



9th Optic Nerve Meeting

10-12 December 2019

Obergurgl, Austria

AGENDA

Tuesday 10 December

8:30 - 8:40	Jonathan Crowston, Franz Grus & Keith Martin	<i>Welcome and Introduction</i>
Session I: Astrocytes		
Moderators: Andras Lakatos & Elena Vecino		
8:40 - 8:50	Andras Lakatos	<i>Is there a point in studying interspecies differences in astrocyte biology and pathology?</i>
8:50 - 9:10	Lea Wenger	<i>New tools for investigating human astrocyte diversity and reactivity</i>
9:10 - 9:30	Colleen Limegrover	<i>Astrocyte responses in human traumatic brain injury</i>
9:30 - 9:50	David Krizaj	<i>Neuronal and glial mechanotransduction: from retinal tension to dysfunction</i>
9:50 - 10:00	Eirini Kokkali	<i>When is a control eye not a control eye? Reactive microglia persist throughout the control contralateral visual pathway in experimental glaucoma</i>

Morning Tea

Session II: Bioenergetics and Neuron-Glial Interactions

Moderators: Bob Casson & Pete Williams

10:30 - 10:50	Pete Williams	<i>From form to function: the effect of nicotinamide on retinal ganglion cell metabolism and mitochondria</i>
10:50 - 11:10	Bob Casson	<i>Gene therapy with neuroglobin in experimental glaucoma</i>
11:10 - 11:30	Flora Hui	<i>NAM and functional recovery in human glaucoma</i>
11:30 - 11:50	Elena Vecino	<i>The whale's RGCs: A long way to go</i>
11:50 - 12:00	Oliver Gramlich	<i>Targeting the cholesterol efflux transporter 1 ameliorates optic neuritis in EAE model</i>

Lunch Break

Session III: Bioenergetics II

Moderators: Peter van Wijngaarden & David Krizaj

17:30 - 17:50	Tom McWilliams	<i>Landscapes of mitochondrial destruction in-vivo</i>
17:50 - 18:10	James Tribble	<i>Targeting Nmnats for neuroprotection in glaucoma</i>
18:10 - 18:30	Marcela Votruba	<i>Mitochondrial morphology drives bioenergetics defects in RGCs in mitochondrial optic neuropathies</i>
18:30 - 18:50	Jeff Goldberg	<i>Neural activity in retinal development and angiogenesis</i>
18:50 - 19:00	Discussion	

Wednesday 11 December

Session IV: Disease Mechanisms, Therapeutics and Detection

Moderators: Franz Grus & Dietmar Fischer

8:30 - 8:50	Evan Reid	<i>Understanding cellular mechanisms of axonopathy in hereditary spastic paraplegia</i>
8:50 - 9:10	Dietmar Fischer	<i>New strategies to promote optic nerve regeneration</i>
9:10 - 9:30	Alice Pébay	<i>Modelling complex diseases with human pluripotent stem cells</i>
9:30 - 9:50	Peter van Wijngaarden	<i>Hyperspectral retinal imaging in Alzheimer's disease</i>
9:50 - 10:00	Wolf Lagrèze	<i>Effect of high-dose intravenous erythropoietin in optic neuritis as a clinically isolated syndrome</i>

Morning Tea

Session V: Retinal Response to Injury

Moderators: Bryan Jones & Jonathan Crowston

10:30 - 10:50	Bryan Jones	<i>Altered bipolar cell input to ganglion cells in retinal degeneration</i>
10:50 - 11:10	Romain Cartoni	<i>Using mitochondria to promote neuronal repair</i>
11:10 - 11:30	James Morgan	<i>Early changes in human glaucoma</i>
11:30 - 11:50	Mike Kapiloff	<i>cAMP compartmentation, mAKAP² signalosomes, and retinal ganglion cell neuroprotection</i>
11:50 - 12:00	Henrik Tonner	<i>Intravitreal injection of an anti-HMGB1 antibody attenuates neurodegeneration in a glaucoma animal model</i>

Lunch Break

Session VI: Gene Therapy

Moderators: Keith Martin & Jeff Goldberg

17:30 - 17:50	Andy Osborne	<i>Gene therapy - protecting retinal ganglion cells via TrkB signalling</i>
17:50 - 18:10	Dominik Fischer	<i>Retinal gene therapy - lessons from treating RPE, rods and cones</i>
18:10 - 18:30	Veselina Petrova	<i>Protrudin enhances CNS axon regeneration through multiple novel pathways</i>
18:30 - 18:40	Discussion	

Thursday 12 December

Session VII: Autophagy and -Omics

Moderators: Christian Behl & Katharina Bell

8:30 - 8:50	Christian Behl	<i>Autophagy response in chronic neuronal oxidative stress</i>
8:50 - 9:10	Katharina Bell	<i>Age related changes of rgc damage in an autophagy impaired model</i>
9:10 - 9:30	Moritz Helmstaedter	<i>Connectomics in brain diseases</i>
9:30 - 9:50	Julie Lefebvre	<i>Cellular and molecular strategies for retinal neuron wiring</i>
9:50 - 10:00	Carsten Schmelter	<i>Synthetic immunopeptides as new strategy in glaucoma therapy</i>

Morning Tea

Session VIII: RGC Development

Moderators: Ed Levine

10:30 - 10:50	Ed Levine	<i>Using single-cell analysis to understand how Lhx2 controls inner retinal cell production</i>
10:50 - 11:10	Michel Cayouette	<i>New players in the transcriptional regulation of retinal ganglion cell fate specification</i>
11:10 - 11:30	Anna La Torre	<i>MicroRNAs in retinal ganglion cell production and survival</i>
11:30 - 11:50	Tom Reh	<i>Restoring the inner retina: endogenous or exogenous stem cell approaches</i>
11:50 - 12:00	Discussion	

Lunch Break

Session IX: Regeneration, Repair and Plasticity

Moderators: James Morgan & Richard Eva

17:30 - 17:50	Richard Eva	<i>PI3 kinase delta and axonal regeneration</i>
17:50 - 18:10	Britta Eickholt	<i>Essential role of the actin cytoskeleton during astrogliosis and scar formation</i>
18:10 - 18:30	Ning Tian	<i>A dual neurotransmitter releasing bipolar cell participates in the homeostatic regulation of RGC synaptic connections</i>
18:30 - 19:00	Discussion and Wrap-Up of 2019 Meeting	