Stella Lee, MD is directing a new initiative to advance the research being done in the Division of Sinonasal Disorders and Allergy. Dr. Lee is just the person to take on such a huge job. After completing her residency at Yale, Dr. Lee completed a fellowship at Johns Hopkins University, where she trained in both rhinology and skull base surgery. When it came time to focus on a specialized area of medicine, Dr. Lee’s decision was clear. According to Dr. Lee, “physicians working in otolaryngology, and especially sinonasal and allergy disorders, have the ability to greatly impact and improve patients’ quality of life. Diseases, such as chronic rhinosinusitis (CRS) and allergic rhinitis (AR) are two of the most common illnesses in this country. The ability to help patients do simple things that most of us take for granted, such as breathe easily, smell, and taste to their fullest ability is very rewarding.”

In 2011, Dr. Lee joined the faculty at the University of Pittsburgh and became Dr. Berrylin Ferguson’s partner in Sinonasal Disorders and Allergy. Together, they have pioneered a wide range of important research in treatment of CRS patients with and without nasal polyps and allergic rhinitis. The opportunity, says Dr. Lee, for research in the field of Rhinology is quite large because there is an immense need. “These disorders like CRS, do not have a known cure and it is such a common illness with significant and truly debilitating symptoms.”

Here at the University of Pittsburgh, the scope of Dr. Lee’s research includes investigating the microbiome of the paranasal sinuses in patients with chronic inflammatory sinus disease, including patients with cystic fibrosis. She and her team have spearheaded several cutting edge clinical trials to treat patients with CRS, who have previously been unresponsive to conventional medical and surgical therapies. These treatments include novel medications, including targeted monoclonal antibody therapies and immunomodulators.

One priority of Dr. Lee’s studies is aspirin exacerbated respiratory disease (AERD), previously known as Samter’s Triad. She is conducting clinical research to further determine the pathophysiology of AERD in order to develop new therapeutic options to treat this disorder. It is because of her specialized interest in this condition that a patient under Dr. Lee’s care has learned more about Dr. Lee’s work and wanted to support her research. The family, wishing to remain anonymous, is launching the Initiative for Research in Sinonasal and Allergy Disorders. With the help of these incredibly generous donors, Dr. Lee would eventually like to establish a Sinonasal and Allergy Research Laboratory, including a tissue bank and a dedicated database. Dr. Lee would use these resources to study the development of biomarkers, as well as gain a greater understanding of how inflammatory triggers and modifiers of the disease occur so that more specific therapies can be developed to treat these debilitating diseases.

To support the Initiative for Research in Sinonasal and Allergy Disorders at the University of Pittsburgh School of Medicine, Department of Otolaryngology, donations can be made to the Eye & Ear Foundation, by using the attached envelope or visiting eyeandear.org. For an appointment with Dr. Lee, please call 412.647.7464.
Glaucoma, one of the most insidious and debilitating optic disorders, is under the microscope at the Louis J. Fox Center for Vision Restoration, as new research and treatments are being developed to combat the disease. Characterized by greatly increased intraocular pressure (IOP), glaucoma causes diminished eyesight and potential blindness. A team of researchers and clinicians within the Department of Ophthalmology at the University of Pittsburgh is engaged in a groundbreaking plan, the Initiative to Cure Glaucoma, and will study the disabling effects of the disease and investigate new methods to combat glaucoma at its very earliest stages.

The use of stem cells from the trabecular meshwork (TM) of the eye to alleviate the effects of, and potentially cure, glaucoma is at the core of the research plan. Dr. Yiqin Du pioneered the process of isolating and growing TM stem cells. Following this innovative approach, Dr. Du created an animal model, in which these stem cells have restored the lost function of the TM, essentially curing glaucoma in mice. Her efforts are now focused toward reducing the pressure caused by glaucoma and a malfunctioning outflow tract, thereby preventing damage to the optic nerve, or otherwise halting vision loss as a result of the disease.

