AOPT XV Biennial meeting: Sessions in detail

Date	Theme Information	Session	Moderator(s)	Last name	First name	Title	Keywords	Organization	Department	City	State	Country
Thursday March 4th		Opening Keynote	Filippo Drago	He	Zhigang	New insights into protection and regeneration of retinal ganglion cells						
	Theme A: Regenerative medicine, Approaches, drugs, regulatory guidance	Theme A; Session 1 Optic nerve regeneration in the age of omics and big data analysis	Kevin Park, Abigail Hackam	Zhou	Fengquan	Targeting neuronal chromatin and transcriptomics landscape to regulate optic nerve regeneration		JHMI	Orthopedic Surgery	Baltimore	Maryland	USA
				Weng	Yi-Lan	Epitranscriptomic regulation of regenerative capacity	Epitranscriptomic, RNA modifications, m^6A	Center for Neuroregeneration	Neurosurgery	Houston	Texas	USA
				Udvavia	Ava	Evolutionarily conserved mechanisms regulating successful optic nerve regeneration		UVM	Biological Sciences	Milwaukee	Wisconsin	USA
				Cartoni	Romain	Local Accumulation of Axonal Mitochondria in the Optic Nerve Glial Lamina Precedes Myelination	Retinal Ganglion cells, Axons, Mitochondria, Myeline, Glaucoma	Duke University	Ophthalmology	Durham	North Carolina	USA
				Arcuri *	Jennifer	Ganglioside Metabolism in Glaucoma and other Neurodegeneration models		Bascom Palmer		Miami	Florida	USA
				Kaja	Simon	Impaired functional effects of exosomes derived from Loxl1-deficient primary optic nerve head astrocytes	exfoliation glaucoma, LOXL1, exosomes, extracellular vesicles, optic nerve head astrocytes	Loyola	Ophthalmology	Maywood	Ilinois	USA
		Theme A; Session 2 Regulatory guidance in regenerative medicine in ophthalmology: A comparison across countries	Cheryl Rowe-Rendleman, Onkar Sawant	Goldberg	Jeffrey	Moving Magnetic Cell Delivery from Bench to Clinic: Human Corneal Endothelial Cells for Corneal Edema		Standford	Byers Eye Institute	Palo Alto	California	USA
				Jurkunas	Ula	CALEC: NEW FRONTIER IN THE TREATMENT OF LIMBAL STEM CELL DEFICIENCY	Therapeutic Approaches to Mitigate Corneal Pathophysiologies	Harvard	MEEI	Boston	Massachusetts	USA
				Okumura	Naoki	Rho-kinase Inhibitor Assisted Cell Therapy for the Treatment of Corneal Endothelial Decompensation		Doshisha University	Biomedical Engineering	Kyotanabe		Japan
				Bharti	Kapil	RPE replacement therapy for macular degeneration			NEI	Washington,	DC	USA
				Nickells	Robert	Gene Therapy with BCLX_L Attenuates Glaucomatous Degeneration in DBA/2J Mice		University of Wisconsin-Madison	Department of Ophthalmology and Visual System	Madison	Wisconsin	USA
				Giurdanella	Giovanni	Corneal re-epithelialization in glucose-stimulated corneal epithelial cells is promoted by a novel derivate of dimethyl fumarate	SIRC, high glucose, Nrf2, wound healing, dimethyl fumarate	University of Catania	Biomedical and Biotechnological Sciences	Catania	Italy	
		Poster Theme A Anterior segment/ Glaucoma/ TM	Daniel Pelaez and Juana Gallar Ava Udvadia	Kolli	Ajay	Decrease in Calculated Ocular Perfusion Pressure in Healthy Eyes after Treatment with Timolol or Latanoprost: A Prospective Crossover Study	Glaucoma, Timolol, Latanoprost, Ocular Perfusion Pressure	umich	Ophthalmology	Ann Arbor	Michigan	USA
				Li	Ying	Oral supplementary nicotinamide riboside protects function in a model of inherited mouse glaucoma		Emory	Ophthalmology	Atlanta	Georgia	USA
				Nam	Mihyun	Peptains protect retinal ganglion cells in animal models of ocular hypertension: Implications for glaucoma					Colorado	USA
				Spurlock	Markus	Neuroinflammation following transient intraocular pressure fluctuations drives retinal ganglion cell disfunction and death	glaucoma, intraocular pressure spikes, neuroinflammation, PERG	Bascom	Ophthalmology	Miami	Florida	USA
