<table>
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<tr>
<th>Paper Title</th>
<th>Author Block</th>
<th>Abstract</th>
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<tr>
<td>Adaptive Optics Imaging of Peripapillary Nerve Fiber Bundles: Implications</td>
<td>Author Block: Dongwon Lee1, Monica Chen2, Toco Y. Chui3, Benjamin Epstein1,</td>
<td>Purpose: To better understand glaucomatous damage seen on circumpapillary disc scans obtained with</td>
<td>observed with optical coherence tomography (OCT), these scans were compared to images of the peripapillary</td>
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<tr>
<td>for Glaucotamous Damage Seen on Circumpapillary OCT Scans.</td>
<td>Robert Ritch3, Richard B. Rosen3, Alfredo Dubra4, Donald Hood</td>
<td>optical coherence tomography (OCT), these scans were compared to images of the peripapillary retinal</td>
<td>nerve fiber (RNF) bundles obtained with an adaptive optics/scanning light ophthalmoscope (AO-SLO).</td>
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<td>RNF bundles obtained with an adaptive optics/scanning light ophthalmoscope (AO-SLO).</td>
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<td>Analysis of the Photoreceptor Mosaic Within, On and Outside the Borders</td>
<td>Author Block: Emily S. Smith1, Toco Y. Chui2, Ching-Lung Chen3,4, Joseph</td>
<td>Purpose: To compare the appearance, density, and spatial organization of photoreceptor cells (PRCs)</td>
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<td>of Hyperautofluorescent Rings in Retinitis Pigmentosa Using Adaptive Optics</td>
<td>Carroll5, Alfredo Dubra5, Robert F. Cooper6, Richard B. Rosen2, Donald Hood1,3</td>
<td>in patients with retinitis pigmentosa (RP) to measures of visual function and retinal structure within, on and outside the borders of the hyperautofluorescent (hyperAF) ring.</td>
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<td>Scanning Light Ophthalmoscopy</td>
<td>C. Greenstein3</td>
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<td>Anterior Ocular Biometry Changes after Cataract Extraction Using 3-</td>
<td>Author Block: Ruojin Ren1, Daniel Laroche1, Sung Chul (Sean) Park1,2, Cristian</td>
<td>Purpose: To investigate the changes in in vivo anterior segment anatomy, using swept-source optical</td>
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<td>dimensional Optical Coherence Tomography</td>
<td>Dalmasso1, Jeffrey M. Liebmann3, Robert Ritch1</td>
<td>coherence tomography (SS-OCT) in response to uncomplicated cataract extraction and posterior chamber</td>
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<td>intraocular lens (IOL) implantation in cataract patients with and without primary open-angle glaucoma</td>
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</table>
Antibiotic Resistance Among Ocular Pathogens – Results from the ARMOR Surveillance Study 2013-Present

Penny A. Asbell¹, Christine M. Sanfilippo², Daniel F. Sahm³, Heleen H. DeCory²

The Antibiotic Resistance Monitoring in Ocular Microorganisms (ARMOR) study was initiated in 2009 to survey resistance levels among ocular pathogens on a nationwide scale. Here we report the complete study results for 2013 compared to preliminary 2014 data.

Association between Lamina Cribrosa Position Change and Glaucomatous Visual Field Progression

Author Block: Ramiz Abumasmah¹, Ruojin Ren¹, Mark Ghassibi¹, Jason L. Chien¹, Olga Adleyba¹, Celso Tello¹,², Jeffrey M. Liebmann³, Robert Ritch¹, Sung Chul (Sean) Park¹,²

Purpose: To investigate the association between longitudinal lamina cribrosa (LC) position change and the rate of glaucomatous visual field (VF) progression.

Changes over time in retinal vessels in patients with early diabetes

Author Block: Richard B. Rosen¹,²

Presentation Description: Adaptive optics scanning light ophthalmoscopy using an offset pinhole (OP AOSLO) configuration enables non-invasive imaging of the dynamics of retinal microvascular walls, lumen, and blood flow, without the need for any exogenous contrast agent. We used OP AOSLO to survey and monitor subclinical microvascular changes over time in patients with diabetic retinopathy, including capillary perfusion remodeling, loop formation and resolution, microaneurysm expansion and regression. This technique provides a dynamic longitudinal view of the histopathology of aberrant diabetic microvascular development.
Combined systemic and intravitreal antiviral treatment in acute retinal necrosis

Author Block: **Emile Sharifi**1, Masako Chen2, Diaz Vicente1, John Mauro1, **C M. Samson**, Sanjay Kedhar1

Abstract

Purpose: To determine the outcomes at our institution for treating acute retinal necrosis (ARN) with combined systemic and intravitreal antiviral agents.

