2017 Annual Meeting Abstracts

Named Lectures

Ruedemann Lecture -- Steven V.L. Brown, MD: "Reflections of a Glorified Plumber: Another hole in the eye?! Glaucoma Related Blindness over a 20 year period, a Private Practice Review"

Jerry & Donna Knauer AESC Foundation Lecture -- David W. Parke II, MD: "Using Big Data to Control your Professional Future"

General Session Program
The following abstracts have been submitted for the summer 2017 AESC meeting. . .

Allen, Richard C.-- "Pop Culture and Oculoplastic Surgery"
- **Purpose:** Daily bombardment by mass media has resulted in our exposure to everything from twerking cats to Gangnam Style. However, twitter feeds, Facebook posts, and snap-chat can be distilled to subjects applicable to our profession. The purpose of this discussion is to examine a number of conditions popularized in mass media that have applications to oculoplastic surgery, including voluntary proptosis, incompetent lacrimal drainage systems, and weights hanging from the lower eyelids.
- **Educational objectives:** Whether at your child's bedtime or a cocktail party, answering questions about oculoplastic conditions in pop culture should be able to be performed with authority and without hesitation.
- **Schedule:** Not Monday or Tuesday

Beardsley, Rob -- "Intermediate Uveitis: Not Just Floaters Anymore"
- **Purpose:** Intermediate uveitis is a relatively uncommon inflammatory entity affecting the central portion of the uveal tract leading to floaters, macular edema, and cataract/glaucoma. While the common causes are well known, the workup and treatment still elicit discussion among practitioners. Complicating the treatment are the TNF inhibitors, which have shown efficacy in multiple types of uveitis but can have tremendous negative systemic effects. This talk will use a few model cases of intermediate uveitis due to several various etiologies as a starting point for discussion.
Educational objectives: While the causes of intermediate uveitis have not changed over the years, the workup has grown more complicated and the treatment more refined as newer medications are developed to target specific inflammatory molecules.

Schedule: Not on Thursday

Bell, Nicholas — "What do you do when the tube stops working?"
- Purpose: As more and more aqueous tube shunts are implanted, we are faced with the clinical dilemma of how to manage glaucoma patients with tubes that have stopped working adequately.
- Educational objectives: Late stage management of advanced glaucoma when standard surgical treatments have lost efficacy.
- Schedule: Anytime

Berry, Jesse L. — "Surrogate Liquid Biopsy for Retinoblastoma"
- Purpose: This talk will discuss the first study to evaluate aqueous humor from retinoblastoma eyes undergoing salvage therapy with intravitreal injection of melphalan. The aqueous can be assayed for quantifiable levels of nucleic acids (DNA, RNA, miRNA) in both treated and untreated eyes and further cfDNA in the aqueous has retinoblastoma-related DNA copy number alterations which mimics that seen in the tumor. This suggests that the aqueous humor can serve as a "surrogate tumor biopsy' which tumor tissue is not available.

- Educational objectives: This talk will discuss the first ever use of aqueous humor as a surrogate biopsy for retinoblastoma.
- Schedule: Not Aug 2 or 3rd

Brown, Jeremiah Jr. — "Zika Virus- Past Present and Future"
- Purpose: The clinical presentation of Zika Virus infection progressed from an uncommon cause of flu-like illness to an infection that has been associated with multiple systemic abnormalities. In incidence of Zika Virus infection is increasing at an epidemic rate. Chorioretinal atrophy with optic atrophy are typical ophthalmic manifestations. Zika Virus infection will continue to increase in frequency. A number of strategies are being employed to slow the rate of progression.
- Educational objectives: Ophthalmic professionals should become familiar with the manifestations of Zika Virus infection, the first mosquito borne illness to be associated with sexual transmission and multiple systemic abnormalities.
- Schedule: Anytime
Chan, R.V. Paul -- "Image Based Diagnosis for ROP: How Can We Do Better?"
- **Purpose:** Retinopathy of prematurity (ROP) telemedicine systems have historically been developed as a screening strategy to diagnose disease of sufficient severity to warrant referral for specialist workup. However, there are still gaps in knowledge about the ability of color fundus imaging to be adequate for having image graders adequately identify all categories of disease (e.g. APROP, stage 4, stage 5). This presentation will discuss our current telemedicine strategies, limitations to these strategies, and ways in which we can improve our diagnostic accuracy for real world telemedicine systems.
- **Educational objectives:** There is a gap in knowledge about ways in which we can improve image based diagnosis of retinopathy of prematurity.
- **Schedule:** Anytime