				Youale	Jenny	Human apo-Transferrin confers neuroprotection against retinal ganglion cell degeneration	Glaucoma, excitotoxicity, iron, transferrin, RGCs death, neuroprotection	INSERM		Paris		France
				Zhang	Xian	Systemic treatment with nicotinamide riboside is protective in two mouse models of retinal ganglion cell damage		Emory	Ophthalmology	Atlanta	Georgia	USA
				Kodati	Bindu	Involvement of the c-Jun N-terminus kinase (JNK) pathway in Endothelin (ET-1) mediated neurodegeneration of retinal ganglion cells		UNTHSC	Pharmacology and Neuroscience	Fort Worth	Texas	USA
				Amankwa	Charles	Synthesis and Evaluation of the Cytoprotective Activity of Novel Hybrid compounds in Human Normal Trabecular Meshwork Cells	Glaucoma, trabecular meshwork cell, anti-oxidant, nitric oxide donor, hydrogen peroxide, hypochlorous acid, cytoprotection	UNTHSC	Pharmacology and Neuroscience	Memphis	Texas	USA
				Al-Nameah	Mashael	Open Angle Glaucoma Intervention Review						
		Break										
		Hot Topics Potpourri 1 Glaucoma / RGC / TM	Husain Shahid and Cynthia Steel	Husain	Shahid	Inhibition of DNA Methylation Provides Retinal Ganglion Cell Neuroprotection in Chronic Rat Glaucoma Model	Glaucoma, DNA Methylation, Neuroprotection, RGC death, Opioids	Storm Eye Insitute	Ophthalmology	Charleston	South Carolina	USA
				Rasiah	Pratheepa	Neurotrauma induced retinal basement membrane Col4a1 defects are restored by Adipose tissue derived mesenchymal stem cell concentrated conditioned medium		uthsc			Tennessee	USA
				Zhang	Nan	Systemic Treatment with Tauroursodeoxycholic Acid (TUDCA) enhances retinal ganglion cell survival following optic nerve crush		Emory	Ophthalmology	Atlanta	Georgia	USA
				Javier Lopez-Cano	Jose	New potential combined retinal neuroprotective therapy in a smart injectable thermoresponsive hydrogel.	Retinal neuroprotection, thermo-responsive hydrogels, PLGA-PEG-PLGA. intravitreal administration.		Ophthalmology	Madrid		Spain
				Wang	Ting	Modulation of Intraocular Pressure by Tuning Transcriptional Control of Lipid Synthesis	lipid biosynthesis, extracellular matrix, intraocular pressure, SREBP.				Indiana	USA
				Reitinger	Jeremy	Comparison of IOP Response to Timolol Versus Latanoprost	raocular pressure, glaucoma, latanoprost, timolol, non-respond	Creighton		Omaha	Nebraska	USA
		BrightFocus Sponsored session: Plenary speakers Brightfocus Awardee talk	Cheryl Rowe-Rendleman Cheryl Rowe-Rendleman Cheryl Rowe-Rendleman	Ford	Dean Henri	See bottom of modified schedule for details with times Brightfocus Talk						
				Zhang	Liyun	Large-scale Phenotypic Drug Screen Identifies Neuroprotectants in Zebrafish and Mouse Models of Retinitis Pigmentosa	retinitis pigmentosa, inherited retinal degeneration, neuroprotectant, large-scale drug screen, phenotypic drug screen, parthanatos, zebrafish	JHMI	Ophthalmology	Baltimore	Maryland	USA
		Theme A; Session 3 Novel therapeutic drugs and devices for glaucoma treatment	Najam Sharif, Sunny Ohia	deLong	Mitch	Netarsudil: Recent Developments and the Approval of Roclanda® (netarsudil and latanoprost ophthalmic solution) 0.02%/0.005%, in the European Union		Aerie Pharmaceuticals		Durham	North Carolina	USA
				Sharif	Najam	Omidenepag Isopropyl (DE-117): A Novel Non-Prostaglandin EP2-receptor Agonist Drug to Treat Ocular Hypertension and Glaucoma.	Omidenepag Isopropyl; Non-prostaglandin; DE-117; EP2 receptor agonist; IOP: Ocular hypertension: Glaucoma.	Santen				USA
