

**Saturday, April 28 – Education courses (education courses require separate registration)**

<b>Time</b>	<b>Session</b>	<b>Title</b>	<b>Location</b>
8am – 4:30pm	001	Big Data: Principles to practical application	313A
	002	Gene Editing Using CRISPR/Cas Technology: From Discovery to Therapy	316B
	003	Inherited retinal diseases: Divergent viewpoints of pathogenesis and treatment	316A
8am– 12:30pm	004	Introduction to AMD: Current research and therapeutics	316C

Sunday, April 29 – Symposia, papers, workshops/SIGs and lectures

Time	Session	Title	Location
8:15 – 10:15am	101	<b>Proteostasis networks: challenges and therapeutic opportunities for ocular diseases</b> [BI, CO, GEN, GL, LE, PH, RC, RE] #1-5	310
	102	<b>Ocular and Systemic Circadian Rhythms: Implications in Vision Research</b> [VI, EY, BI, IM, PH, RC, VN] #6-11	311
	103	<b>Retinal architecture and function: new insights</b> [AP, BI, RC, RE, VI, VN] #12-16	Ballroom A
10:45 – 11:30am	115	Proctor Award and Lecture #338-339	Ballrooms BC
11:45am – 12:30pm	116	Friedenwald Award and Lecture #340	Ballrooms BC
1 – 2:30pm	117	Retinal microglia in degenerative diseases: Why function matters — SIG [AP, IM, RE, RC, GEN]	Room 301AB
	118	A Matter of Life or Death: Regulation of RGC Survival by Glia and Interneurons — SIG [AP, BI, GL, PH, RE, VN]	310
	119	Update on clinical gene therapy trials for inherited retinal diseases — SIG [CL, GEN, RE]	311
	120	Extracellular Vesicles and the Anterior Segment —SIG [CO]	312
	121	Towards Guidelines for Mouse Electroretinography (ERG) — SIG [BI, GEN, PH, RE, RC, VN]	313A
	122	Pizza with the experts*	313BC
	124	Biomarkers and Surrogate Endpoints in Ophthalmic Clinical Research — SIG [CL, CO, GL, IM, RE, MOI]	316A
	125	Experimental design for optimal animal research in the age of the 'reproducibility crisis'	316B
	126	Grant writing: How to get your proposals funded	316C
	127	Delivery of therapeutics to ocular tissues — SIG [CO, GL, PH, RE, GEN]	Ballroom A
3:15 – 5pm	144	Pathogens harbouring in the eye [IM] #716-720	301AB
	145	Neuro-ophthalmology [EY] #721-727	306AB
	146	Novel imaging techniques and applications [VI] #728-734	310
	147	Diabetic Retinopathy Clinical [RE] #735-741	311
	148	Keratoconus: Corneal Biomechanics and Imaging [CO] #742-748	312
	149	Visual Cues and Signaling in Myopia [AP] #749-755	313A
	150	<b>Primate retina and visual brain</b> — Minisymposium [EY, RC, VI, VN] #756-760	314
	151	Retinal ischemia and mechanisms of vascular remodeling [RC] #761-767	315
	152	AMD [PH] #768-774	316A
	153	Genetic Epidemiology [CL] #775-781	316B
	154	Macular Diseases Excluding AMD [RE] #782-788	316C
	155	Biochemistry and Molecular Biology of AMD [BI] #789-795	320
3:15 – 4pm	156	GL-Epstein Award Session [GL] #796-797	Ballroom A
5:15 – 6pm	169	Weisenfeld Award and Lecture #1135	Ballrooms BC