Chiang, Michael F. -- "EHRs, Big Data, and Ophthalmology Trainees"
- **Purpose:** Ophthalmologists are pressured to see more patients in less time. Increasingly, there are additional time constraints such as the use of electronic health record (EHR) systems and the need to document quality and cost of care for reimbursement purposes. For ophthalmologists in academic medical centers, an added time constraint is the need to teach residents and fellows. This talk will describe research using a data analytic approach to quantify the impact of ophthalmology trainees on clinical workflow, and will describe additional concerns for trainees related to the use of EHR systems.
- **Educational objectives:** Physicians in academic medical centers are required to teach residents and fellows, but the impact of trainees on clinical workflow is not known.
- **Schedule:** Tuesday & Wednesday (possibly)

Chiu, Cynthia S. -- "Implantable Miniature Telescope"
- **Purpose:** Though the discovery of anti-VEGF therapy has revolutionized the treatment of wet AMD, patients with geographic atrophy from dry AMD have had limited treatment options. For patients who qualify, the implantable miniature telescope can offer 2.7 x magnification of central visual field and reduce the significance of a central scotoma. This may offer patients 2-4 lines of visual improvement and improved functionality and independence. The IMT dimensions are 13.0 mm haptic-to-haptic and 4.4 mm in thickness, and the implant protrudes through the pupil into the anterior chamber. This presentation will discuss the indications for, the utility of, and the complications from the IMT, as well as review the surgical technique required for implantation.
- **Educational objectives:** The presentation will cover the indications and surgical technique related to use of the Implantable Miniature Telescope, which can offer 2-4 lines of visual improvement in patients with end-stage dry AMD.
- **Schedule:** Anytime
Ciralsky, Jessica Blair-- "PROSE devices"
- **Purpose**: Severe ocular surface diseases such as Stevens-Johnson syndrome, graft-versus-host disease, and chemical injuries are devastating disorders that often result in permanent severe visual loss and chronic pain. In the past several years, exciting new treatment approaches have emerged. In this talk, I want to focus on the role of the PROSE (prosthetic replacement of the ocular surface ecosystem) device in both subacute and chronic management of severe ocular surface disorders.
- **Educational objectives**: Ophthalmologists should be aware of the potential sight-saving benefits of scleral lenses such as PROSE in this patient population that historically has been extremely resistant to treatment.
- **Schedule**: Anytime

Clifford, Bill-- "Politics 101 - A Political Journey"
- **Purpose**: Physicians by nature are outstanding patients advocates, but often fail to advocate politically because they are too busy or fail to appreciate the process. Media scrutiny and the reputation of so-called career politicians discourages bright and inspired doctors from becoming involved. This talk will discuss my 20-year journey from political neophyte to elected office and service as county party chair. I will highlight the entry points to involvement, multiple ways to "vote" (not how they do it in Chicago), and the career benefits of the process. From party caucus to the Inauguration of a President, being at the table beats being on the menu!
- **Educational objectives**: Physicians lack the tools and knowledge to properly advocate for their patients and their Profession.
- **Schedule**: Anytime

Coney, Joseph M.-- "Doctor, do I have diabetes?"
- **Purpose**: The purpose of this case presentation is to consider the approach in a patient with retinal swelling, vascular changes, and peripheral ischemia. The differential diagnosis includes radiation retinopathy, vein occlusion, diabetes, sickle cell disease, sarcoidosis, lupus, and others. The sequence of testing to determine the correct diagnosis will be reviewed.
- **Educational objectives**: This presentation will elucidate the sequence and selection of ancillary testing in some cases of retinal vascular disease in which the diagnosis can be obscure.
- **Schedule**: Anytime

Epley, K. David-- "The ABO's Second Century"
- **Purpose**: 16 states have legislation forbidding hospitals from using maintenance of certification to privilege doctors. Certifying boards are under fire. The ABMS is out of touch and floundering. What is the American Board of Ophthalmology doing to stay relevant, to be
transparent, and to engage board certified ophthalmologists? This presentation will cover what the ABO is doing during this crisis to change the process of continuous certification and to build a relationship with its diplomates, and how we transition to a second century of board certification.