Dr. Nils Loewen, Director of the Glaucoma and Cataract Service in the Department of Ophthalmology, has developed a gene therapy vector that removes the diseased tissue responsible for increased intraocular pressure and can thus address the cause of glaucoma. His new eye culture model allows direct observation of gene therapy vector function in a life-like model. The Loewen Lab has now achieved a first time gene transfer further downstream of the outflow system, which will enable development of entirely new drug categories and therapies. This breakthrough is an exciting development in achieving sustained pressure control for glaucoma patients.

The Eye & Ear Foundation received a challenge grant from Ms. Ritchie Battle in late 2015 for the Initiative to Cure Glaucoma. This philanthropic gift to the Loewen Lab helps in the pursuit of a complementary project to their NIH funded research, which has resulted in a new angiography method to precisely locate the outflow obstruction in glaucoma.

“Academic excellence, patient attentiveness, and professional passion are evident in Dr. Nils Loewen, for which reason I am proud to support his glaucoma research.”

Outflow obstruction and enhancement can now be measured similarly to how a cardiac angiography is done prior to an angioplasty. Ms. Battle saw the immediate need to fund this groundbreaking and game-changing research initiative. According to Ms. Battle, “Academic excellence, patient attentiveness, and professional passion are evident in Dr. Nils Loewen, for this reason I am proud to support his glaucoma research.”

“I was shocked, but excited and thrilled to receive the news of Ms. Battle’s gift,” said Dr. Loewen. “Her gift allows us to hire a dedicated glaucoma scientist, whose sole focus will be the TM research. Having a dedicated scientist allows our glaucoma research to move ahead more rapidly, and will potentially allow us to complete the first two stages of the research in a more timely fashion, which will then allow us to apply for National Institute of Health funding for the third part of the research initiative.”

Donations to support the research to cure glaucoma can be made through the Eye & Ear Foundation of Pittsburgh at eyeandear.org or by returning the attached envelope.

To schedule an appointment with Dr. Loewen, call the UPMC Eye Center at 412.647.2200
Minimally invasive approaches have become more common in many medical fields. One form of minimally invasive surgery is robotic assisted surgery. Robotic surgery incorporates the use of robots in performing surgery. Since 1985, when the first surgical robot was introduced, robotic technology has developed rapidly. Conceptually, the robot allows the surgeon to access small anatomic areas, provide better visualization, and to minimize physiologic tremors.

The most common surgical robotic system was initially developed for cardiac and abdominal surgery. However, surgeons from other fields, such as Otolaryngology: Head and Neck Surgery have used this system, albeit with some difficulty. Now, there is a new surgical robot that has been created especially for Head and Neck surgery. The Flex Robotic System was developed by the MedRobotics Corporation and incorporates flexible robotic instruments, offering the head and neck surgeons exceptional visibility and range of motion. This technology has the advantage of ‘looking around the corner,’ especially in hard to reach areas such as the base of the tongue or the larynx. The development of this device was made through collaboration between the University of Pittsburgh and Carnegie Mellon University, leading to the creation of the MedRobotics Corporation, which is now based in Boston, Massachusetts.

In September 2015, UPMC Presbyterian was the first hospital in the country to receive the Flex Robotic System Surgical Robot and the first to use it in surgical procedures. Surgeons can achieve sub-millimeter accuracy and the robots ability to “snake” around the body causes less damage to soft tissue. These anatomic regions are very difficult to reach using conventional methods and such surgeries are associated with prolonged hospital stays and generally necessitate the performance of a tracheotomy. With the use of robot-assisted surgery, we can now access these areas through the mouth, with excellent visualization and surgical exposure.

The Department of Otolaryngology at the University of Pittsburgh’s focus will remain on improving minimally invasive technology to treat patients with head and neck tumors. Given the faculty’s expertise, along with the current demand for such specific knowledge and research, the Department of Otolaryngology will receive a second Flex Robotic System Surgical Robot for exclusive use in training surgeons from around the world.