Symposia, minisymposia and basic clinical lecture highlighted in **boldface**

\* Registration required

Sunday, April 29 – Posters

Time	Session	Title	Program No.	Board No.	
8:15 –10am	104	Retinitis pigmentosa (clinical) [RE]	17 - 55	A0048 - A0086	
	105	AMD and Retinal Therapies Excluding Anti-VEGF [RE]	56 - 82	A0103 - A0129	
	106	Eyelids: evaluation, analysis and therapeutics [EY]	83 - 99	A0246 - A0262	
	107	Lacrimal and adnexal diseases [EY]	100 - 114	A0263 - A0277	
	108	Ocular surface health and disease [CO, AP]	115 - 162	B0029 - B0076	
	109	Pediatric ophthalmology [CL]	163 - 189	B0317 - B0343	
	110	Diabetic retinopathy [PH]	190 - 207	C0001 - C0018	
	111	AMD [PH]	208 - 246	C0019 - C0057	
	112	Presbyopia and IOL [VI]	247 - 268	C0106 - C0127	
	113	OCT - New Biomarkers and Technical Improvements [MOI]	269 - 300	C0170 - C0201	
	114	Ocular structures in development, health, and disease [AP]	301 - 337	C0234 - C0270	
	1 – 2:45pm	128	Biochemical and molecular mechanisms of age-related macular degeneration [BI]	341 - 373	A0001 - A0033
		129	Gene editing: methods and outcomes in ocular cells [BI]	374 - 386	A0034 - A0046
		130	Macular Edema [RE]	387 - 402	A0087 - A0102
131		Uveitis and Scleritis: Therapeutics [IM]	403 - 427	A0221 - A0245	
132		Cataract Surgery Procedures I [LE]	428 - 449	A0288 - A0309	
133		Surgery and Wound Healing I [GL]	450 - 493	A0310 - A0353	
134		Infection and Immunology [IM]	494 - 521	B0001 - B0028	
135		Corneal Stroma and Keratocytes [CO]	522 - 534	B0137 - B0149	
136		Stem Cell Therapy [RC]	535 - 559	B0150 - B0174	
137		New Insights on Retinogenesis from Organoids [RC]	560 - 575	B0175 - B0190	
138		Retinal Development [RC]	576 - 597	B0191 - B0212	
139		Outer Retina Function [VN]	598 - 607	B0270 - B0279	
140		Neuro-ophthalmology [EY]	608 - 627	B0280 - B0299	
141		Vision Rehabilitation Devices and Training [LV, CL, VN]	628 - 643	C0062 - C0073	
142		AO, OCT and imaging techniques and applications [PH, VI, VN]	644 - 675	C0202 - C0233	
143		Insights into myopia - animal models to human studies [AP]	676 - 715	C0271 - C0310	
3:15 – 5pm		157	AMD and Anti-VEGF I [RE]	798 - 841	A0130 - A0173
		158	Vitreoretinal Surgery: Clinical Science [RE]	842 - 888	A0174 - A0220
	159	Lens Development and Cell Biology [LE]	889 - 898	A0278 - A0287	
	160	Ocular Surface Disease Microbiome [CO]	899 - 908	B0077 - B0086	
	161	Dry Eye Clinical I [CO]	909 - 958	B0087 - B0136	
	162	Photoreceptor Degeneration [RC]	959 - 986	B0213 - B0240	
	163	Retinal degeneration: models and repair strategies [RC]	987 - 1015	B0241 - B0269	
	164	Strabismus: Basic and Clinical [EY]	1016 - 1032	B0300 - B0316	
	165	Diabetic eye disease screening and management [CL]	1033 - 1060	B0344 - B0371	
	166	Low Vision and Vision Rehabilitation Services [LV, CL]	1061 - 1072	C0074 - C0085	
	167	Normal and Aging Vision - Measurement [VI]	1073 - 1092	C0086 - C0105	
168	OCT - Clinical Application [MOI]	1093 - 1134	C0128 - C0169		

Poster board numbers correspond to poster location in Exhibit Hall; A = Poster Area A , B = Poster Area B and C = Poster Area C.

**Monday, April 30 – Minisymposia, papers, section business meetings**

<b>Time</b>	<b>Session</b>	<b>Title</b>	<b>Location</b>
8:15 –10am	201	Clinical Uveitis: Etiology, Complications and QoL [IM] #1136-1141	301AB
	202	EOM and associated tissues: Disease and Development [EY] #1142-1148	306AB
	203	Advances in imaging of retinal disease [VI] #1149-1155	310
	204	Vitreoretinal Interface and Retinal Detachment [RE] #1156-1162	311
	205	Ocular surface biology, disease, surgery [CO] #1163-1169	312
	206	New Perspectives in Human Myopia Research [AP] #1117-1176	313A
	207	Discoveries in Glaucoma and Associated Endophenotypes [GEN, GL] #1177-1183	314
	208	RPE physiology [RC] #1184-1189	315
	209	Gene therapy [PH] #1190-1196	316A
	210	<b>Implementation science in ophthalmology</b> — Minisymposium [CL, LV, RE] #1197-1201	316B
	211	Signaling and Cell Biology [LE] #1202-1207	316C
	212	Biochemistry and Molecular Biology of Diabetic Retinopathy [BI] #1208-1213	320
	213	Biomechanics [GL] #1214-1220	Ballroom A
	214	Deep Learning Highlights [MOI] #1221-1227	Ballrooms BC
10:15 –11am	201a	IM Section Business Meeting [IM]	301AB
	202a	EY Section Business Meeting [EY]	306AB
	203a	VI Section Business Meeting [VI]	310
	204a	RE Section Business Meeting [RE]	311
	205a	CO Section Business Meeting [CO]	312
	206a	AP Section Business Meeting [AP]	313A
	207a	VN Section Business Meeting [VN]	314
	208a	RC Section Business Meeting [RC]	315
	209a	PH Section Business Meeting [PH]	316A
	210a	CL Section Business Meeting [CL]	316B
	211a	LE Section Business Meeting [LE]	316C
	212a	BI Section Business Meeting [BI]	320
	212a	GL Section Business Meeting [GL]	Ballroom A
	11:15 – 1pm	224	New Insights into Bacterial Keratitis [IM] #1544-1550
225		Strabismus [EY] #1551-1557	306AB
226		<b>20/20 Visual acuity is not enough – again</b> — Minisymposium [VI] #1558-1562	310
227		Inherited Retinal Diseases [RE] #1563-1569	311
228		Cornea surgery, non-refractive [CO] #1570-1576	312
229		Anatomical changes during ocular development and disease [AP] #1577-1583	313A
230		<b>Circadian clocks in retinal health and diseases</b> — Minisymposium [RC, RE, VN] #1584-1588	315
231		Retina I [PH] #1589-1595	316A
232		Healthcare Delivery [CL] #1596-1601	316B
233		Posterior capsular opacification (PCO) [LE] #1602-1607	316C
234		<b>Targeting mitochondrial dysfunction in retinal and optic nerve disease</b> — Minisymposium [BI, RC, RE] #1608-1612	320
235		<b>What's new in glaucoma imaging?</b> — Minisymposium [GL, MOI] #1613-1617	Ballroom A
236		AMD and Anti-VEGF [RE] #1618-1624	Ballrooms BC