- *Educational objectives:* Updates the membership with regard to changes to the process of staying board certified, which is central to every modern ophthalmologist's practice

- *Schedule:* Anytime

---

**Giangiacomo, Annette L.** -- "My Ahmed Failed: Now What?"

- *Purpose:* Failure of glaucoma drainage implants is not uncommon. This talk will review 2 of the common options considered as a next step: second GDD implant or cyclophotocoagulation.

- *Educational objectives:* Is second GDD or CPC more effective after Ahmed implant?

- *Schedule:* Not Thursday

---

**Gicheru, Sidney** -- "How we won a Texas Scope battle in 2015?"

- *Purpose:* This is an advocacy talk about how the Texas Ophthalmological Association beat back an Optimetric scope attack in 2015 when I was TOA president.


- *Schedule:* Anytime

---

**Gicheru, Sidney** -- "Starting an LDP for Ophthalmologists on the African continent"

- *Purpose:* I helped cofound an Leadership Development program for Sub-Saharan Africa. I will discuss the experience, successes and disappointments.

- *Educational objectives:* Advocacy, Leadership training.

- *Schedule:* Anytime

---

**Gonzalez, Victor H** -- "Predicting Visual Acuity Response to anti-VEGF DME Therapy in Protocol I: A Post-hoc Analysis of Outcomes in Patients with Limited (≤5 letter) and Intermediate (5-9 letter) Response at 12 weeks"

- *Purpose:* Treating Diabetic Macular Edema (DME) has been revolutionized by the anti-VEGF's. Current regimens from clinical trials require continued treatment over a long period of time. This talk will highlight a strategy that will help physicians treating DME identify those patients who will do well with continued anti-VEGF therapy as early as 12 weeks into treatment, improving outcomes while reducing the treatment burden and the cost for these patients.

- *Educational objectives:* This lecture will help physicians identify patients early in
anti-VEGF treatment of DME that will have favorable results longterm.
- Schedule: Not Monday

Granet, David -- "Practice Pearls from Comic Book Superheroes"
- **Purpose:** All of us are familiar with comic book characters. What we may not realize is the lessons we can learn from the way characters in comics and life behave. Via the use of quotes and video, pearls for the practice of medicine will be presented. These principles will make a difference on daily basis for the practitioner.

- **Educational objectives:** Understanding the role of the MD in providing care and effectively running a practice.
- Schedule: Anytime

Hagedorn, Curtis L. -- "Neovascular Age-Related Macular Degeneration Disease Quiescence with Visual Acuity Stability in a Sub-Group of Patients Following PRN Treatment"

- **Purpose:** ABSTRACT Purpose: This study evaluates long-term visual acuity (VA) outcomes in patients with prolonged clinically quiescent neovascular age-related macular degeneration (AMD) after treatment with a pro re nata (PRN) regimen of intravitreal bevacizumab, ranibizumab, and/or aflibercept. Methods: A retrospective chart review was conducted between October 31, 2005 and December 31 2015 at Colorado Retina Associates to examine patients who had a period of disease quiescence not requiring treatment for at least 180 days. VA was analyzed with an emphasis on changes during the treatment and quiescent periods. The sample was stratified to compare those with VA gain throughout the study to those with VA loss. Other data collected from patients included: age, gender, eye side affected, number and types of treatment, and the amount of time spent in treatment and disease quiescence. Results: The aggregate group showed VA stability during the treatment period (20/117 to 20/116) with a significant decline during the quiescent period (to 20/235; p<.001). The VA gainers had a significant increase in VA during the treatment period (20/187 to 20/88; p<.001) and VA stability during the quiescent period (to 20/93). VA losers had a significant decline in VA during both the treatment and quiescent periods (p<.001). Conclusion: Overall, PRN treatment resulted in a decline in VA during a period of apparent disease quiescence. There is a group of patients that does not lose VA during this quiescent period, and if these patients can be identified early, their treatment could be optimized.