				Ohia	Sunny	ROLE OF HYDROGEN SULFIDE AND PROSTAGLANDINS IN AQUEOUS HUMOR DYNAMICS	Hydrogen sulfide, aqueous humor, prostaglandins, perfusion pressure	Texas Southern University	Pharmaceutical Sciences	Houston	Texas	USA
				Pinchuk	Leonard	The Effect of 0.2 Versus 0.4 mg/ml of Mitomycin C on Intraocular Pressure, Medication Use and Surgical Failure Rate of the PRESERFLO® MicroShunt at One Year in a Multinational Clinical Study		Santen		Miami	Florida	USA
				Kasetti	Ramesh	Correction of impaired autophagy reduces ocular hypertension in a mouse model of glaucoma by promoting autophagic degradation of mutant myocilin		UNTHSC	Pharmacology and Neuroscience	Fort Worth	Texas	USA
				Steel	Cynthia	Preclinical Efficacy and Safety Profile of QLS-101, a Novel ATP-sensitive Potassium Channel Opener for the Reduction of IOP		Qlaris Bio, Inc.		Wellsley	Massachusetts	USA
Friday March 5th		Regeneron Sponsored session: Plenary speakers	Sanjoy Bhattcharya Cheryl Rowe-Rendleman	Benowitz	Larry	Cell-extrinsic and -intrinsic regulators of optic nerve regeneration						USA
				Michael	Chiang							
	Theme B: Regeneration, plasticity, ocular disorders	Theme B; Session 4 Retinal neuroprotection, plasticity and regeneration: where we are	Vittorio Porciatti and Filippo Drago	Cordeiro	Francesca	DARC as a biomarker			Imperial College of London	London		England
				Chen	Dong Feng	The immune response in acute and chronic neural injury: a target for neuroprotection		Schepens Eye Research Institute	Ophthalmology	Boston	Massachusetts	USA
				Shestapalov	Valery	Inflammasome facilitates ganglion cell dysfunction and loss in ocular hypertension glaucoma.	retina, ocular hypertension, retinal ganglion cells, inflammasome, glaucoma, functional protection	University of Miami	Ophthalmology	Miami	Florida	USA
				Romano	Giovanni Luca	P2X7 receptor antagonism preserves retinal ganglion cells in glaucomatous mice	Glaucoma; P2X7 receptor; PERG; Retinal ganglion cells.					Italy
				Meehan *	Sean	Phospholipid Profile Comparison between Three Optic Nerve Regeneration Methods		Bascom Palmer		Miami	Florida	USA
				Maddineni	Prabhavathi	Glucocorticoid-induced ocular hypertension alters synaptic plasticity and neurotransmission during the progression of glaucomatous neurodegeneration		UNTHSC	Pharmacology and Neuroscience	Fort Worth	Texas	USA
		Theme C; Session 5 Diabetic retinopathy: new pharmacological targets	Claudio Bucolo, Maria Grant	Busik	Julia	Use of cyclodextrin for removal of retinal cholesterol crystals in diabetic retinopathy		MSU			Michigan	USA
				Chen	Mei	The IL1 receptor-signalling pathway as a potential target for the management of diabetic retinopathy	Diabetes, innate immune cells, checkpoint molecule, IL1R/TLR signalling pathway, diabetic retinopathy	The Wellcome-Wolfson Institute for Experimental	Queen's University	Belfast		UK
				Platania	Chiara	Innovative approaches to identify new pharmacological targets for diabetic retinopathy		University of Catania	Biomedical Sciences	Catania		Italy

				Grant	Maria	Pharmacological activation of LXR to prevent diabetic retinopathy and diabetes induced bone marrow dysfunction.		UAB	Ophthalmology	Birmingham	Alabama	USA
				El-Remessy	Azza	Modulation of $p75^{NTR}$ on mesenchymal stem cells increases their vascular protection in retinal ischemia-reperfusion mouse model.	Mesenchymal stem cells, $p75^{NTR}$, ischemic retinopathy, angiogenesis, survival, NGF, VEGF, SDF-1, ischemia/reperfusion. visual assessment.	Augusta Biomedical Research Cor	Pharmacology and Toxicology	Augusta	Georgia	USA
