The Glaucoma Service Foundation to Prevent Blindness is hosting the 10th Annual CARES Conference on Saturday, April 29, 2017, at the Dorrance H. Hamilton Building at Thomas Jefferson University, 1001 Locust Street, Philadelphia, PA from 8:00 AM to 1:00 PM.

Since January 2007, the Glaucoma Service Foundation located at the Wills Eye Hospital have held a day-long conference called the “CARES Conference.” CARES stands for “Committed to Awareness through Research, Education, and Support.” This is a patient directed educational conference about glaucoma. Last year, over 350 patients and their families from around the United States (primarily Pennsylvania, New Jersey, Delaware, and New York) attended this conference.

The event includes ground breaking lectures by Wills Eye Glaucoma physicians. Free screenings for glaucoma for those who are at risk and have never been diagnosed with glaucoma are offered and encouraged. In addition, educational resources and information are available at the CARES Conference to patients living with glaucoma.

Representatives from pharmaceutical companies with patient assistance programs, Associated Services for the Blind, Philadelphia Corporation for Aging, Library for the Blind, Pennsylvania’s Initiative on Assistive Technology (PIAT) Institute on Disabilities at Temple University and the Wills Eye Glaucoma Research Center will be on hand.

The conference begins with a continental breakfast. We look forward to seeing you there!

Some of the exciting lectures that will be presented:

- Fluid Flow Inside the Eye – Daniel Lee, MD
- Glaucoma in The U.S. and Around the World–Alice Williams, MD
- Lasers Used To Treat Glaucoma – Michael J. Pro, MD

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A Message From Our President

Dear Friend of the Glaucoma Service Foundation,

With the arrival of Spring, I am happy to tell you that we will be sponsoring our annual CARES Conference on Saturday, April 29th on the lovely campus of Jefferson University.

The conference is designed for glaucoma patients, their family, and friends, as well as everyone seeking the latest information about glaucoma, new advances and research, and making ways to live with glaucoma as easy and productive as possible.

In a word, this is your conference, and presenters are physicians from Wills Eye Hospital and staff from other allied agencies dedicated to assisting individuals with glaucoma. Conference attendees have the opportunity to be screened for glaucoma at no cost, as well as the opportunity to spend the day learning about glaucoma and sharing questions and concerns with outstanding Wills’ physicians.

The CARES Conference provides the Foundation a way to reach out to you, and we hope you join us on April 29th.

Sincerely,

Maxine Colm, EdD, President
Glaucoma Service Foundation

Announcing the 10th Annual CARES Conference
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New Medications On The Horizon
– Scott J. Fudemberg, MD

Alternative Therapies for Glaucoma
– Edward S. Yung, MD

Update on Surgical Innovations
– Jonathan S. Myers, MD

The Future: Stem Cells and Optic Nerve Regeneration – L. Jay Katz

Self Care-101: Mastering the Eye Drop – Benjamin Abramowitz, MD

Lifestyle Choices and Glaucoma – Anand V. Mantravadi, MD

You are Unique, but Your Doctor is Often Afraid to Recognize That

Truth - George L. Spaeth

Shared Vision - Mary Sue Boyle, Community Outreach and Services Liaison – Vision Corps

Overcoming Barriers to Eye Care: What Social Services Can Do For You - Deb Robinson, MSW

A special thanks to the Robison D. Harley Fund for Glaucoma Education and Research for sponsoring this event.

Thank you to Allergan, Novartis, Alcon Pharmaceutical, Accutome, and Carl Zeiss Meditec for their continued support of the CARES Conference.

Register by e-mailing:
Rita Stern (rita@mrs-ster.com)

Please call Debbie Malony at (215) 928-3190 or Rita Stern at (484) 678-4535. You will need to provide your name, address, phone number, number of guests, and email.

Website:
The following link takes you to a web page dedicated to CARES with information on registration, parking, accommodations, etc:
www.willsglaucoma.org/cares

There will be no charge to attend but space is limited, so please register NOW!
The Glaucoma Service Foundation celebrated the annual E B Spaeth Oration on March 22, 2017 at the College of Physicians. Paul A. Sieving, MD, PhD, was the keynote speaker. Dr. Sieving is the Director of the National Eye Institute, National Institutes of Health. His lecture was entitled “Thoughts on Developing Personalized Care, Ocular Gene Therapy and The Translational Pathway.”

