



# Scientific Program Salzburg

February 18.-21. 2009

*sponsored by*



## Wednesday February 18<sup>th</sup> 2009

**16:00 – 19:00** Registration at the meeting center St. Virgil

**18:00 – 20:00** Welcome Reception in St. Virgil

All oral presentations must be uploaded to the presentation computers by the presentation technician before the morning sessions and before the afternoon session. (Memory sticks preferred)

All posters must be mounted by Thursday 10:15

## Thursday February 19<sup>th</sup> 2009

**07:30 – 08:00** Registration and Coffee

**08:00 – 08:15** Opening Remarks

**08:15 – 09:50** Session: Neuroprotection / Pharmacogenetics

Session Chairs: Neville Osborne and Christian Vorwerk

- 08:15 – 08:35 **Ch Vorwerk** - Retinal neuroprotection in ophthalmology.  
(15min + 5min Discussion)
- 08:35 – 08:55 **N Osborne** - Stimulation of mitochondria function with nicotinamide enhances ganglion cell survival.  
(15min + 5min Discussion)
- 08:55 – 09:10 **J Jonas** - Dosage dependence of the effect of ginkgo biloba on the rat retinal ganglion cell survival after optic nerve crush.  
(10min + 5min Discussion)
- 09:10 – 10:00 **A Churchill** - DNA profiling in eye disease - what can it tell us?  
(40min + 10min Discussion)

**10:00 – 10:15** Coffee Break

**10:15 – 12:00** Session: Drug Delivery

Session Chairs: Peter Kador and Achim Krauss

- 10:15 – 10:35 **M Diestelhorst** - Ocular treatment with Lyophilisates.  
(15min + 5min Discussion)

- 10:35 – 10:52 **P Chetoni** - Assessment of Intraocular Drug Concentration after Sub-Tenon Injection of Triamcinolone Encapsulated Liposomes in Rabbits.  
(12min + 5min Discussion)
- 10:52 – 11:09 **S Srinivas** - Kinetics of Drug Penetration across the Cornea at a Microscopic Level.  
(12min + 5min Discussion)
- 11:09 – 11:26 **P Kador** - Preliminary results on the efficacy of topical Kinostat™ in reducing cataracts in diabetic dogs.  
(12min + 5min Discussion)
- 11:26 – 11:43 **J Randazzo** - Orally active multi-functional antioxidants delay radiation-Induced cataracts.  
(12min + 5min Discussion)

### **12:00 – 13:00** *Company Luncheon – IMEDOS*

- 12:00 – 12:20 **B-U Seifert** - Retinal vessel analysis – In vivo investigation of microcirculation.
- 12:20 – 12:40 **G Garhoefer** - Dynamic Vessel Analysis - Neurovascular Coupling in the Retina.

### **14:00 – 15:45** *Open Session Blood Flow*

Session Chairs: **Oliver Zeitz** and **Gerhard Garhoefer**

- 14:00 – 14:15 **D Schmidl** - Correlation of optic disc morphology and ocular perfusion parameters in patients with primary open angle glaucoma.  
(10min + 5min Discussion)
- 14:15 – 14:30 **B Bogner** - Vasopressin Receptors in Ocular Tissues and Their Impact on Ocular Hydrodynamics.  
(10min + 5min Discussion)
- 14:30 – 14:45 **F Seidova** - Age dependence of pulse-wave velocity in retinal arteries of healthy volunteers.  
(10min + 5min Discussion)
- 14:45 – 15:00 **G Weigert** - Effects of topical clonidine versus brimonidine on choroidal blood flow during squatting.  
(10min + 5min Discussion)
- 15:00 – 15:15 **K Kotliar** - Dynamic retinal vessel reaction to flickering light is changed in patients with diabetes mellitus.  
(10min + 5min Discussion)
- 15:15 – 15:30 **C Strohmaier** – A novel rodent model to study choroidal blood flow.  
(10min + 5min Discussion)