				Kim	Minjae	HU-308, a CB2 agonist, potently inhibits TNF-α-induced retinal leukostasis and vascular leakage	CB2 activation, diabetic retinopathy, endothelial cells, leukostasis, retinal disease, vascular permeability	VUMC	Vanderbilt	Nashville	Tennessee	USA
		Poster Theme A/B Anterior segement/ Glaucoma/ Lens	Daniel Pelaez and Juana Gallar	Diaz-Tahoces	Ariadna	TRPM8-mediated neural activity contributes to regulate tearing, blinking, and ocular surface temperature	TRPM8, TRPV1, cold thermoreceptor nerves, ocular surface sensations, ocular surface thermography, tearing, blinking	Instituto de Neurociencias		San Juan de Alicante		Spain
				Delicado	Miralles	Topical perfluorohexyloctane decreases corneal surface temperature and increases tearing and blinking rate without inducing conscious ocular surface sensations	perfluorohexyloctane, dry eye, cold thermoreceptor nerves, ocular surface sensations, ocular surface thermography, tearing, blinking					Spain
				Hollingsworth	TJ	A retinal ganglion cell (RGC) model derived from R28 retinal precursor cells via POU domain. class 4. transcription factor 2 (Pou4f2) expression	Glaucoma, retinal ganglion cell, R28 cells, *Pou4f2*, transcription factors	UTHSC	Ophthalmology	Memphis	Tennessee	USA
				Musada	Ganeswara	Identification of Wnt-induced axonal growth-promoting molecules secreted by Muller glia.	Muller glia, retinal ganglion cell, Wnt signaling, secretome, Neurite growth	Bascom Palmer		Miami	Florida	USA
				Shan	Sze Wan	The Protective Effect of Lycium Barbarum Polysaccharide on Porcine Lens Epithelial Cells against Oxidative Damage	Crystalline lens, Lycium barbarum polysaccharide, oxidative stress	Hong Kong Polytechnic University	Optometry			Hong Kong
				Uddin	Mezbah	Adrenergic receptor agonist inhibits lens-induced myopia in chicks	Myopia, mataminarole, lofexidine, adrenergic receptor agonist. lens-induced myopia. refractive error.	Center for Myopia Research	School of Optometry	Hong Kong		China
				Tabak	Saray	ECM collagen type I secreted by TM cells can be modulated by NPCE exosomes	Glaucoma, NPCE, TM, Exosomes, ECM, Collagen					Israel
				Wang	Rui	Investigation of the anti-uveal melanoma effects of miR-181a	Uveal melanoma, miR-181a, metastases, cell viability, migration, GNAQ, signaling pathway	University of Montreal	Research center of CHU Sainte-Justine			Canada
		Break										
		Theme B; Session 6 Visual perception and ocular disorders	Malinda Fitzgerald, Dora Ventura	Cisarik	Patricia	Advances in the Clinical Measurement of Visual Perception					Tennessee	USA
				Carlson	Michael	Low Vision Muli-Parameter Test to quantitatively measure visual level of low vision patients.	Low visionassessment, multiparameter, quantitation	Nanoscope Instruments. Inc.		Bedford	Texas	USA
				Vidal	Kallene	Early biological marker changes in the visual system of patients with Mild Cognitive Impairment and Alzheimer's Disease	Alzheimer , mild cognitive impairment, visual system , color vision , pupil light reflex.	Uni of San Paulo	Ophthalmology		Tennessee	Brazil
				Barboni	Mirella	Visual functions and Duchenne muscular dystrophy	retina, dystrophin, DMD, electroretinogram, color vision, contrast sensitivity, dark adaptation	Uni of San Paulo	Ophthalmology and experimental Psychology	San Paulo		Brazil
				Souza	Givago	Organic mercury as biomarker of visual loss of children and adult riverine communities in Brazilian Amazon	Mercury exposure, visual loss, Amazonia riverines, Adults, Children	Uni Federal do Para	Nucleo de Medicina Tropical	Belem		Brazil
				Costa	Marcelo	Visual Function and Zika Virus Infection	Zika Virus Syndrome, Visual Development, Visual Acuity, Contrast Sensitivity Function, Early Visual Impairment.	Uni of San Paulo	Ophthalmology	San Paulo		Brazil