Number: 3130 - D0326

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Corneal abrasion following anesthesia for non-ocular surgical procedures. A case-control study

Author Block: Anais Carniciu1, Melissa Fazzari2, Pauline Tabibian2, Priti Batta2,3, Ronald C. Gentile2,3, James Grendell2, Collin Brathwaite2, Nazanin Barzideh

Abstract

Purpose: To identify and characterize the risk factors associated with corneal abrasions following anesthesia for non-ocular surgical procedures at a single institution.

Number: 3057 - D0253

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Cyclopentolate 1% Decreases Schlemm’s Canal Dimension in Normal Subjects

Author Block: **Michael Rosman**1, Alon Skaat1, Sung Chul Park1,2, Jason L. Chien1, Mark Ghassibi1, Siddartha Rathi1, **Robert Ritch**1, Jeffrey M. Liebmann3

Abstract

Purpose: To characterize the in vivo effect of cyclopentolate 1%, an anticholinergic agent, on the structure of Schlemm’s canal (SC) in normal eyes.

Number: 4986 - B0185

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Cytomegalovirus Anterior Uveitis in Immunocompetent Patients

Author Block: **Natasha V. Nayak**1, Emile Sharifi1, **C M. Samson**1, Sanjay Kedhar1

Abstract

Purpose: To describe the clinical features and management of cytomegalovirus (CMV) associated anterior uveitis in immunocompetent patients within the United States.

Number: 1864 - C0172
Developing micro-RNAs as biomarkers for Primary Open Angle Glaucoma

Author Block: Emmanuel S. Buys1, Allyson Hindle1, Jessica V. Jasien2, Krishna Amin3, Kaitlin Allen1, Ana Vandenwijngaert1, Jasen Wise3, Jonathan Shaffer3, Robert Ritch2

Abstract Number: 3654 - A0148

Purpose: Primary open angle glaucoma (POAG) often goes undetected, highlighting the need for novel diagnostic or treatment response biomarkers. A family of ~2500 noncoding microRNAs (miRNAs) function as key molecular regulators by repressing their target gene. miRNA-based therapeutics are promising strategies to treat and detect various disorders. Recent studies illustrated presence of ~500 miRNAs in aqueous humor (AqH). Limited data is available on differential miRNA levels in AqH from patients with various subtypes of POAG, or on the correlation between miRNAs in AqH and plasma. We aimed to identify miRNAs as potential POAG biomarkers in AqH and plasma.

Does a patient’s time of presentation correlate with the severity of diagnosis? – The experience of the Ophthalmology Urgent Care center at the New York Eye and Ear Infirmary

Author Block: Luna Xu1, Aimee Chang2, Kellie Gergoudis2, Anita Gupta1

Abstract Number: 1386 - A0081

Purpose: The study aims to explore whether there is an association between the severity of an ophthalmologic diagnosis and the time at which a patient presents to an ophthalmology urgent care center.
Duration of Immunomodulator Therapy on Five-Year Uveitis Remission Rates

Author Block: Yijie Lin1, Emile Sharifi1, David Mostafavi1, Danielle Rome1, Michael Tang1, Tiffany Truong1, Vicente Diaz1, Sanjay Kedhar1, John Mauro1, C M. Samson1

Abstract
Number: 3109 - D0305

Purpose: To evaluate the relationship between duration of immunomodulator therapy (IMT) and uveitis remission rates five years after discontinuation of the IMT.

Epigenetic Drugs Inhibit Uveal Melanoma Cell Proliferation and Cell Cycle Progression

Author Block: Weiwei Chen1, Jiao Wang1, Dan-Ning Hu2, Dongsheng Yan1

Abstract
Number: 5312 - A0161

Purpose: Emerging evidence indicates that epigenetic drugs, such as DNA hypomethylating agents and histone deacetylase (HDAC) inhibitors have substantial efficacy in treating some cancers. Their effects on uveal melanoma, however, are largely unknown. To deal with this question, we determined the effects of four epigenetic drugs on uveal melanoma cell proliferation and apoptosis. The drugs used include two hypomethylating agents and two HDAC inhibitors.