Symposia and minisymposia highlighted in boldface

**Monday, April 30 – Minisymposia, papers, workshops/SIGs, lectures (continued)**

<b>Time</b>	<b>Session</b>	<b>Title</b>	<b>Location</b>
1:30 – 3pm	249	Telemedicine and Artificial Intelligence using Deep Learning Systems to Screen and Monitor Diabetic Retinopathy, Glaucoma and Age-related Macular Degeneration using Different Imaging Modalities — SIG [GL, IM, RE]	301AB
	250	Phagocytic mechanisms in ocular tissues: from physiological to pathological processes — SIG [BI, CO, IM, PH, RC, RE, VN, GEN]	306AB
	251	Omega-3 Fatty Acid Supplementation for Dry Eye Disease: Data on Efficacy and Safety from the Dry Eye Assessment and Management (DREAM©) Study — SIG [CO, CL]	310
	252	Managing Patients with Diabetic Macular Edema, Diabetic Retinopathy, Neovascular and Non-Neovascular AMD, and Retinal Vein Occlusion: How to Best Utilize the Latest Data from Clinical Trials — SIG [CL, CO, IM, PH, VI, VN, RE, GEN, MOI]	311
	253	MOI Group — Visible Light OCT [MOI]	313A
	254	China-ARVO Networking Forum	313BC
	255	EVER/ARVO Workshop: Multi-omics, mechanisms and stratification – paradigms for understanding and targeting immune responses in disease	314
	256	Keys to writing manuscripts and determining where to publish	316A
	257	NIH-CSR workshop on the peer review of grant applications	316B
	258	Civic and community engagement for stronger science: Effective communication strategies	316C
	259	Eye and Brain - the interrelationship and pathology — SIG [BI, EY, GL, IM, RE, VN, MOI]	320
	260	Membrane dynamics in RPE health and disease — SIG [BI, IM, PH, RC, RE]	Ballroom A
	261	The Lasker/IRRF Initiative for Innovation in Vision Science: Glaucoma and Diabetic Retinopathy — SIG [BI, GL, RC]	Ballrooms BC
3:30 – 5:15pm	262	Functional Vision and Visual Function [LV] #1942-1947	306AB
	263	Accommodation and Binocular Vision [VI] #1948-1954	310
	264	Diabetic Macular Edema Clinical [RE] #1955-1961	311
	265	Dry Eye Clinical [CO] #1962-1968	312
	266	Highlights of Imaging Technologies [MOI] #1969-1975	313A
	267	Photosensitive cells [VN] #1976-1982	314
	268	Stem Cells: from retinal organoids to transplantation [RC] #1983-1989	315
	269	<b>From optics to electronics: New technologies for improving vision in health and disease — Minisymposium [PH] #1990-1994</b>	316A
	270	IOP Measurement, Clinical Trials and Drug Studies [GL] #1995-2001	316C
	271	<b>Corneal regeneration in health and disease — Minisymposium [CO, EY, RC, VI] #2002-2007</b>	320
	272	Neurodegeneration [GL] #2008-2014	Ballroom A
5:30 – 6:45pm	292	ARVO/Alcon Keynote Session: CRISPR-Cas gene editing: biology, technology and ethics	Ballrooms BC
7 – 8:30pm	293	Special Session: Military Relevant Priorities and Strategies for Injury Diagnostics and Treatments #2556-2559	Ballroom A