		Theme B; Session 7 Innovative imperative - changing industry: science relationships	Kimberly Southern, Barbara Wirostko	Panel discussion								
		Poster Theme C Anterior to Posterior	Daniel Pelaez and Juana Gallar	Nsiah	Nana Yaa	Prolonged HIF-1a Stabilization Impairs Retinal Metabolism					Texas	USA
			Kate Keller	Ghosh	Anita	hiPSC-RPE cells for ophthalmic drug discovery: challenges and opportunities		Loyola	Biochemistry and Molecular Biology	Maywood	Ilinois	USA
				Jacobs	Brandon	Treatment preferences among retinal vascular disease patients	survey, intravitreal injections, drug delivery, retinal vascular disease, patient compliance, macular degeneration, anti-VEGF	IU			Indiana	USA
				Kaur	Gaganpreet	Plasma and retinal endothelial glycocalyx proteoglycans in diabetic Akita mice		LSUHSC			Louisiana	USA
				Meng	Tuo	Sustained delivery of fenofibrate with biodegradable nanoparticles for regulating retinal microvascular dysfunction in experimental diabetic retinopathy.		Virginia Commonwealth Univeristy	Pharmaceutics	Richmond	Virginia	USA
				Mohamed	Zeinab	Investigating the novel role of dextromethorphan in mitigating oxidative stress induced changes in retinal pigment epithelial cells (RPE)	Dextromethorphan, NMDA receptor antagonist, RPE, oxidative stress, inflammatory stress, Dry-AMD, Antioxidants.	USF		Tampa	Florida	USA
				Tahia	Faiza	Protection of retinal cells from light-induced damage by sphingolipid biosynthetic inhibitor (SPT-I)		UTHSC	Ophthalmology	Memphis	Tennessee	USA
				Toffoletto	Nadia	Imprinted hydrogels as drug-eluting ophthalmic lenses for the prevention or adjunctive treatment of age-related macular degeneration	Therapeutic ophthalmic lenses, posterior segment diseases, drug release, anti-inflammatory, molecular imprinting, functionalized hydrogels.	Instituo Superior Tecnico Uni of Lisbon	Chemical engineering	Lisbon		Portugal
Saturday March 6th	**Theme C: Degeneration, regeneration and pharmaceutical targets**	**Theme C; Session 8** Student/ Young Investigator Round Table	Dorette Ellis and Mildred Olivier	Panel discussion								
		Theme C; Session 9 Degeneration and regeneration of the trabecular and downstream outflow pathways	Carol Toris, Padmanabhan Pattabiraman	Rao	Vasanth	What we know and don't know about the Trabecular Pathway: Molecular and Functional Parallels between the TM and Podocytes		Duke University	Ophthalmology	Durham	North Carolina	USA
				Soundarajan	Avinash	Decoding the mechanistic role of clusterin in regulating intraocular homeostasis	Clusterin, Extracellular Matrix, IOP, MMP	Indiana University	Ophthalmology		Indiana	USA
				McLellan	Gillian	Imaging the post-trabecular outflow pathways in glaucoma: lessons from animal models	conventional aqueous outflow, post-trabecular, Schlemm's canal, scleral venous plexus, aqueous angiography, OCT	Univ. of Wisconsin-Madison	Surgical sciences and Ophthalmology	Madison	Wisconsin	USA
				Keller	Kate	Degeneration and Regeneration of the Trabecular and Downstream Outflow Pathways	trabecular meshwork, glaucoma, live-cell imaging, tunneling nanotubes, phagocytosis, extracellular matrix, netarsudil.	OHSU	Casey Eye Institute	Portland	Oregon	USA
				Loewen	Nils	Impact of Distal Outflow Tract Modulation on IOP						
				Patil	Shruti	TGFβ2 induces Chronic Endoplasmic Reticulum Stress in Trabecular Meshwork cells	Trabecular meshwork, TGFβ2, chronic ER stress, extracellular matrix, ISRIB, sodium 4-phenylbutyrate (PBA), matrix metalloproteases (MMPs)	UNTHSC	Pharmacology and Neuroscience	Fort Worth	Texas	USA