Extrafoveal Cone Packing Density and Geometry in Retinopathy of Prematurity (ROP)

Author Block: Ramkumar Ramamirtham1, Garima Soni1,2, James D. Akula1,3, Emily A. Swanson1, Tara L. Favazza1, Mircea Mujat4, R D. Ferguson4, Toco Y. Chui5, Anne Moskowitz1,3, Anne B. Fulton1,3

Abstract
Number: 4933 - B0061

Purpose: To study cone packing density and geometry using an adaptive optics scanning laser ophthalmoscope (AOSLO) in eyes with history of ROP and age matched control subjects.
Factors associated with paracentral visual field involvement in glaucomatous eyes with optic disc hemorrhages

Author Block: Verena Juncal1, Flávio Lopes1, Paula Alhadeff2, Robert Ritch2, Tiago S. Prata

Abstract

Number: 1053 - B0187

Purpose: To assess factors associated with paracentral visual field (VF) involvement in glaucomatous eyes with disc hemorrhages (DH)

Fluorescein Angiography and Retinal Vessel Oxygen Saturation in Patients with Proliferative Diabetic Retinopathy.

Author Block: Nicole K. Scripsema1, Chavakij Bhoomibunchoo1, Paul Whitten1, Robert Masini1, Richard B. Rosen

Abstract

Number: 3309 - B0092

Purpose: To determine oxygen saturation differences between areas of active versus inactive Proliferative Diabetic Retinopathy (PDR) using the Oxymap Retinal Oximeter.

Glaucoma Diagnostic Capability of Circumpapillary Retinal Nerve Fiber Layer Thickness in Circular Scans with Different Diameters

Author Block: Mark Ghassibi1, Jason L. Chien1, Thipnapa Patthanathamrongkasem1, Ramiz Abumasmah1, Michael S. Rosman1, Alon Skaat1, Celso Tello1,2, Jeffrey M. Liebmann3, Robert Ritch1, Sung Chul (Sean) Park1,2

Abstract

Number: 4552 - B0105

Purpose: To compare the diagnostic capability of circumpapillary retinal nerve fiber layer thickness (RNFLT) for glaucoma among circular scans with different diameters.
Glaucoma Diagnostic Capability of Macular Layer Volume and Thickness using Spectral-Domain Optical Coherence Tomography

Author Block: Jason L. Chien1, Mark P. Ghassibi1, Thipanapa Patthanathamrongkasem1, Ramiz Abumasmah1, Michael S. Rosman1, Alon Skaat1, Celso Tello1,2, Jeffrey M. Liebmann3, Robert Ritch1, Sung Chul (Sean) Park1,2

Abstract Number: 4529 - B0082

Purpose: To compare the diagnostic capability of different macular layer volume and thickness parameters for glaucoma in different-sized grids.

Glucomatous Damage of the Retinal Nerve Fiber Layer Can Be Better Visualized with En-Face OCT Imaging than with Typical OCT Thickness Maps

Author Block: Maria A. Mavrommatis2, Brad Fortune1,6, Juan Reynaud1,6, Monica Chen2, Rithambara Ramachandran2, Robert Ritch4, Richard B. Rosen4, Alfredo Dubra5, Toco Y. Chui4, Donald Hood3

Abstract Number: 4554 - B0107

Purpose: The appearance of the retinal nerve fiber layer (RNFL) seen using summed voxel projections (SVP) of en-face images of optical coherence tomography (OCT) scans was compared to RNFL thickness maps derived from the same scans.

Human Adult Retinal Pigment Epithelial Cultures Exhibit Key Physiological Characteristics of Native RPE Tissue

Author Block: Timothy A. Blenkinsop1, Janmeet S. Saini2, Arvydas Maminishkis3, Kapil Bharti3, Qin Wan3, Janine Davis3, Sheldon S. Miller3, Sally Temple2, Jeffrey Stern2

Abstract Number: 2330 - B0264

Evaluate the physiology of adult human RPE cultured using a recently established protocol.
Hypoxia induces VEGF secretion in uveal melanocytes through increased protein levels of hypoxia-inducible factors-1α

Author Block: **Dan-Ning Hu**, **Richard B. Rosen**, **Codrin E. Iacob**

Abstract Number: 223 - C0078

Purpose: Hypoxia leads to the accumulation of hypoxia-inducible factor-1α (HIF-1α) protein, which in turn causes the increase in VEGF secretion in various cell types; however, the effects of hypoxia on the expression of VEGF and HIF-1α in uveal melanocytes (UM) have never been reported. We hypothesize that hypoxia may stimulate the secretion of VEGF in cultured human UM via the accumulation of HIF-1α protein.