Symposia and minisymposia highlighted in boldface

Monday, April 30 – Posters

Time	Session	Title	Program No.	Board No.	
8:15 – 10am	215	Clinical Trials and Drug Studies [GL]	1228 - 1258	A0069 - A0099	
	216	Visual function- beyond clinical VA and CSF [VI, VN, LV]	1259 - 1293	A0294 - A0328	
	217	Corneal Surgery non-refractive [CO]	1294 - 1349	B0001 - B0056	
	218	Corneal Endothelium I [CO]	1350 - 1382	B0110 - B0142	
	219	Corneal Biomechanics [CO]	1383 - 1417	B0160 - B0194	
	220	Genetics of AMD and Macular dystrophies [GEN]	1418 - 1438	B0337 - B0357	
	221	AMD and Anti-VEGF II [RE]	1439 - 1475	C0001 - C0037	
	222	Retinal glia: cell biology [RC]	1476 - 1500	C0218 - C0242	
	223	Clinical Imaging Retina [RE, RC]	1501 - 1543	C0342 - C0384	
	11:15am – 1pm	237	Retinoblastoma: From Bench to Bedside [AP, BI]	1625 - 1647	A0001 - A0023
		238	Aqueous humor dynamics, IOP [PH]	1648 - 1665	A0024 - A0041
239		Image Processing and Interpretation [MOI]	1666 - 1703	A0187 - A0224	
240		Machine Learning on Imaging [MOI, VI]	1704 - 1741	A0225 - A0262	
241		Contact Lens [CO, AP]	1742 - 1794	B0057 - B0109	
242		Corneal Neuropathy [CO]	1795 - 1811	B0143 - B0159	
243		Genetic and Retinal disease epidemiology [CL]	1812 - 1846	B0273 - B0307	
244		Ganglion Cells and Beyond [VN, VI]	1847 - 1862	C0151 - C0166	
245		Inner Retinal circuits [VN]	1863 - 1874	C0167 - C0178	
246		Visual Disease Models and Restoration [VN]	1875 - 1884	C0179 - C0188	
247		Diabetic Retinopathy: Clinical [RE]	1885 - 1913	C0285 - C0313	
248		Diabetic Retinopathy: Imaging [RE]	1914 - 1941	C0314 - C0341	
3:30 – 5:15pm		273	Biomechanics [GL]	2015 - 2041	A0042 - A0068
		274	Surgery and Wound Healing II [GL]	2042 - 2078	A0100 - A0136
		275	Imaging: Posterior Segment I [GL]	2079 - 2128	A0137 - A0186
	276	Optics, imaging, biometry and function in normal and myopic eye growth [AP]	2129 - 2159	A0263 - A0293	
	277	Eye Movements [EY]	2160 - 2173	A0329 - A0342	
	278	Neuro-ophthalmology [EY]	2174 - 2187	A0343 - A0356	
	279	Neuro-ophthalmology Intracranial HTN and papilledema [EY]	2188 - 2197	A0357 - A0366	
	280	Cataract Surgery - IOLs [LE]	2198 - 2218	A0367 - A0387	
	281	Cataract Surgery Procedures II [LE]	2219 - 2240	A0388 - A0409	
	282	Corneal Development, Cell and Molecular Biology [CO]	2241 - 2293	B0195 - B0247	
	283	Trauma [CL, AP]	2294 - 2318	B0248 - B0272	
	284	Genetics of Retinal dystrophies and Functional Genomics [GEN]	2319 - 2347	B0308 - B0336	
	285	Proteostasis and systems biology approaches for ocular cellular profiling [BI]	2348 - 2371	B0358 - B0381	
	286	Neovascular AMD [RE]	2372 - 2405	C0038 - C0071	
	287	Dry AMD [RE, RC]	2406 - 2431	C0072 - C0097	
288	Early and Atrophic AMD [RC]	2432 - 2459	C0098 - C0125		
289	Disease modeling and potential therapies [RC]	2460 - 2484	C0126 - C0150		
290	Neuroprotection [RC]	2485 - 2513	C0189 - C0217		
291	Inflammatory Disease Processes in Humans and Experimental Models [IM]	2514 - 2555	C0243 - C0284		

Poster board numbers correspond to poster location in Exhibit Hall; A = Poster Area A , B = Poster Area B and C = Poster Area C.

**Tuesday, May 1 – Minisymposia, papers, general business meetings, workshop and SIGs**

<b>Time</b>	<b>Session</b>	<b>Title</b>	<b>Location</b>	
8:15 –10am	301	Near Tasks and Reading with Vision Impairment [LV, VI] #2560-2565	306AB	
	302	Retinal Vascular Diseases I [RE] #2566-2572	311	
	303	Corneal Neovascularization and Immunology [CO] #2573-2579	312	
	304	<b>The nuts and bolts of novel drug development</b> — Minisymposium [AP, GL, RE, VN] #2580-2584	313A	
	305	Ganglion cells and beyond [VN] #2585-2591	314	
	306	Retinal Development [RC] #2592-2598	315	
	307	Diabetic eye disease and other retinal diseases [CL] #2599-2605	316B	
	308	<b>Molecular and cellular insights into lens and cornea regeneration</b> — Minisymposium [CO, LE] #2606-2611	316C	
	309	Neuroprotection [GL] #2612-2618	Ballroom A	
	310	AMD Imaging I [RE] #2619-2625	Ballrooms BC	
10:15 –11am	324	General Business Meeting	320	
11:15 – 1pm	325	<b>Metabolic regulation of ocular immune responses</b> — Minisymposium [IM, BI, CO, LE, PH, RE] #2970-2974	301AB	
	326	Lens optics and IOLs [VI] #2975-2981	310	
	327	Retinal Gene Therapy and Stem Cell Transplantation [RE] #2982-2987	311	
	328	Corneal epithelium [CO] #2988-2994	312	
	329	Bipolar, Horizontal and Amacrine cells [VN] #2995-3001	314	
	330	Diabetic retinopathy: Molecular mechanisms and novel therapeutic targets [RC] #3002-3008	315	
	331	Nutrition and Eye Disease [CL] #3009-3015	316B	
	332	Functional Genomics and Epigenetics in Ocular Disease [GEN] #3016-3022	316C	
	333	New Ideas [GI] #3023-3029	Ballroom A	
	1:30 – 3pm	347	Objective Quantification of Intraocular Inflammation: Using Newer Technologies to Overcome an Old Challenge — SIG [CL, IM, RE, MOI]	301AB
		348	Next-Gen autofluorescence imaging — let's get ready — SIG [BI, RC, RE, MOI]	306AB
		349	Immune tolerance in steady state and ocular surface/corneal diseases — SIG [CO, IM]	310
		350	Molecular Imaging of the Retina in Health and Disease — SIG [AP, BI, IM, PH, RC, RE, VI, VN, MOI]	311
351		Optical Coherence Tomography Angiography of the Eye — SIG [AP, GL, RE, MOI]	312	
352		GEN Group - Making good on the promise of genetics for eye diseases: The successes and challenges along the translational pathway [GEN]	313A	
353		Bridging and bootstrapping in today's risk averse environment	314	
354		Gene therapy of glaucoma — SIG [GL]	315	
355		Clinician-Scientist Forum: How to become a successful clinician-scientist	316A	
356		Addressing global blindness and eye diseases through international research collaborations	316B	
357		How to promote vision research to patients and policymakers in different regions of the world	316C	
358		Lipid and Lipid Targeted Therapies for Eye Diseases- past, present and future — SIG [BI, CO, EY, PH, RE, RC]	320	
359		The Lasker/IRRF Initiative for Innovation in Vision Science: Restoring Vision to the Blind and Amblyopia — SIG [GL, RC, VN, NT]	Ballrooms BC	