		Hot Topics Potpourri 2 Retina / RPE Biology, Pathogenesis and Therapies for AMD	Manas Biswal and Daisy Shu	Khiev	Dawin	Evaluating daily systemic betaine delivery in alleviating Dry-AMD pathophysiology	Betaine, Oxidative stress, Sod2, Dry-AMD, RPE, ERG, OCT.	USF		Tampa	Florida	USA
				Ortiz	Christina	miRNA Let-7f Induces Cellular Senescence and Exacerbates Oxidative Stress in Retinal Pigment Epithelium Cells	dry age-related macular degeneration, let-7f, retinal pigment epithelium, senescence, oxidative stress	CHU Sainte-Justine Research Center	Pharmacology		Quebec	Canada
				Choudhary	Mayur	NURR1 regulates epithelial-mesenchymal-transition (EMT) and inflammation in RPE cells.	Age-related macular degeneration (AMD), Epithelial-mesenchymal-transition (EMT), Inflammation, Nuclear receptors, NURR1, Retinal pigment epithelial cells, Visual function	Albert Eye Research Institute	Ophthalmology	Durham	North Carolina	USA
				Fu	Zhongjie	Müller glial remodeling preserves retinal function during photoreceptor loss revealed by single-cell transcriptomics	RP, muller glia, retina, photoreceptors, transcriptomics, retinal plasticity					USA
				Santhanam	Abirami	Identifying the regulators of photoreceptor neuron regeneration in a Zebrafish model of Retinitis Pigmentosa	Regeneration, Retinal progenitor cell, Retinitis Pigmentosa, Proliferation, Zebrafish, Vision restoration				Texas	USA
		Break										
		AOPT Special Session	Tom Yorio Shusheng Wang Filippo Drago	Nanoscope therapeutic Sheyang group Chambers	 Wiley							
		Santen Sponsored session: Plenary speaker	Najam Sharif	Curcio	Christine	Clinically visible progression indicators in age-related macular degeneration (AMD) are transdifferentiated retinal pigment epithelium (RPE)		UAB	Ophthalmology	Birmingham	Alabama	USA
		AMD talk in the Santen session selected from abstracts	Najam Sharif	Biswal	Manas	Buspirone enhances cell survival and preserves structural integrity in oxidative injury to retinal pigment epithelial (RPE) cells.	Buspirone, RPE, Dry-AMD, Oxidative stress, OCT, ERG, Antioxidants.	USF	Pharmaceutical sciences	Tampa	Florida	USA
		AMD talk in the Santen session selected from abstracts	Najam Sharif	Thomas	Chloe	Delivering topical IL-33 with a cell penetrating peptide to treat neovascular age-related macular degeneration.	Age-related macular degeneration, eyedrop, immunotherapy, IL-33, cell penetrating peptide, wound healing, cytotoxicity.	Uni of Birmingham	School of Biomedical Sciences	Birmingham		UK
		Theme C; Session 10 Novel therapeutic targeting for age-related macular degeneration - overcoming the challenging path to success	Goldis Malek, Aprana Lakkarju	Wong	Wai	Targeting retinal glia to regulate neuroinflammation in AMD therapeutics					California	USA

				Porter	Louise	Epigenetic Changes of Ageing and Age-Related Macular Degeneration		University of Liverpool	Eye and Vision Science	Liverpool		UK
				Chao	Jennifer	Early Onset Macular Drusen: Loss-of-Function Variant in CFH	complement factor H, early onset macular drusen, age-related macular degeneration, induced pluripotent stem cells, retinal pigmented epithelium	UW	Ophthalmology	Seattle	Washington	USA
				Sapieha	Przemylslaw	Targeting Cellular Senescence for Retinal Vasculopathies		Unity Biotechnology		San Francisco	California	USA
				Park	Bomina	AAV8 mediated expression of shRNA targeting soluble epoxide hydrolase suppresses choroidal neovascularization	Soluble Epoxide Hydrolase, EPHX2, RNAscope, Age-related macular degeneration, Choroidal neovascularization, Gene therapy, AAV				Indiana	USA