Identification of a novel locus for Exfoliation Syndrome


Abstract Number: 4380

Purpose: Exfoliation syndrome (XFS) is an age-related disease, manifesting primarily in the eyes. XFS is a very common and recognizable cause of secondary glaucoma world-wide. We sought to better understand the overall disease process of XFS. To this end, we thus conducted a genome-wide association study (GWAS) on ~1500 patients with XFS matched to ~1200 controls from Japan.

Imaging of Periarteriolar Capillary Free Zone using Offset Pinhole Adaptive Optics Scanning Light Ophthalmoscopy


Abstract Number: 5298 - A0052

Purpose: Previous studies have shown that the dimension of the periarteriolar capillary free zone (CFZ) is associated with the retinal oxygen level. In this study, we imaged and quantified the CFZ in healthy controls using an offset pinhole adaptive optics scanning light ophthalmoscope (AOSLO).
Impaired Lysosomal and Mitochondrial Function in Exfoliation Glaucoma

Author Block: Andrew Want1,2, Stephanie Gillespie1, J Mario Wolosin1, Robert Ritch2, Audrey Bernstein1

Abstract Number: 1695

Purpose: In the eye, exfoliation syndrome (XFS) is characterized by the aggregation of disorganized microfibrils (exfoliation material, XFM). Deposition of XFM and pigment in the aqueous outflow pathway leads to chronic intraocular pressure elevation leading in turn to glaucoma. Similar to other age-related diseases in which protein aggregates cause disease, we hypothesize that lysosomal and mitochondrial dysfunction contributes to the formation of XFM aggregates.

Improving inter-individual diagnostic agreement in early glaucoma through better use of optical coherence tomography (OCT) scans.

Author Block: Donald Hood1, C Gustavo De Moraes2, Lola Grillo1, Paula Alhadeff3, Ravivarn Jarukasetphon3, Rithambara Ramachandran4, Diane Wang4, Dana Blumberg2, Jeffrey M. Liebmann3, Robert Ritch

Abstract Number: 2060

Purpose: To test if individuals trained in a method integrating key visual field (VF) and optical coherence tomography (OCT) information without stereo disc photographs (SDP) would show better inter-individual agreement in diagnosing early glaucoma than glaucoma specialists using traditional commercial reports and SDP.

In Vivo Schlemm’s Canal Size Is Associated with Axial Length, Age and Corneal Thickness in Normal Eyes

Author Block: Sung Chul (Sean) Park1,2, Thipnapa Patthanathamrongkasetm2, Ruojin Ren2, Jason L. Chien2, Mark Ghassibi2, Celso Tello1,2, Jeffrey M. Liebmann3, Robert Ritch

Abstract Number: 4987-B0186

Purpose: To assess the associations between Schlemm’s canal (SC) size with ocular and demographic factors in normal eyes.
In vivo imaging of human retinal microvasculature in sickle cell retinopathy using adaptive optics scanning light ophthalmoscope fluorescein angiography and offset pinhole imaging.


Abstract: Purpose: To detect and monitor microvascular changes cross-sectionally and longitudinally in patients with sickle cell retinopathy (SCR) using adaptive optics scanning light ophthalmoscope (AOSLO) fluorescein angiography (FA) and offset pinhole (OP) imaging.

In vivo retinal vascular wall imaging in patients with diabetic retinopathy using non-confocal Split Detection Adaptive Optics Scanning Light Ophthalmoscopy


Abstract: Purpose: To measure lumen diameter and wall thickness of perfused retinal vasculature, and to quantify changes in diabetic retinopathy (DR) relative to healthy control eyes.

Iridocorneal Angle and Anterior Chamber Architecture after Laser Iridotomy or Pilocarpine in Anatomically Narrow Angles


Abstract: Purpose: To compare the effects of laser iridotomy (LI) and pilocarpine on the iridocorneal angle and anterior chamber structures in anatomically narrow angles (ANA).