Symposia and minisymposia highlighted in boldface

**Tuesday, May 1 – Minisymposia, papers, lectures, MIT Outstanding Poster Award Competition (continued)**

<b>Time</b>	<b>Session</b>	<b>Title</b>	<b>Location</b>
3:30 – 5:15pm	360	<b>Vergence eye movements and strabismus</b> — Minisymposium [EY] #3430-3434	306AB
	361	Corneal Imaging and Topography [CO] #3435-3441	310
	362	Diabetic Retinopathy Imaging [RE] #3442-3448	311
	363	Corneal Development and Regenerative Medicine [CO] #3449-3455	312
	364	Surgery and Wound Healing [GL] #3456-3462	313A
	365	Neovascularization and Vascular Permeability [RE] #3463-3468	314
	366	AMD pathogenesis and preclinical studies [RC] #3469-3475	315
	367	Anterior segment, ion channels, IOP [PH] #3476-3482	316A
	368	Lens Biochemistry [LE] #3483-3488	316C
	369	Regulation of Ocular Gene Expression and Epigenetics [BI] #3489-3495	320
	370	Imaging Posterior Segment and Progression [GL] #3496-3502	Ballroom A
5:30 – 6:30pm	383	ARVO/Champalimaud Award Lecture	Ballrooms BC
5:30 – 7pm	384	MIT Outstanding Poster Award Competition	Exhibit Hall
7 – 8:15pm	385	Special Session: Bringing Regenerative Medicine Therapies to the Clinic #3903-3907	Ballroom A

Symposia and minisymposia highlighted in boldface

**Tuesday, May 1 – Posters**

Time	Session	Title	Program No.	Board No.	
8:15 – 10am	311	Neovascular AMD [RC]	2626 - 2639	A0131 - A0144	
	312	Retinal vascular biology [RC]	2640 - 2651	A0145 - A0156	
	313	Toxicology, anti-inflammatory, antibiotics [PH]	2652 - 2667	A0379 - A0394	
	314	Anterior segment [PH]	2668 - 2679	A0395 - A0406	
	315	IOP [GL]	2680 - 2720	B0001 - B0041	
	316	Glaucoma risk factors, progression and management [CL]	2721 - 2745	B0100 - B0124	
	317	ROP 1 [RE, VI]	2746 - 2788	B0125 - B0167	
	318	OCT Angiography - Clinical Applications [MOI]	2789 - 2841	B0207 - B0259	
	319	OCT Angiography - Experimental Applications and Technical Improvements [MOI]	2842 - 2887	B0260 - B0305	
	320	Corneal Endothelium II [CO]	2888 - 2914	C0185 - C0211	
	321	Genetics of Corneal dystrophies [GEN]	2915 - 2927	C0212 - C0224	
	322	Strabismus: Therapy [EY]	2928 - 2939	C0250 - C0261	
	323	Accommodation and Binocular Functions [VI, VN, EY]	2940 - 2969	C0262 - C0291	
	11:15am – 1pm	334	Lens Biochemistry, Physiology and Biomechanics [LE]	3030 - 3044	A0001 - A0015
		335	Biochemistry and molecular biology of the retina/RPE [BI, VN]	3045 - 3094	A0016 - A0065
		336	Retinal Cell and Developmental Biology [RC]	3095 - 3122	A0103 - A0130
		337	Macular diseases excluding AMD [RE, GEN, LV, BI]	3123 - 3165	A0240 - A0282
		338	Melanoma: Basic and Translational [AP]	3166 - 3188	A0309 - A0331
		339	Blood flow, ischemia [PH]	3189 - 3206	B0189 - B0206
340		AMD imaging [RE]	3207 - 3256	B0306 - B0355	
341		AMD basic research [RE]	3257 - 3272	B0356 - B0371	
342		Dry eye non-clinical I [CO]	3273 - 3306	C0067 - C0100	
343		Corneal Neovascularization and Immunology [CO]	3307 - 3342	C0149 - C0184	
344		Neuro-ophthalmology: Optic neuropathy excepting glaucoma [EY]	3343 - 3367	C0225 - C0249	
345		Refractive error epidemiology and management [CL]	3368 - 3407	C0292 - C0331	
346		Functional Impacts of Vision Impairment [LV, VI]	3408 - 3429	C0332 - C0353	
3:30 – 5:15pm		371	Biochemical processes and disease mechanisms involved in glaucoma [BI]	3503 - 3539	A0066 - A0102
		372	Diabetic retinopathy - Cell Biology [RC]	3540 - 3572	A0157 - A0189
		373	Diabetic retinopathy - preclinical studies [RC]	3573 - 3591	A0190 - A0208
		374	Diabetic Macular Edema Anti-VEGF [RE]	3592 - 3621	A0210 - A0239
		375	Melanoma: Clinical Innovations [AP]	3622 - 3647	A0283 - A0308
		376	Epidemiology, Treatments, and Outcomes of Infection [IM]	3648 - 3694	A0332 - A0378
	377	Neurodegeneration [GL]	3695 - 3752	B0042 - B0099	
	378	ROP 2 [RE]	3753 - 3773	B0168 - B0188	
	379	Cataract, cornea and ocular surface disease [CL]	3774 - 3805	C0001 - C0032	
	380	Dry eye non-clinical II [CO]	3806 - 3839	C0033 - C0066	
	381	Corneal epithelium [CO]	3840 - 3887	C0101 - C0148	
	382	Profound Low Vision and Low-vision Clinical Trials [LV, VI]	3888 - 3902	C0354 - A0368	