				Shu *	Daisy	Suppression of PGC-1α drives metabolic dysfunction in TGFβ2-induced EMT of retinal pigment epithelial cells	Retinal pigment epithelium (RPE), metabolism, mitochondria, transforming growth factor-beta (TGFβ), epithelial-mesenchymal transition (EMT), bioenergetics, PGC-1α	MEEI	Ophthalmology	Boston	Massachusetts	USA
		Theme C; Session 11 Mechanisms and therapeutics for ocular fibrosis	Shusheng Wang, Heping Xu	Gillies	Markus	Notch signalling and retinal fibrosis		University of Sydney	Dept of Medicine and Health	New South Wales		Australia
				Bernstein	Audrey	Self-delivery siRNA to prevent corneal scarring				NY	New York	USA
				Felszeghy	Szabolcs	The role of NRF2/PGC-1a in Oxidative Stress – Mediated Epithelial-to-Mesenchymal Transition of Retinal Pigment Epithelial Cells – Implications in Retinal Degeneration and Fibrosis	age-related macular degeneration; AMD; epithelial-mesenchymal transition; senescence; *NFE2L2/PGC-1α* dKO mice	University of Eastern Finland	School of Medicine, Biomedicine			Finland
				Xu	Heping	The role of the complement system in retinal fibrosis	retina, fibrosis, inflammation, complement system, epithelial cells, macrophages, myofibroblasts	Wellcome-Wolfson Institute		Belfast		UK
				Wu*	Yinga	MiRNA-24 represses TGF-β2 induced epithelial-mesenchymal transition (EMT) and fibrosis in RPE cells		Tulane	Ophthalmology	New Orleans	Louisiana	USA
				Yi	Caijiao	Augmented Subretinal Fibrosis Secondary To Choroidal Neovascularization In Old Age is Related To Increased Profibrotic Potent of Circulating Immune Cells	subretinal fibrosis, aging, circulating immune cells		Ophthalmology	Changsha		China
Sunday March 7th		**AOPT Business meeting/ Nominations for Awards**										
		Poster Theme C/ D Retina/ RPE/ imaging/ drug delivery	Daniel Pelaez and Juana Gallar	Lal	Shankar	Optokinetic Drum to Assess Visual Acuity	Optometry, Retinitis Pigmentosa, Behavioral Assay, retinal degeneration, Optogenetics				Texas	USA
			Rob Nickells	Linder	Markus	Development and use of novel tools for subretinal fibrosis imaging	subretinal fibrosis, nAMD, in vivo imaging, collagen remodeling, collagen hybridizing peptides	Roche Pharma Research		Basel		Switzerland
				Cho	Junsang	Assessing the clinical requirement of 2.5% phenylephrine for diagnostic pupil examination	Dilating agent, eye examination, clinical utility, phenylephrine, tropicamide				Missouri	USA
				Patil	Madhoosudan	Suprachoroidal Drug Delivery: Influence of Eye Size and Drug Physicochemical Properties		Uni of Colorado	Pharmacy and Pharmaceutical Sciences	Aurora	Colorado	USA
				Tong	Yao	Crosstalk among Ferroptosis, Necroptosis, and Pyroptosis during oxidative stress-induced RPE Cell Death		Tulane	Cell and Molecular Biology	New Orleans	Louisiana	USA
				Vichare	Riddhi	Impact of detoxification gene augmentation on oxidative stress-induced changes in the retinal pigment epithelial (RPE) cells.	Oxidative Stress, RPE, Dry-AMD, GSTM1, ZO-1, Cell viability, Gene therapy.	USF		Tampa	Florida	USA
				Cole II	Jerome	Reduction of Cellular Ceramide Levels Prevents Photoreceptors Degeneration in Rd10 mice		uthsc	Ophthalmology	Memphis	Texas	USA
				Wang	Qin	Unmasking inhibition prolongs neuronal function in retinal degeneration mouse model	Retinistis Pigmentosa, picrotoxin, retinal ganglion cell, electrophysiology, GABAergic inhibition					Hong Kong
	Theme D: Imaging, Biomarkers, Ocular pharmacology	**Theme D; Session 12** Update on ocular pharmacology research in China	Wei Jiye and Sylvia He	Barnstable	Colin	How an Academic Researcher to Develop a Drug Candidate in China		Penn State U	Behavioral and neural science	Pennsylvania	Pennsylvania	USA