Long-term Outcomes of Laser Trabeculoplasty Prior to Cataract Surgery

Author Block: **Ting Ting Liu**, **Sarah Chao Ying Xu**, **James C. Tsai**, **Ji Liu**

Abstract: Purpose: To evaluate the long-term effect of laser trabeculoplasty on intraocular pressure (IOP) prior to cataract surgery.
Abstract

Number: 3983

Purpose: Primary open angle glaucoma (POAG) is a progressive optic neuropathy involving mitochondrial dysfunction revealed by characteristic structural changes to the optic nerve head and retinal nerve fiber layer, and functional visual field alterations. This study was designed to quantitatively assess mitochondrial dysfunction in the maculae of patients with POAG compared to healthy controls using flavoprotein autofluorescence (FPF) measured by the Retinal Metabolic Analysis (RMA) (OcuSciences, Ann Arbor, MI).

Abstract

Number: 2778 - B0160

Purpose: To evaluate high-resolution MRI sequences for utility in defining the 3D shape of eyes by comparing emmetropic and myopic eyes of subjects born full-term to those with a history of retinopathy of prematurity (ROP), a disease associated with both short axial length and myopia.
MicroRNA-135b Inhibits Uveal Melanoma Cell Proliferation and Migration

Abstract

Purpose: MicroRNAs (miRNAs) can act as either oncogenes or tumor suppressors in tumorigenesis. Evidence indicates that miRNAs play important roles in uveal melanoma cell proliferation and migration. The role of miR-135b in uveal melanoma, however, remains unclear. Here, we investigated the function of miR-135b in uveal melanoma cells.

Outcome of Descemet stripping automated endothelial keratoplasty in eyes with simultaneous insertion of a Descemet membrane

Abstract

Purpose: To compare the outcome of Descemet stripping automated endothelial keratoplasty (DSAEK) in eyes with simultaneous insertion of a Descemet membrane.

Outcomes of Descemet stripping automated endothelial keratoplasty performed by residents

Abstract

Purpose: Descemet stripping automated endothelial keratoplasty (DSAEK) has continued to gain popularity as an alternative to penetrating keratoplasty (PK) for the treatment of patients with endothelial cell disorders. While studies have documented the learning curve of cornea surgeons in performing DSAEK, there is little known on the similarities and differences of outcomes and complications when performed by residents in training. The purpose of our study is to evaluate the postoperative outcomes of DSAEK by residents under the supervision of experienced cornea surgeons.
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<th>Purpose</th>
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<tr>
<td>Prevalence of intermediate-stage age-related macular degeneration in patients with the Acquired Immunodeficiency Syndrome</td>
<td>Douglas A. Jabs, MD, MBA, Mark L. Van Natta, MHS, Efe Sezgin, MD, Jeong Won Pak, PhD, Ronald P. Danis, MD for the Studies of the Ocular Complications of AIDS Research Group.</td>
<td>1409 - A0104</td>
<td>Antiretroviral-treated, immunorestored, HIV-infected persons have evidence of accelerated and accentuated aging manifested as an increased prevalence of age-related diseases at younger ages than non-HIV-infected persons. We evaluated the prevalence of age-related macular degeneration (AMD) in patients with the acquired immunodeficiency syndrome (AIDS).</td>
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<td>Preventing the Argentinian Flag Sign During the Extraction of White Intumescent Cataracts: Phaco Capsulotomy Experience</td>