Many cancerous and non-cancerous conditions can be treated with these methods. Recently, we have employed robotic technology to remove excessive tissue from the base-of-tongue for patients with severe obstructive sleep apnea. Preliminary results demonstrate that this is a safe and feasible procedure with minimal patient discomfort (all patients have left the hospital within 12 days, tolerating an oral diet). Some patients have experienced relief of symptoms and improvement of their sleep disturbance scores.

In summary, robotic-assisted surgery of the head and neck is an exciting novel method that allows us to offer patients an alternative to traditional open surgery. Our initial experience suggests that this method reduces patient discomfort and promotes early post-procedure discharge from the hospital.
In the summer of 2015, we received a call from Pi Lambda Phi brother, Richard Minker, regarding a plan to honor the lifetime achievements of Joel Smalley. Mr. Minker spearheaded the fraternity’s campaign to support the Louis J. Fox Center for Vision Restoration. The Fox Center supports ocular regenerative research within the Department of Ophthalmology and the McGowan Institute at the University of Pittsburgh.

Brothers Unite to Restore Vision

by Heather Chronis

The bonds of brotherhood and a love of the University of Pittsburgh brought the Pi Lambda Phi Fraternity together Homecoming Weekend 2015 to celebrate and honor Mr. Smalley, longtime Gamma Sigma chapter advisor. The driving force behind the Pi Lams’ long devotion to each other and their community, Mr. Smalley instilled a mandate for the Pitt brotherhood to be involved in philanthropic activities. One of the brothers who Mr. Smalley inspired is Louis J. Fox, the founding donor in the endowment of the Louis J. Fox Center for Vision Restoration at the University of Pittsburgh.

The Pi Lams’ donation to Eye & Ear Foundation for the Joel Smalley Award fosters the development of the future generation of vision scientists and supports research that gives the potential of a lifetime of sight to blind children.

Left to right: Lawton Snyder, Eye & Ear Foundation Executive Director; Jeffrey Gross, PhD, the E. Ronald Salvitti, MD Chair in Ophthalmology Research and Director of the Louis J. Fox Center for Vision Restoration; Joel Smalley; and Alex Danenberg. They stand among the 11,000 zebra fish tanks at the University of Pittsburgh.

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To honor Mr. Smalley, the Pi Lams established a fund through the Fox Center that will help young researchers attend professional scientific conferences that might otherwise be out of their reach financially. The ambitious goal set for the campaign was not only reached, but exceeded through the generosity of a prominent Pi Lam brother. As a result, this unexpected bounty is being used to improve research and clinical pediatric ocular imaging at the Children’s Hospital of Pittsburgh of UPMC.

This prominent member’s gift has provided an upgrade of the optical coherence tomography (OCT) machine at Children’s Hospital, which is the key instrument in ongoing research to allow more children who are born blind to be included as eligible for corneal transplant. In this innovative research, Professors Kira Lathrop and Ken Nischal, MD are imaging the corneal stem cell niche in children born with congenital corneal opacities to better evaluate their potential to sustain a transplant. Previously, these children had been rejected from transplant centers worldwide, but this study is showing that some of these children can be given the gift of vision through corneal transplantation. Upgrading the OCT system has directly facilitated the progress of this research.

The Joel Smalley Award honors not four years, but a lifetime of activity, achievement and friendship. Accordingly, this donation to the Eye & Ear Foundation for the Joel Smalley Award fosters the development of the future generation of vision scientists and supports research that gives the potential of a lifetime of sight to blind children.

The Eye & Ear Foundation is the support organization for the Louis J. Fox Center for Vision Restoration and the Department of Ophthalmology at the University of Pittsburgh. The Eye & Ear Foundation raises support and awareness for the academic and research efforts for both the Departments of Ophthalmology and Otolaryngology. Donations are accepted at eyeandear.org or by using the attached envelope.
The Voice of Change
by Leah B. Helou, PhD, CCC-SLP

Transgender: adjective; relating to, or being a person who identifies with or expresses a gender identity that differs from the one which corresponds to the individual’s sex at birth.