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### Wednesday, May 2 – Minisymposia, papers, workshops and SIGs

Time	Session	Title	Location
6:45 – 8:15am	401	Breakfast with the Experts*	313BC
8:15 –10am	402	Vision Rehabilitation [LV] #3908-3913	306AB
	403	<b>Treatment on the horizon for Fuchs endothelial corneal dystrophy —</b> Minisymposium [CO] #3914-3919	310
	404	OCT Angiography Update [MOI] #3920-3926	311
	405	Contact Lens [CO] #3927-3933	312
	406	Retinopathy of Prematurity [RE] #3934-3938	313A
	407	Retinal glial and immune responses [RC] #3939-3945	315
	408	Retina II [PH] #3946-3952	316A
	409	Myopia prevalence, progression and risk factors [CL] #3953-3959	316B
	410	Gene Therapies [BI] #3960-3966	320
	411	Trabecular Meshwork [GL] #3967-3972	Ballroom A
	412	Retinal Prostheses [RE, LV] #3973-3978	Ballrooms BC
10:15 –11am	428	Cogan Award and Lecture #4405	Ballrooms BC
11:15am – 1pm	429	<b>Why cancer inflames the eye - Minisymposium [AP, IM] #4406-4410</b>	301AB
	430	Eye Movements and Nystagmus [EY] #4411-4417	306AB
	431	Corneal wound healing [CO] #4418-4424	310
	432	Vitreoretinal Surgery and Endophthalmitis [RE] #4425-4431	311
	433	Corneal Endothelium and Fuchs Corneal Dystrophy [CO] #4432-4438	312
	434	ERG: Advances, Disease and Injury [VN] #4439-4445	314
	435	Gene function and neural protection [RC, LV] #4446-4452	315
	436	Drug delivery [PH] #4453-4459	316A
	437	Impact of vision impairment [CL] #4460-4465	316B
	438	Novel genes found through methods old and new [GEN] #4466-4472	316C
	439	Capillaries, Blood Flow, OCT Angiography [GL] #4473-4479	Ballroom A
	440	AMD Imaging II [RE] #4480-4485	Ballrooms BC
1:30 – 3pm	455	Animal Models of Ocular Trauma — SIG [EY, RC, RE]	301AB
	456	LV Group — Implementing low vision service [LV]	306AB
	457	Biobanking with a Purpose: Advancing Research in Ophthalmology — SIG [AP, BI, CO, GL, IM, LE, RE, RC, VN, GEN]	310
	458	Regenerative Medicine Wnt Signaling and Retinal vascular Disease — SIG [RE]	311
	459	Optical Coherence Tomography and Ophthalmic Surgery: New Visualizations, Functional Analysis, and Enabling Robotic Assistance — SIG [CO, GL, RE, MOI]	312
	460	Patient report outcome measures (PROMs) in clinical glaucoma research: refining current tools, exploring new opportunities and improving means of data capture and analysis. — SIG [GL]	313A
	461	Understanding the NEI Granting Process (NEI Extramural Roundtable)	313BC
	462	Data sharing: Clinical science in the era of artificial intelligence	314
	463	Ontology and Common Data Elements for Collaborative Research in Ophthalmology — SIG [CO, CL, EY, GL, LE, RE, RC, VI, GEN, LV]	316A
	464	Making ARVO more accessible: Experience from countries with emerging vision-oriented research agenda	316B
	465	The path from bench to bedside: Professional development and entrepreneurship	316C
	466	Phagocytosis in the outflow pathway: what we can learn from other ocular tissues — SIG [PH, GL]	320
	467	Mechanisms and Therapies for Corneal Endothelial Dysfunction — SIG [CO]	Ballroom A