<td>Mahmood El-Gasim1, Kateki Vinod1, Christopher C. Teng2</td>
<td>683 - B0249</td>
<td>The extraction of white intumescent cataracts is challenging. During the creation of the capsulorhexis, the pressure of the cataract can cause spontaneous tears in the capsule that extend to the periphery (Argentinian flag sign). The aim of this study is to evaluate the effectiveness of phaco capsulotomy in preventing the Argentinean flag sign.</td>
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<tr>
<td>Progression of Retinal Nerve Fiber Layer Abnormalities Associated with Optic Disc Hemorrhages Can Be Followed with Optical Coherence Tomography</td>
<td>Daiyan Xin1, Diane Wang1, Rithambara Ramachandran1, Lola Grillo1, Gustavo De Moraes3, Ravivarn Jarukasatphon1, Robert Ritch2, Donald Hood1</td>
<td>4567 - B0120</td>
<td>To follow the changes in circumpapillary, retinal nerve fiber layer (RNFL) thickness seen with frequency domain optical coherence tomography (fdOCT) after an optic disc hemorrhage (DH) has been visualized on a fundus photograph.</td>
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<tr>
<td>Qualities of the Ideal Surgical Retina Fellow and Attending: Perspective of the Attending and Fellow</td>
<td>Jessica Lee1, Chirag Shah3, Steven Agemy1, Dean Elliott2, Ronald C. Gentile1,4, Study Group Annual Mass Eye and Ear Vitrectomy Course2</td>
<td>Purpose: To identify the top five ideal characteristics (behaviors) of both the retina surgical fellow and attending.</td>
<td>5126 - C0162</td>
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<td>Quantitative Analysis of Capillary Network Density in Diabetic Retinopathy Using Optical Coherence Tomography with Split-Spectrum Amplitudinal Decorrelation Angiography</td>
<td>Steven Agemy1, Jessica Lee1, Patricia Garcia1, Yi-Sing Hsiao2, Toco Y. Chui1, Richard B. Rosen1</td>
<td>Purpose: To quantitatively visualize retinal vascular flow in patients with diabetic retinopathy using Optical Coherence Tomography Angiography and a novel perfusion density mapping software.</td>
<td>3342 - B0125</td>
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<tr>
<td>Reference Ranges for Fixed Protocol Short Duration Transient Visual Evoked Potentials Parameter of Healthy Eyes</td>
<td>Peter H. Derr1, Alberto Gonzalez-Garcia1, Anna Shengelia2, Jason L. Chien3,4, Mark Ghassibi3,4, Celso Tello2,5, Robert Ritch3</td>
<td>Purpose: To evaluate the responses of Fixed Protocol Short Duration Transient Visual Evoked Potentials (SD-tVEP) on healthy subjects, to obtain the distribution of these parameters, and to establish expected reference ranges.</td>
<td>461 - A0185</td>
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<tr>
<td>Review and characterization of ophthalmology inpatient and emergency room consultations at a tertiary care hospital</td>
<td>Andrew A. Kao1, Anita Gupta1</td>
<td>Purpose: To identify the pattern and frequency of inpatient and emergency department ophthalmology consultations at a large tertiary care hospital.</td>
<td>1385 - A0080</td>
</tr>
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</table>
Purpose: Elevated intraocular pressure (IOP) is the sole proven modifiable risk factor for XFG development and progression. Rho-associated protein kinase inhibitors have been studied for their ability to lower IOP, by several mechanisms including disruption of adhesions between the trabecular meshwork (TM) cells and increasing aqueous outflow. The main purpose of this study was to evaluate the efficacy of AR-12286 and evaluate the lasting effect on IOP after discontinuation.