Here, at the University of Pittsburgh Voice Center, we have been helping transgender people find their voice, both literally and figuratively, since 2011. The human voice is an incredibly elegant and flexible instrument. In speech, it is used to convey basic information, show emotion, suppress emotion, and even give a clear window into the mind and personality of the speaker. As such, voice and speech are important areas of focus for many people who are transgender. Many trans individuals feel that their communication style is a top priority for making their external self congruent with their inner self.

Recently, we met to discuss the ideal scenario for how the University of Pittsburgh Voice Center can dramatically change and improve the way that trans voice communication therapy is practiced. Our vision is to create an Endowed Clinical Researcher position at the University of Pittsburgh Voice Center. This position will be filled by a skilled clinician with expertise in voice disorders, transgender voice care, and total communication training. This person will not only lead a clinical program, but will also establish a complementary arm of research, with the aim of making transgender voice and speech training more efficient, effective, and successful in the eyes of the patient. In supporting this effort to fund an Endowed Clinical Researcher position, donor support can help to offset the cost of voice and communication training for all transgender clients at the University of Pittsburgh Voice Center, as well as move forward the entire field of transgender voice and communication care through top-quality research. The University of Pittsburgh Voice Center is perfectly poised to serve the transgender population in this way, and invite you to lend your support in order to make this vision a reality.

If you would like to support this or any other Voice Center projects, there is an option to direct your donation to your specific area of interest. You only need to visit eyeandear.org or return the attached envelope.
A Board Member’s Lifelong Commitment

by Heather Chronis

For more than three decades, Albert C. Muse has dedicated himself to the Eye & Ear Foundation. As a longtime board member to the Eye & Ear Foundation, his support of research, knowledge and treatment of diseases affecting the eye, ear, nose, throat, and head and neck cancer have paved the way for groundbreaking discoveries that propelled the University of Pittsburgh’s Departments of Ophthalmology and Otolaryngology to become one of the top research facilities in the world.

“I wanted to become involved in charitable causes for the city of Pittsburgh. I was invited to join the Eye & Ear Hospital Board of Directors and thought that it was a good cause, and I joined it for that reason," states Mr. Muse. “I always say, it took me four years to pronounce otolaryngology and ophthalmology and after that, which was about 1973, I really started to get active.”

Having served as Vice Chairman of the Eye and Ear Hospital, then the Eye and Ear Institute, and finally of the Foundation, Mr. Muse has intimately been involved with the evolution from an independent hospital through the sale of the organization to the University of Pittsburgh to today’s international research powerhouse. In addition, Mr. Muse saw the Eye & Ear Foundation progress from an organization that did not do much fundraising to one that now has a global fundraising reach, as it allowed “us to set the rules.” We could then increase our grants for research. With the government cutting down our research grants, this is very important.”

Mr. Muse’s dedication to the Eye & Ear Foundation is evident in his long term support of the Muse Prize. Established in 2001, the annual prize honors the world’s leaders in ophthalmology and otolaryngology. The award, which alternates between the two specialties, carries a cash prize and honors groundbreaking leaders in research and medicine.

At the end of 2015, Mr. Muse gave the Eye & Ear Foundation a $100,000 gift from his IRA. Planned giving through an IRA allows the Foundation to receive a generous donation, while allowing the donor to enjoy the tax benefits of the donation. Mr. Muse, along with his financial planner, worked closely with the Eye & Ear Foundation to strategically donate from his IRA.

A key figure in the growth of Crown Coal and Coke Company, Mr. Muse has led the Pittsburgh based energy company for over 30 years. He also serves as president of the Muse Company, the family holding group. Mr. Muse’s long history with the Eye & Ear Foundation has provided stability, growth, and leadership that have changed the reach and the scope exponentially.