It was the 40th year of the event which honors Edmund B. Spaeth, who was a busy, internationally respected physician and teacher. Edmund Spaeth passed away at age 86 in 1976. The evening, devoted to celebrating great teaching and great teachers, brings together fellows, residents, and medical students from Wills Eye Hospital, Temple, Thomas Jefferson University, Salus University, Scheie Eye Institute, Drexel, Children’s Hospital of Philadelphia, and Philadelphia College of Osteopathic Medicine and ophthalmologists from all over the Greater Delaware Valley. Representatives from Akorn Pharmaceuticals, Allergan, Novartis, Alcon Pharmaceuticals, Cherry Hill Medical Recruiting Center, and Board Members from the Glaucoma Service Foundation were also in attendance. Akorn Pharmaceuticals, Allergan, Cherry Hill Medical Recruiting Center and Alcon, Novartis Pharmaceuticals were the joint sponsors for this wonderful, 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.

Support the Glaucoma Service Foundation through Amazon

We are excited that we have set up a new fundraising initiative called AmazonSmile. Amazon may already be an online source that you use for purchases. By entering the following link (http://smile.amazon.com/ch/23-2106693), into your browser, 0.5% of your eligible purchases will support the Glaucoma Service Foundation. You need only set this up one time and your AmazonSmile account will remain linked to the Glaucoma Service Foundation.

Please consider supporting the Glaucoma Service Foundation to Prevent Blindness by using this link for your future Amazon purchases.
Sidney Kimmel Medical College Students Present at ARVO
by Lisa Hark, PhD, RD and Debbie Malony

The annual Association for Research in Vision and Ophthalmology (ARVO) meeting is being held in Baltimore, Maryland from May 7-11, 2017. This meeting draws the largest group of eye and vision researchers in the world. There will be over 11,000 attendees from more than 75 countries. It is a wonderful opportunity for our medical students (MS) and physicians to showcase research conducted at the Wills Eye Hospital Glaucoma Research Center through posters. Over 25 of our submitted posters have been accepted and the titles and presenters covering glaucoma studies are listed below:

1. Philadelphia Telemedicine Glaucoma Detection and Follow-up Study: Methods and screening results – Lisa Hark, PhD, RD (Faculty)
2. Philadelphia Telemedicine Glaucoma Detection and Follow-up Study: Diagnostic positive predictive value between Visit 1 and Visit 2 – Andrew Ines (MS1)
3. Philadelphia Telemedicine Glaucoma Detection and Follow-up Study: Unreadable Image Results at Visit 2 – Sanika Adyaver (MS1)
4. Philadelphia Telemedicine Glaucoma Detection and Follow-up Study: Visit 1 and Visit 2 satisfaction survey results – Charles Browdowski (MS1)
5. Assessment of patient satisfaction in a glaucoma private practice – Megan Falls (MS1)
6. Reproducibility of minimum rim width and retinal nerve fiber layer thickness measurements using the anatomic positioning system in patients with glaucoma and normal controls – Lalita Gupta (MS4)
7. A longitudinal analysis of the impact of glaucoma on performance in daily life – James Murphy (MS1)
8. The relationship between contrast sensitivity and retinal nerve fiber layer thickness in patients with glaucoma – Sarah Amanullah (MS1)
9. Measuring contrast sensitivity with SPARCS in specific areas of vision – a meaningful way to assess quality of life and ability to perform daily activities in glaucoma patients – Karishma Kodia (MS1)
10. Vision blue for the assessment of filtering bleb functioning during cataract surgery – Arjun Patel (MS1)
11. The impact of a novel artificial vision device (ORCAM) on the quality of life of participants with end-stage glaucoma – Joshua Newman (MS1)
12. Prevalence and risk factors of depressive disorders in an urban ophthalmic population – Teresa Horan (MS1)
13. Two novel electrophysiological diagnostic tests for detection of reversal of retinal ganglion cell dysfunction in ocular hypertension patients – Dilru Amarasekera (MS3)
14. Validation and reproducibility of the heidelberg edge perimeter in the detection of visual field defects in glaucoma patients – Jonathan Lam (MS2)
15. The relationship between vision-related quality of life scores and depression symptoms in a community-based glaucoma screening project – Kamran Rahmatnejad, MD (Fellow)
16. Comparing rates of glaucomatous optic neuropathy in professional wind versus non-wind instrument players in the Philadelphia orchestra – Shuai-Chun Lin, MD (Fellow)
17. Clinical efficacy and safety profile of micropulse transscleral cyclophotocoagulation – Alice Williams, MD (Fellow)
18. The outcomes of gonioscopy-assisted transluminal trabeculotomy (GATT) in open-angle glaucoma – Marlene Moster, MD (Faculty)