Purpose: SKQ1 (Visomitin) is a novel mitochondrial-targeted anti-oxidant that holds promise for treatment of the ocular surface inflammation. The goal of this study is to determine the potential role of SKQ1 as an anti-inflammatory drug for the treatment of ocular surface inflammation, such as that seen in dry eye disease.

Purpose: To compare the fellow eye of unilateral exfoliation syndrome (XFS) and exfoliative glaucoma (XFG) patients SD-tVEP test results to a set of SD-tVEP parametric reference ranges.
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<tr>
<td>Steady-State Pattern Electroretinogram (ssPERG)</td>
<td>Author Block: Anna Shengelia1, Peter H. Derr2, Alberto Gonzalez-Garcia2, Mark Ghassibi3,4, Jason L. Chien3,4, Celso Tello3,5, Robert Ritch</td>
<td>1030 - B0164</td>
<td>To propose and present evidence for the Combined Tractional-Hydration Theory of Idiopathic Macular Hole Formation, Progression, and Closure.</td>
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<tr>
<td>The Combined Tractional-Hydration Theory of Idiopathic Macular Holes</td>
<td>Author Block: Ronald C. Gentile1,2, Dean Eliott3, Richard B. Rosen1, Joseph Benevento1, Vincent S. Reppucci1, Raymond Iezzi4</td>
<td>4325</td>
<td>To propose and present evidence for the Combined Tractional-Hydration Theory of Idiopathic Macular Hole Formation, Progression, and Closure.</td>
</tr>
<tr>
<td>The Microarchitecture of Schlemm’s Canal before and after Selective Laser Trabeculoplasty</td>
<td>Author Block: Alon Skaat1, Michael S. Rosman1, Sung Chul (Sean) Park1,2, Jason L. Chien1, Mark P. Ghassibi1, Siddarth Rathi1, Robert Ritch1, Jeffrey M. Liebmann3</td>
<td>4978 - B0177</td>
<td>To characterize the in vivo effect of selective laser trabeculoplasty (SLT) on the structure of Schlemm’s canal (SC) in open-angle glaucoma eyes.</td>
</tr>
<tr>
<td>The Relative Odds of Progressing by Structural and Functional Tests in Glaucoma</td>
<td>Author Block: Amir Marvasti1, Linda M. Zangwill1, Ricardo Y. Abe1,2, Alberto Diniz-Filho1,3, Carolina Gracitelli1,4, Robert N. Weinreb1, Christopher A. Girkin5, Jeffrey M. Liebmann6, Felipe A. Medeiros1</td>
<td>623 - B0136</td>
<td>To evaluate the relationship between disease severity, number of tests during follow-up and the odds of progressing by structural and functional tests in glaucoma.</td>
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<tr>
<td>The Role of Primary Cilia in Anterior Segment Development and Disease</td>
<td>Carlo Iomini, PhD</td>
<td>Course Presentation</td>
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<tr>
<td>The Standard 24-2 Visual Field Test Can Miss Central Macular Damage Confirmed with 10-2 Visual Fields and Optical Coherence Tomography</td>
<td>Author Block: Lola M. Grillo1 , Diane Wang1 , Rithambara Ramachandran1 , Alyssa C. Ehrlich1 , Paula Alhadeff1 , C Gustavo De Moraes4 , Robert Ritch3 , Donald Hood2,1</td>
<td>Abstract Number: 634 - B0147</td>
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<td>The influence of age on the rate of estimated retinal ganglion cell counts in healthy eyes</td>
<td>Author Block: Joseph Liao1,2 , Carolina Gracitelli1,3 , Linda M. Zangwill1 , Christopher A. Girkin4 , Jeffrey M. Liebmann5 , Robert N. Weinreb1 , Felipe A. Medeiros1</td>
<td>Abstract Number: 3237 - A0086</td>
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### Purpose:
Glaucomatous damage to the macula (central ±10°) is relatively common and involves both deep local and shallow widespread defects.\(^1,2\) To assess the extent to which macular damage can be missed and/or underestimated by a 24-2 visual field (VF) test, we examined various metrics of the 24-2 VF of patients with confirmed macular damage based upon 10-2 VFs and optical coherence tomography (OCT).

### Purpose:
To evaluate aging effects on estimated retinal ganglion cell (RGC) counts in healthy eyes.
The minimum rim width at Bruch’s membrane opening (BMO-MRW) and detection of early glaucomatous damage.

Author Block: Ravivarn Jarukasetphon1,2, Diane Wang1, Xian Zhang1, Hassan Muhammad1, Lola Grillo1, Rithambara Ramachandran1, Robert Ritch2, Donald Hood1

Abstract Number: 1018 - B0092

Purpose: A recent optical coherence tomography (OCT) study found that the minimum distance between Bruch’s membrane opening (BMO) and the inner limiting membrane (ILM) was a better measure for detecting glaucomatous damage than was the circumpapillary retinal nerve fiber layer thickness (cpRNFL).[1] To explore when the BMO measure might fail, eyes with confirmed mild glaucomatous damage were studied.

The relation between patterns of central (macular) glaucomatous damage, diagnostic categories, and disc-fovea angle.

Author Block: Diane Wang3, Rithambara Ramachandran3, Lola M. Grillo3, Ravivarn Jarukasetphon1,3, Paula Alhadeff1,3, Gustavo De Moraes4, Robert Ritch1, Donald Hood2,3

Abstract Number: 635 - B0148

Purpose: To examine the association between the pattern of glaucomatous macular defects and diagnostic categories, as well as disc-fovea angle (DFA), using information from both frequency domain optical coherence tomography (fdOCT) and visual fields (VFs).

Visualization of Multiple Retinal Capillary Beds using Offset Pinhole Adaptive Optics Scanning Light

Author Block: Richard B. Rosen1,2, Nadim Choudury1,2, Nikhil Menon1,2, Alexander Pinhas1,2, Rishard Weitz1, Joseph Carroll3, Alfredo Dubra3, Toco Chui1,2

Abstract Number: 4098 - B0020

Purpose: To image retinal capillary beds at different retinal layers in healthy and diseased retinas using an offset pinhole adaptive optics scanning light ophthalmoscope (AOSLO).