



13th Optic Nerve Meeting

Obergurgl, Austria, 9-11th December 2025

20 minute slot = 10 minute talk and 10 minute discussion
10 minute slot = 5 minute talk and 5 minute discussion

Tuesday 9 th December		
8:30 - 8:40	Keith, Jonathan & Franz	Welcome and Introduction
Session 1: Glial Influence in Optic Neuropathy		
Chairs: Adriana Di Polo, Lukas Neukomm		
8:40 - 9:00	QJ Cui	Fate mapping determines the roles of monocytes and microglia in glaucoma
9:00 - 9:20	Deborah Villafranca	cAMP Signaling and spatially resolved astrocyte diversity in glaucoma
9:20 - 9:40	James Tribble	Inflammation-driven metabolic dysfunction
9:40 - 9:50	Xandra Pereiro	Müller glia-RGC communication via extracellular vesicles
9:50 - 10:00	Athanasios Alexandris	Axonal degeneration and recovery after diffuse traumatic optic nerve injury: evidence for homotypic collateral sprouting and sex-dependent plasticity
Morning Tea		
Session 2: Mitochondrial Dysfunction and Metabolism		
Chairs: Elena Vecino, Franz Grus		
10:30 - 10:50	Bledi Petriti	Reversing mitochondrial dysfunction in optineurin E50K glaucoma
10:50 - 11:10	Jeff Goldberg	Axon transport of mitochondria and mRNAs
11:10 - 11:30	Elena Vecino	Mitochondrial importance in RGC injury and repair
11:30 - 11:50	Luana Naia	Mitochondria-derived vesicles in ageing and neurodegeneration
11:50 - 12:00	Yasmin Alameddini	Mitochondrial DNA at the interface between mitochondrial dysfunction and neuroinflammation in glaucoma
Lunch Break		
Session 3: Neurodegeneration		
Chairs: Yang Hu, Giovanna Malucci		
17:30 - 17:50	Bryan Jones	Retina: A model for neurodegeneration
17:50 - 18:10	Giovanna Malucci	Neurodegeneration and protein stress
18:10 - 18:30	Len Levin	Axon-to-axon signaling: A paradigm for progression in optic neuropathy
18:30 - 18:40	Jesse Gardner-Russell	Selective axonal injury depletes interpericyte tunnelling nanotubes
18:40 - 18:50	Lidia Sánchez-Puebla	The retina as a mirror of Alzheimer's Disease: Early structural and vascular alterations in the APPNL-F/NL-F mouse model
18:50 - 19:00	Seungsoo Rho	Nicotinamide trial in NTG patients
Wednesday 10 th December		
Session 4: Regeneration and Repair Pathways		
Chairs: Richard Eva, Luana Naia		
8:30 - 8:50	Richard Eva	Optimising retinal neuroprotection and optic nerve regeneration by targeting axonal organelles
8:50 - 9:10	Adriana Di Polo	Neuronal revival: The insulin pathway to dendritic and synaptic regeneration after axonal injury
9:10 - 9:30	Robin Franklin	Schwann cells in the CNS
9:30 - 9:50	Yang Hu	Recent progress on optic nerve protection and regeneration
9:50 - 10:00	Carola Rutigliani	Netrin-1 as a dual guidance and regenerative cue following sheath-preserving optic nerve transection
Group Photo + Morning Tea		
Session 5: Gene Therapy and Translational Platforms		
Chairs: Alice Pébay, Keith Martin		
10:30 - 10:50	Volker Patzel	Non-viral vectors for mitochondrial gene therapy
10:50 - 11:10	Alice Pébay	Can we use iPSCs to characterise heterogeneity in AMD? The case of reticular pseudodrusen
11:10 - 11:30	Pete Williams	Gene therapy targeting neuroprotection and neuroregeneration in glaucoma
11:30 - 11:50	Stavros Vagionitis	Neuronal activity bidirectionally regulates myelin plasticity
11:50 - 12:00	Steven Bergmans	A proof-of-concept study for single-nucleotide base editing to prevent vision loss in a Wolfram Syndrome mouse model
Lunch Break		
Session 6: Vision Circuits and Synaptic Plasticity		
Chairs: Pete Williams, Deborah Villafranca		
17:30 - 17:50	Ben Sivyer	Melanopsin in high-acuity RGCs
17:50 - 18:10	Tas Khatib	CNTF-mediated rescue of circuit dysfunction
18:10 - 18:30	Christian van Oterendorp	Mechanosensitive responses of cultured RGCs
18:30 - 18:50	Luca Masin	Successful injury-induced axonal regeneration requires extensive dendritic remodelling
18:50 - 19:00	Greg Duncan	Remyelination protects retinal ganglion cells from dual leucine zipper kinase-mediated apoptosis
Thursday 11 th December		
Session 7: Rapid-Fire		
Chairs: Michel Cayouette, Len Levin		
8:30 - 8:40	Andrew White	Role of Lactoferrin on RGC survival in a retinal explant model
8:40 - 8:50	Alan Nicol	Pyrroloquinoline quinone is a potent metabo- and gero- protective agent in C. elegans
8:50 - 9:00	Marcelino Aviles-Trigueros	Unveiling hidden complexity: Insights into an uncharacterized subtype of retinal ganglion cell
9:00 - 9:10	Ngan Pan Bennett Au	Neuronal-intrinsic mechanisms for effective nerve repair: therapeutic implications for glaucoma
9:10 - 9:20	Xiaosha Wang	Crybb3 promotes retinal ganglion cell axon regeneration via mTOR pathway activation
9:20 - 9:30	Qiong Ding	Evaluating AMPK activation as a strategy to enhance retinal ganglion cell survival and function in glaucoma
9:30 - 9:40	Marta Molinari	Modulation of miR-181a/b prevents glaucomatous optic neuropathy by improving mitochondrial dynamics and suppressing inflammation
9:40 - 9:50	Markus Kuehn	Altered distribution of T Cells in peripheral blood of patients with POAG
9:50 - 10:00	Valery I. Shestopalov	Inflammasome blockade strategies in optic neuropathies
Morning Tea		
Session 8: Neuroprotection		
Chairs: Jeff Goldberg, Katharina Bell		
10:30 - 10:50	Antje Grosche	TSP0 maintains Müller Cell metabolic resilience under stress to preserve retinal homeostasis
10:50 - 11:10	Livia Carvalho	Drug-based interventions for cone preservation
11:10 - 11:30	John D. Ash	AMPK and mitochondria-targeted neuroprotection
11:30 - 11:50	Veronica Moreno	Cell type-targeted mitochondrial transplantation mediated by protein binders rescues cell degeneration
11:50 - 12:00	Eleonora Daghini	Targeting taurine metabolism for neuroprotection in a rat model of ocular hypertensive glaucoma
Lunch Break		
Session 9: Transplantation, Stem cells and Organoid Models		
Chairs: Tas Khatib, Andrea Loreto		
17:30 - 17:50	Tim Kennedy	Making connections: guiding synaptic plasticity in the CNS
17:50 - 18:10	Michel Cayouette	Numb-mediated Tau lowering therapy
18:10 - 18:30	Luis Alarcon-Martinez	Neurovascular coupling
18:30 - 18:50	Keith, Jonathan & Franz	Close and suggestions for 2026