Symposia and minisymposia highlighted in boldface

\* Registration required

**Wednesday, May 2 – Papers (continued)**

<b>Time</b>	<b>Session</b>	<b>Title</b>	<b>Location</b>
3:30 – 5:15pm	468	Mechanisms and Therapy for Viral Infection [IM] #4931-4936	301AB
	469	Refractive Error and Visual Function [VI] #4937-4943	310
	470	AMD Clinical Research [RE] #4944-4950	311
	471	Dry Eye Non-clinical [CO] #4951-4957	312
	472	Basic Innovations in Oncology [AP] #4958-4963	313A
	473	Signaling in retinal degeneration [RC] #4964-4970	315
	474	Accommodation and cataractogenesis [LE] #4071-4976	316C
	475	Biochemistry and Molecular Biology of the Retina [BI] #4977-4983	320
	476	Structure-Function Relationships [GL] #4984-4990	Ballroom A
	477	Clinical Posterior Segment Imaging [RE] #4991-4997	Ballrooms BC
5:30 –7pm	490	Special Session: Clinical Trial Design and Endpoints for Choroideremia Clinical Trials	Ballroom A

Symposia and minisymposia highlighted in boldface

\* Registration required

**Wednesday, May 2 – Posters**

Time	Session	Title	Program No.	Board No.	
8:15 – 10am	413	RPE [RC, LE]	3979 - 4007	A0104 - A0132	
	414	RPE: metabolism [RC]	4008 - 4038	A0133 - A0163	
	415	Color vision and photoreceptors [VI]	4039 - 4052	A0246 - A0259	
	416	Imaging: Posterior Segment II [GL]	4053 - 4090	B0048 - B0085	
	417	Prevalence of vision impairment [CL]	4091 - 4109	B0216 - B0234	
	418	Amyopia [EY]	4110 - 4131	B0273 - B0294	
	419	Neuro-ophthalmology: Pediatrics and Pupillometry [EY, AP]	4132 - 4142	B0295 - B0305	
	420	Patient reported outcomes, methods and reporting of research [CL, LV]	4143 - 4158	B0366 - B0381	
	421	Clinical Uveitis and Scleritis: Epidemiology, Diagnosis and Outcomes [IM]	4159 - 4217	C0001 - C0059	
	422	Retinal Detachment: Basic and Clinical Science [RE, LV]	4218 - 4256	C0060 - C0098	
	423	Retinal vascular diseases I (excluding diabetes) [RE, LV]	4257 - 4296	C0128 - C0167	
	424	Ocular complications of therapy: trends, imaging, treatment [AP, PH]	4297 - 4313	C0271 - C0287	
	425	Pathology and Omics [AP, GEN, BI]	4314 - 4327	C0288 - C0301	
	426	Corneal wound repair and healing [CO]	4328 - 4377	C0376 - C0425	
	427	Keratoconus and Collagen Crosslinking [CO]	4378 - 4404	C0426 - C0452	
	11:15am – 1pm	441	Molecular mechanisms of retinal function and retinal disease [BI]	4486 - 4521	A0001 - A0036
		442	Ocular gene therapies and chemical therapeutics [BI]	4522 - 4553	A0037 - A0068
		443	Retinal prostheses [RE]	4554 - 4574	A0083 - A0103
		444	Stem Cells: New Approaches and Disease Modelling [RC]	4575 - 4591	A0164 - A0180
		445	Inflammatory/immune responses in retinal diseases [RC]	4592 - 4617	A0181 - A0206
		446	Imaging Technologies and Applications I [MOI, AP]	4618 - 4664	A0260 - A0306
		447	Imaging Technologies and Applications II [MOI]	4665 - 4699	A0307 - A0341
		448	Trabecular Meshwork [GL]	4700 - 4733	B0124 - B0157
		449	High and pathological myopia: characteristics and treatment [AP]	4734 - 4747	B0235 - B0248
		450	Refractive Error — Myopia and Astigmatism [VI]	4748 - 4771	B0249 - B0272
		451	Cataract Surgery Outcomes and Epidemiology [LE]	4772 - 4809	B0382 - B0419
		452	Diabetic Macular Edema Clinical Research [RE]	4810 - 4856	C0168 - C0214
453		Dry Eye Clinical II [CO]	4857 - 4905	C0302 - C0350	
454		Tear Film, Lacrimal gland, Meibomian Gland [CO]	4906 - 4930	C0351 - C0375	
3:30 – 5:15pm		478	Retina/RPE transplantation (clinical) [RE]	4998 - 5011	A0069 - A0082
		479	Human electrophysiology [VN]	5012 - 5034	A0208 - A0230
		480	ipRGCs and Circadian Rhythms [VN]	5035 - 5049	A0231 - A0245
		481	Capillaries, Blood Flow, OCT Angiography [GL]	5050 - 5096	B0001 - 50047
		482	Electrophysiology and Visual Fields [GL]	5097 - 5134	B0086 - B0123
		483	Genetics of Glaucoma [GEN]	5135 - 5161	B0158 - B0184
		484	Consequences of and associations with vision impairment [CL]	5162 - 5192	B0185 - B0215
		485	Pediatric Ophthalmology [EY]	5193 - 5214	B0306 - B0327
	486	Healthcare delivery [CL]	5215 - 5252	B0328 - B0365	
	487	PVR and Vitreoretinal Interface [RE, BI, RC]	5253 - 5281	C0099 - C0127	
	488	Retina [PH]	5282 - 5309	C0215 - C0242	
	489	Retina, drugs [PH]	5310 - 5337	C0243 - C0270	

Poster board numbers correspond to poster location in Exhibit Hall; A = Poster Area A , B = Poster Area B and C = Poster Area C.