- **Educational objectives:** We may be able to hold treatment indefinitely in quiescent wet AMD and still maintain good vision.
- Schedule: NOT Thursday
Hildebrand, P. Lloyd -- "Machine Teaching - IBM Watson in Ophthalmology"
- **Purpose**: In the emerging field of artificial intelligence, cognitive computing and big data analytics, machine learning plays a pivotal role. How do human teachers help machines learn? Examples from the IBM Watson Health Imaging Collaborative's ophthalmology project will be presented.
- **Educational objectives**: Role of machine learning in future practice.
- **Schedule**: Anytime

Hoar, Glen -- "Ophthalmology Residency Training - A Canadian Perspective"
- **Purpose**: A review of Canadian Ophthalmology Residency programs and curriculum, a look back and a look forward.
- **Educational objectives**: In the changing landscape of medical and surgical ophthalmic care, this will be a view on how Canadian residents are trained.
- **Schedule**: Anytime

Irvine, John -- "Ocular Graft vs Host Disease: Challenges and Opportunities"
- **Purpose**: The ocular surface sequelae of chronic graft vs host disease are complex, debilitating and frustrating for patients, family, and physicians. This presentation will outline some of the factors involved in this challenging entity and present a clinical approach to management.
- **Educational objectives**: This presentation will discuss management strategies for ocular GVHD "dry eye", giving hope to patients for achieving quality of life once they "get their life back".
- **Schedule**: NOT Thursday

Kishor, Krishna -- "Case of a Visual Field Defect"
- **Purpose**: Patient had ocular hypertension with normal visual fields. The patient had cataract surgery with subsequent retained lens fragment. The patient was lost to follow up. The patient developed a visual field defect on follow up.
- **Educational objectives**: After a retained lens fragment the intra-ocular pressure needs to be managed aggressively.
- **Schedule**: Monday

- **Purpose**: Sebaceous cell carcinoma is a potentially devastating malignancy of the eyelid and ocular adnexa. Surgical management typically requires complex reconstructive techniques. Outcomes vary and may be determined by the extent of the disease and complexity of repair required. Several cases will be presented illustrating some of the challenges of treating this
subset of cutaneous malignancies.
- **Educational objectives:** Ophthalmologists should be aware of the importance of early detection of sebaceous cell carcinoma of the eyelid, the complexity of surgical management, and the potential for significant morbidity.
- **Schedule:** Anytime

---

**LaRosa, Frank**-- "Optometrists in our Ophthalmology Practice"
- **Purpose:** I will describe the lessons we have learned in employing optometrists and how we have integrated them into our primarily ophthalmic practice.
- **Educational objectives:** Contemporary strategies of using optometrist physician extenders in a large ophthalmology practice.
- **Schedule:** Anytime

---

**Lawrence, Scott D.**-- "Glaucoma Training in the Developing World: A New Model for a New Era"
- **Purpose:** Nearly 80 million people will be affected by glaucoma by the year 2020. The majority of these patients reside in Africa and Asia. At the same time, developing countries like Ethiopia have only one ophthalmologist per 500,000 - 1M people. This talk will review the current challenges to glaucoma management in under-resourced settings and will propose a novel, modular-based training approach to address the human resource component. This model of subspecialty fellowship training could create a platform for bringing innovative technologies - like MIGS - to the people who need them most.
- **Educational objectives:** Innovative models of subspecialty training and technological advances in glaucoma surgery could be game changers in combating blindness in the developing world.
- **Schedule:** Monday or Tuesday ONLY

---

**Lelli, Gary J.**-- "Herding Cats: Stopping Overspending in Pre-operative Cataract Clearances"
- **Purpose:** Many standard pre-operative tests are not necessary for cataract surgery, yet are still performed. This talk evaluates the potential costs of unnecessary pre-operative tests and demonstrates and effort to curtail this practice.
- **Educational objectives:** Diminishing unnecessary pre-operative testing in cataract surgery patients.
- **Schedule:** Anytime

---

**Mahajan, Vinit.** -- "Personalized Proteomics for Proliferative Vitreoretinopathy"
Purpose: Personalized Proteomics for Proliferative Vitreoretinopathy

Vinit B. Mahajan M.D., Ph.D.1,2, C. Nathaniel Roybal M.D., Ph.D.1,3,4, Gabriel Velez, B.S.1,5

Affiliations: 1 Omics Laboratory, Stanford University, Palo Alto, CA 2 Byers Eye Institute, Department of Ophthalmology, Stanford University, Palo Alto, CA 3 Eye Associates of New Mexico, Albuquerque, NM 4 Department of Surgery, University of New Mexico, Albuquerque, NM 5 Medical Scientist Training Program, University of Iowa, Iowa City, IA

Abstract Objective: To use proteomics to profile cytokine expression in vitreous of patients in different stages of proliferative vitreoretinopathy to help explain the pathophysiology of PVR and point to rationale therapeutic repositioning.