### **15:45 – 16:00** *Coffee Break*

### **16:00 – 17:30** *Open Session*

Session Chairs: **Oliver Zeitz** and **Gerhard Garhoefer**

- 16:00 – 16:15 **O Zeitz** - Characteristics and prognostic role of disturbances of ocular hemodynamics in glaucoma patients.  
(10min + 5min Discussion)
- 16:15 – 16:30 **C Toris** - Aqueous humor dynamics in pigment dispersion syndrome.  
(10min + 5min Discussion)
- 16:30 – 16:45 **P Kador** - Novel murine models for investigating diabetic retinopathy.  
(10min + 5min Discussion)
- 16:45 – 17:00 **J Jonas** - Intravitreal bevacizumab for retinal macroaneurysm.  
(10min + 5min Discussion)
- 17:00 – 17:15 **F Schlichtenbrede** - Toxicity Assessment of intravitreal Triamcinolone and Bevacizumab in a retinal explant mouse model using Two-Photon Microscopy.  
(10min + 5min Discussion)

### **17:30 – 18:30 Poster Session**

1. **Yasuhiro Tamaki** - Effects of light exposure on Wnt/beta-catenin pathway in retinal pigment epithelium.
2. **Françoise Brignole-Baudouin** - In vivo studies of toxic profiles of anti-glaucomatous prostaglandin analogues in cationic emulsion formulation.
3. **Jost Jonas** - Effect of brimonidine on retinal ganglion cell survival in an optic nerve crush model.
4. **Shawkat Michel** - Role of systemic anti-viral medications in the treatment of herpetic keratitis.
5. **Norman Harris** - Expression of hypoxia-inducible factors in the retina of diabetic mice.
6. **Herwig Brandner** - Correlation between Goldmann applanation tonometry and rebound tonometry in relation to central corneal thickness.
7. **Christian Nischler** - Static and dynamic retinal vessel analysis in patients with active central serous chorioretinopathy.
8. **Takashi Kitaoka** - Pharmacokinetics of IgG injected by intravitreal injection guide
9. **Frank Schlichtenbrede** - Intravitreal Triamcinolone after Intravitreal Bevacizumab for retinal vein occlusions.
10. **Susanne Nitsch** - Role of Nebivolol In choroidal and ciliary blood flow regulation in anesthetized rabbits.
11. **Elisabeth Kramar** - Dose dependent modulation of choroidal and ciliary blood flow with adenosine.
12. **Christian Runge** - The effect of beta blockers on ocular hemodynamics in anesthetized Rabbits.
13. **Hermann Tschiderer** - Dorzolamide and Brimonidine: Two oppositional mechanisms of reducing aqueous humour formation in acute rabbit experiments.
14. **Melchior Hohensinn** - Endogenous dopamine contributes to baseline vasodilatory tone to the choroid in anesthetized rabbits.
15. **Alexander Bacherneegg** - The effect of adenosine on optic nerve head blood flow and oxygen tension in the rabbit eye.
16. **Doris Paikl** - Neuronal nitric oxide synthase inhibition does not block parasympathetic vasodilation in the choroid.

17. **Rousa Aghayan-Ugurluoglu** - Dopaminergic Modulation of horizontal-cell-axon-terminal receptive field size in the mammalian retina.
18. **Anita Ritter** - Pharmacological modulation of orbital venous pressure in anesthetized rabbits.
19. **Theresia Keindl** - Oxygen Gradients in the anterior segment of the eye.
20. **Martin Emesz** - Microscope based laser doppler flowmeter for rodent use.
21. **Karin Weikinger** - Short term effects of topical Travoprost on ciliary blood flow in rabbits.
22. **Nora Santner** - The effect of vasopressin on ocular hemodynamics and aqueous flow.
23. **Orang Seyeddain** - Corneal cross linking (CXL) in progressive keratoconus – clinical results after 6 month follow up.
24. **Samad Abri** - No correlation between intraocular pressure and age in the Salzburg Moorfields collaborate glaucoma study.
25. **Patricia Udaondo** - Intravitreal autologous plasmin injection for macular edema secondary to branch retinal vein occlusion.
26. **Patricia Udaondo** - Intravitreal plasmin for the treatment for refractory diabetic macular edema.
27. **Teodosio Libondi** - Topical nepafenac for treatment of age-related macular degeneration.
28. **Carolina Isiegas** - Systemic AAV-mediated delivery of proinsulin delays progression of visual degeneration in the rd10 mouse.
29. **Hong Liang** - Reduction of quaternary ammonium-induced ocular surface toxicity by emulsions: an in vivo study in rabbits.
30. **Bernhard Steger** – Stereoids in traumatic optic neuropathy with optic canal decompression surgery.

