rather, it just spreads around the knowledge that already exists.

Much of what we think we know is wrong, that is, not really consistent with reality. Obvious examples are beliefs in years past that the world was flat, or that the sun moved around the earth. Those beliefs were “absolute.” People knew with certainty that they were correct.

What is clear is that it is never possible for any of us to see the whole picture. We can only see the world from one point of view at a moment in time. We can move to a different point of view and look at what we were examining from a different side, and even move all the way around that particular object until we can see it from every side. However, we still don’t see the whole picture, because we are only looking from the outside in, and don’t see what’s happening inside. Let’s assume, however, that we can actually look from inside out also. Even if we were able to do that, we would still not be able to see the whole picture with certainty, because between the time that we looked at one side and then looked at the other side, there would be a slight change in the object, but we couldn’t see that change, because we would not be looking at where that change was occurring. Philosophical historians such as Benedetto Croce commented that it was never possible to know accurately what had happened in the past. Present versions are always reconstructions that are at least partially wrong. Bishop Berkeley commented that we create our own conceptions of the world and could never know it accurately. Saint Paul noted that, “Now we see through a glass darkly.” This inability to see the world completely accurately was codified by the atomic physicist Heisenberg with his “uncertainty principle” when he proved that it was not possible to know at any moment exactly where an electron would be as it was spinning around the nucleus of an atom.

What we see or think we see is affected by our genes, which affect the receptors that we have that relate us to the external world. What we see are our previous experiences by the situation which we are at the moment, by custom, by beliefs, and by biases. The fact is we often interpret reality incorrectly. There is an old saying that, “Seeing is believing.” But really it should be, “Believing is seeing.” Because what we see is strongly influenced by what we believe.

What good research does is allow us to see (or understand) the real world more accurately, and perhaps even accurately. What useful research does is allow us to see or understand that reality in a way that provides a benefit.

It is obvious that people who have absolutely no sight will not be able to perform the activities of daily living as well as people who have normal vision. One doesn’t need to do a study to determine that. However, what’s interesting is that the relationship between the ability to see and the ability to perform the activities of daily living is not as close as one might think.

We reasoned that perhaps the cause for this poor relationship wasn’t in the eyes, but was in the brain, and we developed a study to test that hypothesis. What we found was that people with glaucoma lose function in certain areas of the brain, and actually gain function in other areas of the brain. That’s not what we expected to find, but that’s what we did find. Knowing that, we can now perform other studies to try to understand better the relationship between vision, the brain, and what people can do!

By and large, we see what we look for. By and large, we look for what we know. Thus, by and large, we only see what we already know. What research is about is seeing a part of the real world that has not been seen before and that nobody has known before. What useful research is about is seeing a part of the real world that has not been seen before and that will be useful.
Dr. Spaeth Recipient of the 2012 Schweitzer Leadership Award

Dr. George Spaeth was awarded the Albert Schweitzer Prize for Humanitarianism at the sixth annual Celebration of Life ceremony held at Jefferson School of Population Health on May 16, 2012. This Humanitarianism Award was originally established in 1986 by Dr. h.c. Alfred Toepfer of the Alexander von Humboldt Foundation to advance the cause of humanitarianism in the United States through recognition of extraordinary achievement. Previously administered by Johns Hopkins University, the prize is now presented by The Albert Schweitzer Fellowship on behalf of its Schweitzer Fellows for Life Alumni Network—an interdisciplinary pipeline of more than 2,000 Leaders in Service who are dedicated to addressing health disparities. This award recognizes an individual whose life example has significantly mitigated the social determinants of health in the U.S. and whose commitment to service influences and inspires others. Dr. Spaeth is the Founder and Director of Medical Research and Education at the Glaucoma Service Foundation. He is also the Louis J. Esposito Research Professor at the Wills Eye Institute. His students have gone on to provide quality eye care to people in need in thirty-four countries encompassing six continents.

Wish List

People who read the Searchlight on Glaucoma, and who visit us in our offices often wonder "What can I do?" In response to this question, we have asked our doctors and fellows to create a Wish List of items that support their research and clinical work at the Wills Glaucoma Research Center. Please consider funding or partially funding one of these items.

Endnote Software - $300

The rate at which new medical information pours out of the universities is astonishing and somehow the doctors at Wills Eye must read and catalogue an ever increasing volume of information required to provide top-flight care to their patients. One useful tool for making, storing and accessing this medical information is a software package called EndNote. EndNote is also used by doctors to publish their medical findings to communicate with other doctors who are faced with patients who have similar complaints. EndNote is used to manage literally thousands of these articles and make the real information easy for the doctors to retrieve. The cost to purchase Endnote Software is $300.