Methods: A case-control study was performed using vitreous biopsies from control subjects (ERM) and test subjects (n=7) with retinal detachment and varying degrees of PVR. A high-throughput cytokine screen measured expression of 200 human cytokines. Cytokine expression patterns were prospectively validated in separate cohorts of control patients and those with PVR-A, PVR-B, and PVR-C. Expression changes were evaluated by ANOVA (significant p-value < 0.05), unsupervised cluster algorithm, and pathway analysis, to identify candidate pathways for prospective studies.

Results: In PVR vitreous, 35 cytokines were upregulated compared to controls. Stage-specific analysis demonstrated cytokine profiles differ in early vs. late PVR. Early-PVR vitreous showed upregulation of T-cell markers, pro-fibrotic cytokines, and cytokines downstream of mTOR activation (IL-2, IL-6, and IL-13), whereas late PVR vitreous, cytokines driving monocyte responses and stem-cell recruitment (SDF-1) prevailed. Prospective validation confirmed the differential expression of specific cytokines from PVR-A to C. Cytokine profiles segregate PVR patients from controls, and the early PVR stages characterized by activation of T-cells and mTOR signaling, whereas advanced-PVR is characterized by a chronic monocyte response. PVR could be treated by rational repositioning of existing drug, such as Metformin, Sirolimus and anti-IL-6.

Whether vitreous cytokine analysis can segregate patients with single surgery RD from those who develop PVR at the time of initial presentation remains to be evaluated.

Educational objectives: The lecture will address how ophthalmologists can better understand and treat proliferative vitreoretinopathy at the molecular level.

Schedule: Anytime

---

Maltzman, Jeffrey -- "When the field says yes but the nerve says no"

Purpose: A case demonstrating rapidly progressive bilateral field loss in a glaucoma patient will be presented. The ultimate cause of field progression will be identified and discussed.

Educational objectives: Not all progression of visual field loss in glaucoma is due to glaucoma, and the clinician must be aware of other processes that may mimic glaucoma.

Schedule: Anytime

---

Melendez, Robert -- "Control Your Online Reputation"

Purpose: It's reported that more and more patients are searching for doctors online. What
do they see? I will highlight several AESC doctors online profiles and provide strengths, weaknesses, opportunities, and threats to their online reputation. I will offer up some pearls to help you and your practice shine online.

- **Educational objectives:** Most doctors do not know how to control their online reputation.
- **Schedule:** Anytime

---

**Miller, David G.** -- "Ocular Complications Following Intraocular Injection of Elevated Dose of Cefuroxime"

- **Purpose:** Intracameral injection of cefuroxime sodium (1 mg/0.1 mL) has been reported to reduce the risk of endophthalmitis following cataract surgery and is becoming more common. This study describes the results of a 10 times elevated doses of intracameral injection of cefuroxime sodium. Dilution errors of this type may be more common with the adoption of cefuroxime endophthalmitis prophylaxis.
- **Educational objectives:** Physicians should be aware of complications from intraocular medications that are compounded improperly.
- **Schedule:** Monday or Tuesday (not Wednesday or Thursday)

---

**Orge, Faruk** -- "Anterior Segment Imaging Revisited"

- **Purpose:** Current anterior segment imaging (OCT and UBM) still has limitations and has difficulty showing structures behind the iris and aqueous outflow dynamics. 3D UBM may give us a unique perspective and better understanding of the structures.
- **Educational objectives:** This talk will help to cover current and upcoming anterior segment imaging modalities.
- **Schedule:** Anytime

---

**Orge, Faruk** -- "Emerging New Technologies"

- **Purpose:** This presentation will introduce new device ideas, drug delivery concepts and findings of new compound effecting wound healing algorithms.
- **Educational objectives:** This talk will help to cover current and upcoming anterior segment imaging modalities.
- **Schedule:** Anytime