A Painless Way to Make a Big Impact

by Carrie Fogel

We know that supporting our mission is important to you, but have you considered including us in your estate plans? Just as you hope to provide for your loved ones, you may have a desire to provide for worthy causes. A few moments of planning now will benefit so many aspects of the department(s) you support, such as patient care, research, and academic endeavors for many more years to come. Making a bequest costs you nothing during your lifetime, but can dramatically shape the future of our work.

Making a bequest simply requires the inclusion of straightforward language in your will, stating the amount or percentage of your estate that you would like to leave to Eye & Ear Foundation to benefit the department or area of your choice. You can designate how you would like your gift to be used.

Another consideration to a meaningful legacy is to provide a gifts to the Eye & Ear Foundation through a life insurance policy. Life insurance uses manageable payments made from income — the premiums — to create a large future gift for the Eye & Ear Foundation of Pittsburgh. By donating a new or existing life insurance policy, you can help to ensure our long-term financial strength without diminishing your own!

If you would like to know more about the process or notify us of your intentions, we can help to make sure you and your family feel well-informed about making a planned gift. Please contact us at info@eyeandear.org or 412.864.1300, or mail us at 203 Lothrop St., Suite 251 EEI, Pittsburgh, PA 15213
Eye to the Brain
Connecting the Optic Nerve:
the anonymous gift.
quarterly with the infusion of funds from
will now progress from a rabbit model to a
nerve regeneration.  The work with ECM
nerve tissues, a critical component in optic
Complex and collaborative, the research
to fully achieve optic nerve regeneration
makes great strides daily at the Fox Center.
Donations, such as the one this past
December, allow the Fox Center to grow the
research team and fill it with international
experts, while rapidly accelerating research
activities. The anonymous gift helps to
fulfill Louis Fox’s promise to the Eye & Ear
Foundation at the University of Pittsburgh
that the Fox Center will be the international
leader in optic nerve regeneration.

In late 2015, the Fox Center received a
record breaking gift from an anonymous
donor. After the donor carried out an
international search of institutions currently
conducting cutting edge research, he
concluded that the Fox Center had the
best potential to accomplish optic nerve
regeneration. The donation allows the Fox
Center to conduct research in newer and
more innovative areas.

Dr. Jeffrey Gross, PhD, the E. Ronald Salvitti,
MD Chair in Ophthalmology Research at
the University of Pittsburgh, Department of
Ophthalmology and Director of the Louis J. Fox
Center for Vision Restoration.

The Brain Institute, under the leadership of Dr. Peter Strick, is conducting research
to achieve the crucial connection between
the eyes and the brain. The sharing of
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Fox Center and the Brain Institute will allow
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New Era for the Eye & Ear Foundation!

By Lawton Snyder, Executive Director

In our annual report, Dr. Joel S. Schuman made the announcement that he is leaving Pittsburgh to become the Chairman of Ophthalmology at New York University. I believe I can speak for everyone at the Eye & Ear Foundation when I tell you Dr. Schuman will be sorely missed. We will be forever in debt to Dr. Schuman for creating an outstanding environment for researchers and clinicians to leverage the resources of the University of Pittsburgh towards better care for patients suffering from vision loss. Dr. Schuman was directly responsible for creating the Louis J. Fox Center for Vision Restoration and spearheading some of the most ambitious projects to improve patient care, which have elevated the stature of the University of Pittsburgh. Currently led by Dr. Jonas T. Johnson, we have been fortunate for the past 30 years to have an Otolaryngology Department that is ranked nationally in the top five, year after year. Thanks to Dr. Schuman, Ophthalmology is on its way.

In our next edition of Sight + Sound, we will provide you with the profile of the new Chairman for Ophthalmology, Dr. José-Alain Sahel, scheduled to arrive July 1, 2016. After you learn about Dr. Sahel, I am sure you will agree the legacy of excellence that has become the standard will continue with your support of the Eye & Ear Foundation.