Thursday, May 3 – Symposia, papers and lectures

Time	Session	Title	Location
8:15 – 10:15 am	501	<b>In Galileo's Footsteps: visualizing immunity</b> [IM, CO, RE] #5338-5342	311
	502	<b>Neuronal Health in AMD and Glaucoma: Lifestyle-based Therapies to Live Long and Prosper</b> [GL, RE, CL, BI, LV] #5343-5348	Ballroom A
11am – 12:45pm	524	Advances in Clinical Therapeutics for Uveitis [IM] #5948-5953	301AB
	525	Amblyopia [EY] #5954-5960	306AB
	526	Visual psychophysics in color and complex vision [VI, VN] #5961-5967	310
	527	Retinal Vascular Diseases II [RE] #5968-5974	311
	528	Cornea Refractive Surgery [CO] #5975-5981	312
	529	Clinical Innovations in Oncology [AP] #5982-5987	313A
	530	Diseases and Protection [VN] #5988-5994	314
	531	<b>Retinal lipid and glucose metabolism in health and disease</b> — Minisymposium [RC, BI, RE] #5995-6000	315
	532	Retina III [PH] #6001-6007	316A
	533	AMD Epidemiology and Treatment [CL] #6008-6013	316B
	534	Cataract Surgery, epidemiology and clinical outcomes [LE] #6014-6019	316C
	535	Genome: Structure, Function and Editing [BI] #6020-6026	320
	536	Visual Fields, Vision Function, Psychophysics [GL] #6027-6033	Ballroom A
	537	Pharmacological Interventions and Cellular Mechanisms [GL] 6034-6040	Ballrooms BC
1 – 2pm	546	Beckman-Argyros Award in Vision Research	Ballrooms BC
2:15 – 3:45pm	547	ARVO/Alcon Keynote Session: Principles of gene repair in human embryos	Ballrooms BC

Symposia and minisymposia highlighted in boldface

Thursday, May 3 – Posters

Time	Session	Title	Program No.	Board No.	
8:15 – 10am	503	Molecular mechanisms of diabetic retinopathy [BI]	5349 - 5379	A0001 - A0031	
	504	Gene variants and regulation of ocular genes expression in health and disease [BI]	5380 - 5422	A0032 - A0074	
	505	Retinal vascular diseases II (excluding diabetes) [RE]	5423 - 5460	A0092 - A0129	
	506	Retinal ischemia, angiogenesis and vascular remodeling [RC]	5461 - 5492	A0130 - A0161	
	507	Ganglion Cells: Metabolism and response to injury [RC]	5493 - 5517	A0162 - A0186	
	508	Animal electrophysiology [VN]	5518 - 5532	A0210 - A0224	
	509	AMD Epidemiology and outcomes [CL]	5533 - 5550	A0225 - A0242	
	510	AMD: immunobiology [IM]	5551 - 5564	A0243 - A0256	
	511	Conjunctival Allergic Disease [IM]	5565 - 5576	A0257 - A0268	
	512	Lymphoma, hemangioma, surface, orbit, and eyelid tumors [AP]	5577 - 5611	A0296 - A0330	
	513	Thyroid and orbital diseases [EY]	5612 - 5631	A0331 - A0350	
	514	Cataractogenesis and PCO [LE]	5632 - 5653	A0351 - A0372	
	515	Gene therapy, implants [PH]	5654 - 5674	A0373 - A0393	
	516	Drug and gene delivery systems [PH]	5675 - 5713	A0394 - A0432	
	517	Corneal Imaging and Topography [CO]	5714 - 5744	C0001 - C0031	
	518	Cornea Surgery; Refractive [CO]	5745 - 5781	C0032 - C0068	
	519	Fixational Eye Movements and Nystagmus [EY]	5782 - 5796	C0069 - C0083	
	520	Image Quality and Vision [VI]	5797 - 5815	C0084 - C0102	
	11am – 12:45pm	521	Animal Imaging [MOI, BI]	5816 - 5858	C0103 - C0145
		522	Innovations in Imaging [MOI]	5859 - 5883	C0146 - C0170
523		Imaging: Anterior Segment [GL]	5884 - 5912	C0171 - C0199	
523a		Vitreoretinal Surgery: Novel Approaches [RE]	5913 - 5947	C0310 - C0344	
538		Potpourri in genetic eye disease [GEN]	6041 - 6057	A0075 - A0091	
539		Retinal diseases and aging: preclinical studies [RC, LV, VI]	6058 - 6080	A0187 - A0209	
540		Surgery and Wound Healing III [GL]	6081 - 6109	C0200 - C0228	
541		Neuroprotection [GL]	6110 - 6152	C0229 - C0271	
542		Medical education, training and telemedicine [CL]	6153 - 6172	C0272 - C0291	
543		Trauma and Endophthalmitis [RE]	6173 - 6190	C0292 - C0309	
545	Image-guided Laser Applications and Lasers in Retinal Therapy [RE]	6191 - 6202	C0345 - C0356		

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