---

**Parke, Will** -- "Vitrectomy for Floaters and Return to the O.R."

- **Purpose:** Vitrectomy for visually-significant vitreous opacities remains controversial and has an unclear complication rate. A large data registry was used to analyze the rate of reoperation after vitrectomy for vitreous opacities.
- **Educational objectives:** Information on various new research ideas and concepts.
- **Schedule:** Not Thursday
Rachitskaya, Aleksandra -- "Argus II Retinal Prosthesis, Cleveland Clinic Experience"
  - **Purpose:** Argus II Retinal Prosthesis System is the first and only FDA approved intervention for patients blind from advanced retinitis pigmentosa. Cleveland Clinic Cole Eye Institute is one of the leading centers of Argus II implantation. The patient selection, surgery, post-surgical outcomes, and research initiatives will be discussed.
  - **Educational objectives:** Argus II Retinal Prosthesis System has been recently approved by FDA and there is insufficient information on Argus II recipients outcomes.
  - **Schedule:** Anytime

Robbins, Shira -- "Prenatal Ultrasound: The Eyes in The Hopper"
  - **Purpose:** Technological progress in medicine has provided earlier diagnosis, even in the prenatal phase, through ultrasonographic imaging of the prenatal eye and surrounding tissues of the orbit. During development of these structures, multiple pathologies and diseases can arise. Orbital anomalies can be detected prenatally using ultrasound or MRI; some of these include congenital cataracts, hypertelorism, hypotelorism, dacrocystocele, microphthalmia, anophthalmia, orbital tumors/masses, and septo-optic dysplasia. This talk describes characteristic ultrasound findings of these diseases. Prenatal ocular and orbital diagnosis is best facilitated by a team approach between ophthalmology, radiology, obstetrics, neonatology and genetic counselors to optimize diagnostic accuracy, familial expectations and early treatment.
  - **Educational objectives:** Most ophthalmologists are unaware of the range of orbital and ocular diagnoses that can be found during prenatal ultrasound.
  - **Schedule:** Anytime

Saini, Arvind -- "Treatment of corneal Ocular Surface Squamous Neoplasia (OSSN) with topical 5-FU"
  - **Purpose:** This is a case report of the successful treatment of a presumed corneal OSSN with 5-FU after the patient presented with a nodular corneal lesion.
  - **Educational objectives:** Treatment of corneal nodular lesions and the role of topical chemotherapy agents in OSSN
  - **Schedule:** Anytime

Schwartz, Stephen -- "The Monocular Duke of Urbino"
  - **Purpose:** Federico da Montefeltro (1422 -1482), the Duke of Urbino, was famous during the Italian Renaissance. He is the subject of a renowned painting by Piero della Francesca (1416-1492), which displays the Duke in left profile and features his oddly shaped nose. The Duke lost his right eye due to a jousting injury, which is why the painting portrays him from the
left. Some historians (medical and nonmedical) claim that the Duke subsequently underwent nasal surgery to remove tissue from the bridge of his nose in an attempt to compensate for the lost eye. In theory, removal of a piece of the nose may have expanded the nasal visual field, especially the more physiologic "eye motion visual field" that includes eye movements. Removing part of the nose also may have reduced some of the effects of ocular parallax. Shifting of the visual egocenter may have subsequently occurred, although this seems unrelated to the proposed nasal surgery. Whether or not the Duke actually underwent the surgery is unknown, it seems doubtful that this would have improved his visual function substantially.

- **Educational objectives:** Discusses challenges faced by monocular patients and explores the hypothesis that a famous individual underwent nasal surgery to overcome these challenges

- **Schedule:** Monday or early Tuesday

---

**Setabutr, Pete**-- "Post Auricular Grafts in Exposed Implants"
- **Purpose:** Post auricular grafts can be used in the management of exposed orbital implants.
- **Educational objectives:** Exposed implants are known complication of socket surgery. The use of post auricular grafts can be a viable option for repair.
- **Schedule:** Anytime

