**American Glaucoma Society (AGS)**
The mission of the American Glaucoma Society is to support glaucoma research and education to promote excellence in the care of patients with glaucoma. It was founded in 1985 to maintain and improve "the quality of patient care primarily through improvement, exchange and dissemination of information and scientific knowledge pertinent to glaucoma and related diseases."

The SWF was able to attend the annual AGS meeting this year and I'm pleased to share a few highlights with you. The AGS meeting typically is at the same time as the American Academy of Dermatology (AAD) so we rely upon our advisors attending the meeting to relay the latest news.

A few interesting paper abstracts by title and author are presented here with the purpose and conclusion:

"**Higher Levels of Adherence to Topical Glaucoma Medications Decrease Risk of Visual Field Progression" Donald Fong, Michael Batech, Cynthia Mattox,, Tiffany Luong, Jennifer Jimenez, Joann Campbell, Hitesh Chandwani -Southern California Permanente Medical Group**
**Purpose-**To determine the effect of glaucoma medication adherence on visual field (VF) progression among newly diagnosed glaucoma patients taking intraocular pressure-lowering medication.
**Conclusion**-Low and moderate medication adherence are insufficient for reducing the risk of VF progression; only high adherence was associated with a significantly decreased risk of progression. Additional research is needed to identify facilitators for and barriers to long-term medication adherence, particularly among patients with moderate to very severe glaucoma.

**"Resting Nailfold Capillary Blood Flow in Primary Open-Angle Glaucoma" Jonathan Chou, Clara Cousins, Scott Greenstein, Stacey Brauner, Lucy Shen, Angela Turalba, Louis Pasquale-Massachusetts Eye and Ear**
**Purpose**-Ocular blood flow dysregulation in primary open-angle glaucoma (POAG) has been described. POAG patients may also have reduced systemic blood flow. Prior work has shown that patients with normal tension glaucoma (NTG) demonstrate pronounced reduction of nail fold capillary blood velocity in response to local cooling. However, blood flow (blood velocity x cross sectional area of vessel) was not assessed nor did the study account for possible confounding factors. In this project, we sought to determine whether POAG patients have reduced resting nailfold capillary blood flow after adjusting for resting pulse, blood pressure and other factors.
**Conclusion**-Understanding the etiology behind reduced peripheral capillary perfusion in POAG may lead to additional diagnostic and therapeutic interventions.

**"Qualitative Input to Develop a Health Related Quality-of-Life Survey for Glaucoma Patients with Micro-invasive Glaucoma Devices" Qi Cui, Ron Hays, Michelle Tarver, George Spaeth, Ronald Fellman, Joseph Caprioli, Steven Vold, Louis Pasquale, Kuldev Singh, Malvina Edelman-University of Pennsylvania**
**Purpose-**Through a collaborative research effort among the Food and Drug Administration (FDA), American Glaucoma Society, and UCSF/Stanford University, we constructed a 39-item questionnaire to assess health-related quality of life (HRQOL) in patients undergoing micro-invasive glaucoma surgical (MIGS) devices implantation.
**Conclusion**-Further refinement of the questionnaire will include cognitive interviews followed by field testing to evaluate relevant psychometric properties and, ultimately, accessible web administration for all who are innovating in the glaucoma surgical arena.

**"Identifying and Prioritizing Outcomes that Matter to Patients Considering Minimally Invasive Glaucoma Surgical (MIGS) Devices and Other Treatments for Open-Angle Glaucoma" Jimmy Le, Amanda Bicket, Michelle Tarver, John Bridges, Tianjing Li-Johns Hopkins Bloomberg School of Health**
**Purpose-**The development of minimally invasive glaucoma surgical (MIGS) devices has expanded treatment options for patients with mild-moderate open-angle glaucoma (OAG) Patients have unique perspectives ("preferences") about the benefits and risks of the treatment. We sought to explore the preferences of patients with OAG and use this information to prioritize outcomes that could be considered in regulatory decision making.
**Conclusion**-We have identified outcomes that patients with mild to moderate OAG have considered as important. The outcomes could be useful in future evaluations of new treatments such as MIGS devices.

**"Association Between Visual Field and Cognitive Impairment in Primary Open-Angle Glaucoma" Makayla McCloskey, Kendall Goodyear, Victoria Addis, Yinxi Yu, GUI-Shang Ying, Prithvi Sankar, Qi Cui, Eddie Miller-Ellis, Maureen Maguire, Rebecca Salome, Joan O'Brien-Scheie Eye Institute University of Pennsylvania**
**Purpose**-Neuropathy in primary open-angle glaucoma (POAG) extends throughout the visual pathway in the brain, but it remains unclear whether this neuropathy affects other functions, such as cognition, in addition to vision. This study examines the potential association between cognitive impairment and the severity of visual field loss in POAG patients.
**Conclusion**- The association between visual field loss in glaucoma and more global neurodegeneration warrants a further investigation to evaluate any clinical significance.

**"A Randomized Double-Masked, Placebo-Controlled Trial of the Efficacy of a Novel Neuroprotective Combination for Reversing Mitochondrial Dysfunction in Glaucoma" Robert Ritch, Yanin Susan, Richard Rosen, C. Gustavo De Moraes-New York Eye and Ear Infirmary of Mount Sinai**
**Purpose**-To determine whether a combination of over-the-counter supplements with anti-oxidant and mitoprotective properties could reverse mitochondrial dysfunction in treated glaucoma patients by reducing mitochondrial flavoprotein fluorescence compared to placebo.
**Conclusion**-GlaucoHealth ™ reverses mitochondrial dysfunction and may be neuroprotective in glaucoma. This finding serves as a proof-of-concept for future trials testing neuroprotective effect of supplement combinations in glaucoma.

**"Patients' Perspectives on Follow-up Interval, Testing and Length of Visit in Glaucoma Practice" Anna Djougarian, Luke Schwartz, Andrew Tigris, Jung Lee, Celso Tello, Sung Chui (Sean) Park-Manhattan Eye, Ear and Throat Hospital**
**Purpose-** We aimed to assess patients' perspectives on follow-up interval (FUI), testing, and length of visit in Glaucoma practice. We further sought to identify subjective and objective (demographic/clinical) factors affecting their perspectives. This knowledge would be useful in patient-centered glaucoma care.
**Conclusion**-Understanding patients' perspectives on FUI, glaucoma testing and length of visit may facilitate more personalized glaucoma care and improve patient satisfaction.

"**Trends in the Use of Medical Marijuana for Glaucoma from 2012-2016" Aliya Rogniel, Anand Gopal, Ann Shue, Joshua Warren, Joseph Ross, Lucian DelPriore, Christopher Teng-Yale School of Medicine**
**Purpose-**Twenty-nine U.S. states have legalized marijuana for medicinal use, despite its federal designation as a Schedule 1 drug. Glaucoma is among the approved indications for medical marijuana, as marijuana may be an effective ocular hypotension agent. This study aimed to characterize trends in the use of medical marijuana for glaucoma in 2012 through 2016 for glaucoma and al other indications

was calculated, and its change with time was analyzed by linear regression analysis. Analyses were performed in Excel v15.21.1.
**Conclusion**-Our results suggest that medical marijuana use for the treatment of glaucoma is becoming increasingly common among patients in several U.S. states. It may be useful for physicians to have a thorough understanding of the risks and benefits of medical marijuana use, so that they can effectively counsel their patients.