ARVO has given us the opportunity to showcase the culmination of hard work and dissemination of our research findings by the medical students, glaucoma clinical and research fellows, ophthalmologists, and staff of the Wills Eye Glaucoma Service and Glaucoma Research Center. Your generous donations have helped to ensure this very important research will continue.
Patient Empowerment Through Technology
By Benjamin D. Abramowitz, MD and Marlene R. Moster, MD

The World Health Organization defines empowerment as “a process through which people gain greater control over decisions and actions affecting their health.” In recent years, many technological advances in various fronts have empowered patients like never before. From pocket computers to enhanced electronic medical records, patients are now more equipped with information to better understand glaucoma and be active decision makers in their treatment process. We will explore a couple of these technologies in this article.

Patient Portals
The Health Information Technology for Economic and Clinical Health (HITECH) Act was signed into law in 2009. Ever since then, more physicians are required to adopt electronic health records. Patient portals are a common feature of many modern record systems and allow the patient to access parts of their medical record and educational materials while at home. In addition, these portals provide a secure channel of communication that allow the patient to carefully craft their questions to the doctor, instead of a rushed phone call during a busy office day. On the other side, the doctor’s office can quickly respond to these electronic messages with thoughtful, written answers as well. Patient portals provide an excellent opportunity to open the lines of communication with the doctor instead of holding on to a long list of questions until the next appointment.

Smart Phones and Tablets
Miniaturized computers, such as smart phones and tablets provide powerful technologies with a breadth of accessibility. For instance, the Wills Eye Hospital Glaucoma Department has a free application (app) available that allows patients to easily access informational documents and videos regarding glaucoma, track their eye pressures, and have reminders for the next drop administration and follow-up appointment. Other apps, like GoodRx®, allow patients to access drug coupons and quickly review drug prices at multiple different pharmacies in their area. In an ever increasingly busy world, these devices equip patients with high quality information and organizational materials with the touch of a button.

Home Monitoring
Several researchers are working on refining home monitoring of visual function. Drs. Spaeth and Richman of the Wills Eye Hospital Glaucoma Department are investigating home testing of contrast sensitivity, an important marker of glaucoma progression. Interested patients can access their test at https://www.sparcscontrastcenter.com/home.php. Meanwhile, a British group is researching an internet-based program of the visual field test similar to the one in the doctor’s office. Patients may access this program at http://www.testvision.org/. Although these websites provide exciting opportunities for patients to track their disease at home, regular follow up with your physician is recommended to ensure proper monitoring of your disease.

Glaucoma is a lifelong disease that requires the consistent administration of drops and sometimes surgery to control. These burdens can often be difficult for patients, however many current and future technologies provide promise to empower the patient to take control over this disease. Through accessible information, easy communication with the doctor, drop reminders, and home monitoring, the patient of today is more equipped than ever before to work with their doctor to beat glaucoma.
stopped, the IOP went back to baseline within a three week period. Other studies have found similar IOP reduction but this data has not been applied to a large group of patients with actual glaucoma. That said, I still think that this is very encouraging. I think as doctors, we sometimes tell patients not to do certain specific things. For example, we tell them not to do headstands for too long because the IOP is increased during a headstand. In addition, we tell some people to avoid strenuous activity after glaucoma surgery.

P: Are there any programs for exercise already developed for glaucoma patients?

Dr. Pro: Presently, there is not a glaucoma exercise regimen. Generally speaking, I tell my patients to engage in activities that they enjoy and can perform safely. For instance, I have some patients who are Marathon runners and that is great. However, some patients are elderly or have medical conditions. They should do whatever activity their primary care provider feels is safe.

P: What are your thoughts on high intensity interval training? Is training at a maximum heart rate safe for glaucoma patients?

Dr. Pro: Great question. I certainly do not tell my patients to not engage in strenuous exercise (except for a defined period of time after surgery). Whether it is okay to engage in a maximum heart rate is more of a question for the primary care provider. This is because the primary care provider knows more about the general cardiovascular health of the individual.