---

**Shaw, Hal** -- "Brain Tumors and Aneurysms. A 38 Year Ophthalmologic Perspective"
- **Purpose:** Brain tumors and aneurysms frequently have ocular manifestations and ophthalmologists often play an important role in the diagnosis and management of these conditions. In this presentation, a large series of brain tumors and aneurysms seen by one ophthalmologist is analyzed from an ophthalmologic perspective.
- **Educational objectives:** Ophthalmologists play an important role in the diagnosis and management of brain tumors and aneurysms and should be familiar with the manifestations of these conditions.
- **Schedule:** Monday or Tuesday (not Wednesday or Thursday)

---

**Tandon, Amit**-- "A Patient’s Perspective"
- **Purpose:** A first hand account of a physician becoming a patient and experiencing a hospital stay with a severe illness.
- **Educational objectives:** Show a patient's experiences with health care at an educational hospital.
- **Schedule:** Anytime
**Wand, Martin** -- "The Effect of Topical Prostaglandins on Migraine Headaches"

- **Purpose:** To study the ability of topical prostaglandin analogues applied to the fingernail bed or eye in reducing the frequency, severity and duration of migraines. Methods: We conducted retrospective expanded Migraine Disability Assessment (MIDAS) questionnaires on 17 migraine patients pre- and post- treatment. Results: Subjects (average age 54.4; 4 males) used prostaglandins (2 in the eye and 15 on the nail) for 15.8 months on average. There was a decrease in the number of headache days from the 3 months pre-treatment (mean 24.7 headache days) to the 3 months post-treatment (mean 7.5 days) (p ≤ 0.05). There was a decrease in headache severity from 6.1 to 3.7 (scale 0-10) (p ≤ 0.05) and headache duration from 3-12 hours to 1-3 hours (p ≤ 0.05). The MIDAS score reduced from 18.4 to 3.9 (p ≤ 0.05). No adverse effects were reported with nail application however it was noted that nail growth accelerated. Conclusion: Prostaglandin analogues may prove to be a novel treatment modality for headache management.

- **Educational objectives:** There are many known and as yet undetected side effects of topical prostaglandins. One serendipitous, unexpected, and counter-intuitive side effect is that topical PGs can effectively treat/prevent migraine headaches.
- **Schedule:** Wednesday or Thursday (not Monday or Tuesday)

**Weingeist, Aaron** -- "Real Estate Development for the Ophthalmologist"

- **Purpose:** Renting a practice location has many drawbacks. Developing your own real estate has many advantages. This presentation will take the audience from start to finish in a Seattle comprehensive ophthalmology practice. Dos and don'ts, and hidden challenges will be discussed.
- **Educational objectives:** To help those who surgically treat glaucoma decide if XEN Gel Stent insertion is applicable to their practice.
- **Schedule:** Anytime

**Welcome, Brian** -- "XEN-ophile or XEN-ophobe? My Early Experience with the XEN Gel Stent"

- **Purpose:** With the aid of surgical videos, I will describe the XEN Gel Stent surgical procedure, its indications, and its complications. My early surgical experience and outcomes will be discussed, and I will proffer where I see this newly FDA-approved MIGS procedure fitting into the care of glaucoma patients in the long term.
- **Educational objectives:** We all need to work somewhere and practice development is not
addressed in any or our formal education.
  - **Schedule:** Anytime

---

**Williams, Pamela** -- "The Mountains and Valleys of Low Dose Atropine in High Myopia: An American Eye Study Club Perspective"
  - **Purpose:** To discuss the use of low dose atropine in children with myopia. Although widely used in southeast Asia, usage of low dose Atropine is relatively new in this country to treat high myopia. In this mini-symposia, we will discuss indications, results and challenges experienced by pediatric ophthalmologists in different geographic regions across the country.
  - **Educational objectives:** As the use of low dose Atropine is becoming more widely used in the US, it is important to understand the indications, the results in a multicultural population and challenges that occur when using a drug that is not commercially available.
  - **Schedule:** Anytime

---

**Ying, Michelle S.** -- "Topography-Guided Ablations"
  - **Purpose:** Topography-guided ablations have been FDA approved for the treatment of myopia and astigmatism. In other countries, topography-guided technology has been used to treat cornea abnormalities. Some of the cornea conditions that can be treated include ectasia, irregular astigmatism, decentered ablations, and cornea scars. In this talk, we will review our early results with topography-guided ablations for abnormal corneas.
  - **Educational objectives:** Discuss the indications and benefits of topography-guided ablations for irregular corneas.
  - **Schedule:** Anytime