Computers to support the SPARCS Research Project - $10,000

The Spaeth Richman Contrast Sensitivity (SPARCS) Test is a computer-based test to evaluate the ability of patients to discern between different shades of dark and light. This is important because many ocular diseases such as glaucoma, macular degeneration, diabetic retinopathy and cataracts harm patients’ ability to do so. Knowing that a patient has lost his or her ability to tell the difference between various shades can be an early warning sign for eye disease. Initial testing has shown SPARCS to be a better test than other tests currently available. Further testing is needed to confirm this. While the software for this test is available free of charge, computers are needed to enable our researchers to gather additional data from the individuals with varying cultural backgrounds, various lighting backgrounds, and various eye diseases. Ten computers will be needed and each one costs about $1,000. Thus, $10,000 will fully fund this project.

A Konan Pupillometer - $17,950

In glaucoma patients, the optic nerve of one eye is often more damaged than the nerve of the other eye. This can be determined by observing how patients respond to varying degrees of light. Ophthalmologists
Meet GSF New Research Fellows

**Wanda Hu, MD**

Wanda Hu, MD will be beginning a Clinical Fellowship under the supervision of the Wills Glaucoma specialists this July. Dr. Hu is currently completing a Residency in ophthalmology at Jules Stein Eye Institute in Los Angeles. She received her medical degree from the University of California at San Diego where in 2009 she was named the Department of Ophthalmology's Senior Student of the Year. Dr. Hu's research has been published in in Ophthalmology, Ophthalmic Plastic and Reconstructive Surgery, Neuroreport, and the Journal of Neuroscience Research.

**Sonya Shah, MD**

Sonya Shah, MD begins her Clinical Fellowship this July. Dr. Shah is currently in her final year as a Resident at Wills Eye Institute, a program run by former Fellow Dr. Tara Uhler. Dr. Shah received her medical degree from John's Hopkins University, and her undergraduate degree from the University of Pennsylvania. During her time at John's Hopkins Dr. Shah volunteered to deliver medical services in rural areas of Honduras. She is a member of the American Academy of Ophthalmology, and the Pennsylvania Academy of Ophthalmology.

**Timothy Sullivan, MD**

Timothy Sullivan, MD, a native of Springfield, IL will be joining us for a Clinical Fellowship beginning in July. Dr. Sullivan is a graduate of the University of Michigan Medical School and of Dartmouth College. Since 2010 Dr. Sullivan has trained as a Resident at New York Eye and Ear Infirmary with former fellow Dr. Tania Tai. Active in volunteerism, Dr. Sullivan has treated patients in the Dominican Republic, worked with the Red Cross and tutored at-risk children. He is also an Eagle Scout.

**Victor Cvintal, MD**

Victor Cvintal, MD began a Research Fellowship in November. Dr. Cvintal is a native of Sao Paulo, Brazil and will be with us through November, 2013. Victor has served as an instructor at Tadeu Cvintal Institute of Ophthalmology, where he instructed residents on cataract surgery. Dr. Cvintal's video Blink won the Special Category Award at the 2010 International Congress on Cataract and Refractive Surgery. Selective research projects during his time at Wills Eye will include a look at the effectiveness of treatments for acute angle closure glaucoma, and a comparison of the effectiveness of two types of visual field tests.

**Elif Erdem, MD**

Elif Erdem, MD joined us for a Research Fellowship in November, she will be with us through May. Dr. Erdem comes to us from Ankara, Turkey, where she is a Professor at Cukurova University. Dr. Erdem's research has been published in International Ophthalmology and Journal of Ophthalmology. During her stay here Elif is working on a project to evaluate the quality of life of those living with glaucoma. She is also working with Dr. George Spaeth on creating a new method to teach his Disc Damage Likelihood Scale to ophthalmologists.
have performed this kind of test for many years, but it takes extensive training to do so. The Konan Pupillometer can make it much simpler for a skilled examiner to perform, and just as important, the test lasts only a few minutes. The cost to purchase this instrument is $17,950.

ARVO Conference - $25,000

Each year the Association for Research and Vision in Ophthalmology (ARVO) has its annual meeting, to which around 15,000 of the most influential ophthalmologists come all over the world because this is “the meeting” at which new findings are exchanged.

Our Glaucoma Service fellows and medical students submit materials to the Program Committee, and on average we have around five to eight abstracts accepted for posters or presentations. The cost to prepare of a poster is approximately $300. However, travels costs can be much greater. This year’s meeting will be held in Seattle. Airfare will vary from $500 to $1,000 (coach style) and accommodations will cost approximately $500. The cost to prepare posters, presentations and send five to eight investigators to attend ARVO is approximately $25,000.