				Tombran-Tink	Joyce	PEDF Peptide for Treatment of Ocular Diseases		Penn State U	Behavioral and neural science	Pennsylvania	Pennsylvania	USA
				He	Sylvie	Innovation and Drug Discovery of Ophthalmic Research in China		Hyfinity Investment Fund		Beijing		China
				Wei	Jay Ji-Ye	Gene Therapy to Treat Ocular Disorders in China		He University, Shenyang, China		Sheyang		China
				Zhang	Donglei	Esculetin protects human corneal epithelial cells from oxidative stress through Nrf-2 signaling pathway		Sheyang Pharmaceutical University	Pharmacy	Sheyang		China
				Hou	Zhuang	Structure-Based Design and Discovery of Novel Dual-tail Carbonic Anhydrase Inhibitors with Efficacy in an in Vivo Glaucoma Model		Sheyang Pharmaceutical University		Sheyang		China
		Theme D; Session 13 Ophthalmic imaging technologies and biomarkers	Ash Jayagopal, Imam Uddin	MD Imam	Uddin	A novel method to visualize mRNA to predict ocular angiogenesis	molecular imaging, mRNA, diabetic retinopathy, neovascularization.	VUMC	Ophthalmology	Nashville	Tennessee	USA
				Hunter	Jennifer	Adaptive Optics Fluorescence Lifetime Ophthalmosopy	retina, imaging, adaptive optics, photoreceptors, fluorescence lifetime, visual cycle, multiphoton	University of Rochester	Flaum Eye Institute	Rochester	New York	USA
				Chateau	Nicolas	Adaptive optics retinal imaging usable by clinicians		Imagine Eyes		Orsay		France
				Jia	Yali	Visible-light OCT oximetry in retinal capillaries		OHSU	Casey Eye Institute	Portland	Oregon	USA
				Schmidl	Doreen	The effect of orally administered dronabinol on ocular blood flow parameters in healthy subjects	dronabinol, THC, optic nerve head blood flow, total retinal blood flow, laser Doppler flowmetry, Doppler Optical Coherence Tomography	Medical Uni of Vienna	Clinical Pharmacology	Vienna		Austria
				Wyndham	Batchelor	Feasibility of Creating Retinal Ganglion Cell Axon Guidance Cues of Various Length Scales Using a Custom Atomic Force Microscopy Lithography Device		Bascom Palmer	Biomedical Engineering	Miami	Florida	USA
	Theme D: Imaging, Biomarkers, Ocular	**Hot Topics Potpourri 3**	David Hinkle	Ozer	Omer	Effects of Mesenchymal Stem Cells on microRNA Expressions in Acute Alkaline Corneal Burn	Alkaline corneal burn, mesenchymal stem cell, miRNA.	Mersin University	Ophthalmology	Yenişehir	Mersin	Turkey
				Eveleth	David	Healing of Primary and Recurrent Mouse Ocular Herpetic Disease Following Topical Ocular Treatment with an Engineered Fibroblast Growth Factor-1 (FGF-1) is Associated with Increased Frequency and Function of Corneal Anti-Inflammatory M2 Macrophages	FGF-1, Fibroblast Growth Factor-1. HSV-1, Herpes Simplex Virus Type 1.	Trefoil Therapeutics	Laboratory of Cellular and Molecular Immunology	Irvine	California	USA
				Golawala	Baano	Bioinformatics pertinent to Neuronal regeneration	Neuronal regeneration, central nervous system, computer program	University of Miami/American Heritage High School	Miami Integrative metabolomics Research Center	Miami	Florida	USA
				Joachim	Stephanie	Evaluation of a novel potent autotaxin-inhibitor in a retinal ischemia model	ischemia-reperfusion, autotaxin, ATX, retinal ganglion cell, microglia, macroglia	Ruhr-University Bochum	Experimental Eye Reearch Institute		Buchum	Germany
				Pizzuto	Sarah	Accelerated regeneration of corneal endothelium after Descemet's stripping mediated by the engineered fibroblast growth factor TTHX1114	Cornea, endothelium, FGF, Fuchs endothelial corneal dystrophy, Descemet's stripping	Trefoil Therapeutics		San Diego	California	USA
	AOPT Business meeting/Fellows/Closing **Best of AOPT (replay of Sheyang Group Video)**											