P: I am a glaucoma suspect. How long before vision loss begins?

Dr. Pro: That question is impossible to answer without knowing more about your exam. Some patients are glaucoma suspects based on the optic nerve appearance and never develop visual field

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Leading an active and healthy lifestyle

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dysfunction/loss. However, other patients go from being glaucoma suspects to having manifest glaucoma. So there are a number of risk factors, including IOP, optic nerve appearance, corneal thickness, family history, health history etc. These factors all play a role and with them, it can still be difficult to know whether you will ever develop glaucoma.

P: I want to acknowledge that we have a triathlon present here this evening: Ms. Amy Dixon. Amy recently came in 2nd place in a triathalon. She is legally blind and was tethered to a girl with a leg prosthetic.

Dr. Pro: Awesome! Way to go!

P: How about high impact exercise (i.e. running, boxing, trampoline, horseback riding, and other activities that involve lots of movement and bouncing)? Is that safe for patients with glaucoma and/or a history of valve or trab surgeries?

Dr. Pro: Any activities where there may be blows to the head are not recommended. I once saw a patient who had a bleb leak due to kickboxing. It is also important to mention that high impact activities may not be good for the brain. As to jumping on the trampoline, I would caution any individual with a bleb or tube shunt. Those activities may not be the safest. I would also recommend that these patients wear goggles or other protective eye wear for any activity where there is a possibility of being struck in the eye (including tennis). That said, I have not heard of damage due to rapid acceleration, deceleration or bouncing. Therefore, I think that the horseback riding and jumping on a trampoline would be okay.

P: I know that glaucoma eye drops have not yet been issued. I am puzzled though because many articles that I have read recommends using drops as soon as possible before any loss can occur. The articles I read state that the drops will prevent loss. Is this true? If so, why wouldn’t a doctor already prescribe them then?

Dr. Pro: There is no medicine that is completely benign or free of side effects. If we treat every glaucoma suspect, we are unnecessarily adding the burden of cost to the patient and society. Further, some patients develop side effects from the drops, such as ocular surface irritation or allergies. Moreover, some drops have systemic side effects, such as fatigue. Sometimes it is better to observe a glaucoma suspect assuming the exam does not suggest that the patient is at risk in developing glaucoma nerve damage.

P: What is the effect of high impact type exercise after a trabeculectomy, such as aerobics, running etc.? What about body pump classes or using moderate weights after a trab surgery?

Dr. Pro: Usually I restrict my patients’ physical activity for about one month after a glaucoma surgery. After that there is no restriction on running, swimming, etc. However, goggles must not press into or onto the eye but simply rest comfortably on the orbital rim. Similarly, moderate weights and exercise classes are okay.

P: Is regulating blood sugar helpful in managing a patient’s IOP? What about being gluten free and/or sugar-free?

Dr. Pro: Certainly uncontrolled blood sugar can lead to a host of eye problems, including glaucoma. There is no data that I know of regarding a gluten-free diet in connection to glaucoma risk and/or IOP control. There are several animal studies demonstrating there is reduced glaucoma risk with a diet high in omega 3 fatty acids (like fish oils) and a mixture of omega 3 and omega 6 fatty acids. This has not really been demonstrated in humans but it makes sense to consume less fatty animal protein and fat and more leafy greens and fish. Further, a recent large study of mostly African American women demonstrated that women who ate three or

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more servings of fruit or vegetables a day were 79% less likely to develop glaucoma than those who ate one or fewer servings of fruit or vegetables a day.

P:  I started doing triathlons when I lost my sight last year and had failed valve surgery. I had gained 45 pounds due to anaphylaxis during the procedure that shut down my thyroid and adrenal glands. Now, eight months later, I have completed 5 sprint triathlons: one Olympic distance and I have also qualified for the Para triathlon National Championships. I have received sponsorship and I am now headed to train in San Diego with the US National Team! It has been an amazing journey. I am now two weeks postop trab surgery in my good eye. So far so good! Thank you all for helping me get through a very difficult year with this disease.

Dr. Pro:  Congratulations on your incredible success! Thanks for sharing your story.

Moderator:  This concludes the October 2, 2013 online glaucoma chat on “Leading an active and healthy lifestyle” with Dr. Michael Pro. Thank you all for participating.