## Friday February 20<sup>th</sup> 2009

**07:30 – 08:15**    *Registration and Coffee*

**08:15 – 09:50**    *Session: Drugs in the pipeline – Stem Cells*

Session Chairs: **Filippo Drago** and **Carl Erb**

- 08:15 – 08:35    **A Krauss** - *Ocular hypotensive activity of PF-3187207, a nitric oxide donating prostaglandin analog, in preclinical models. (PFIZER)*  
(15min + 5min Discussion)
- 08:35 – 08:55    **W Bonitz** - *Current concepts in drug development. (NOVARTIS)*  
(15min + 5min Discussion)
- 08:55 – 09:15    **M Prinz** - *Applications for thiolated polymers in ophthalmology. (CROMA)*  
(15min + 5min Discussion)

09:15 – 10:00 **L Aigner** - A vision for blindness? What we learn from Stem Cells in the CNS.  
(35min + 10min Discussion)

**10:00 – 10:15 Coffee Break**

**10:15 – 12:00 Session: Safety and Efficacy in clinical trials – the role of the European Vision Institute**

Session Chairs: **Eberhart Zrenner** and **Susanne Nitsch**

- 10:15 – 10:25 **E Zrenner** – Introduction  
(10min + 0min Discussion)
- 10:25 – 10:42 **J Cunha-Vaz** - EVI.CT.SE: A Network of clinical trial sites of excellence in ophthalmology.  
(12min + 5min Discussion)
- 10:42 – 10:59 **U Schiefer** - Visual field assessment – present state and future options.  
(12min + 5min Discussion)
- 10:59 – 11:16 **E Zrenner** - Assessing retinal function by refined electrophysiological protocols in clinical trials.  
(12min + 5min Discussion)
- 11:16 – 11:33 **T Peters** - The Steinbeis ERG-Reading Centre for Electrophysiological Data in Tübingen.  
(12min + 5min Discussion)
- 11:33 – 11:50 **T Léveillard** - Insights into the mode of action of the Rod-derived Cone Viability Factors.  
(12min + 5min Discussion)

**12:00 – 13:00 Company Luncheon – Bausch & Lomb**

Moderator: **Leopold Schmetterer**

- 12:00 – 12:40 **CB Slonim** - The novel substance for ocular inflammation control: loteprednol etabonate

**13:00 – 14:00 Company Luncheon – ALCON**

Moderator: **Herbert A Reitsamer**

- 13:00 – 13:20 **C Erb** - Role of oxidative stress in glaucoma  
13:20 – 13:40 **D Bertin** - Alcon - Research and Development

**14:00 – 15:45 Pharmacology of Ocular Blood Flow**

Session Chairs: **Jeffrey W. Kiel** and **Falk Schroedl**

- 14:00 – 14:20 **F Schrödl** - Intrinsic choroidal neurons: a review.  
(15min + 5min Discussion)
- 14:20 – 14:35 **D Zamora** - Sodium nitroprusside increases episcleral venous pressure  
(10min + 5min Discussion)

- 14:35 – 14:50 **J Kiel** - An ocular hypertensive dose of sodium nitroprusside does not increase aqueous flow.  
(10min + 5min Discussion)
- 14:50 – 15:05 **HA Reitsamer** - Effect of stimulation frequency on nitric oxide mediated autonomous choroidal vasodilation.  
(10min + 5min Discussion)
- 15:05 – 15:20 **L Wagenfeld** - Hydroxyl radical induced vasospasms: vasoactive effects of nebivolol in vitro and in vivo.  
(10min + 5min Discussion)
- 15:20 – 15:35 **C Bucolo** - Morphine-induced ocular hypotension is modulated by nitric oxide and carbon monoxide: role of  $\mu_3$  receptors.  
(10min + 5min Discussion)

### 15:45 – 16:00 *Coffee Break*

### 16:00 – 17:30 *Ocular Blood Flow in Health and Disease*

Session Chairs: **Herbert A Reitsamer** and **Leopold Schmetterer**

- 16:00 – 16:15 **G Fuchsjäger-Mayrl** - Relation between retrobulbar flow velocities as assessed with CDI and mean arterial blood pressure in patients with primary open angle glaucoma.  
(10min + 5min Discussion)
- 16:15 – 16:30 **B Pemp** - Retinal vessel response to flicker-stimulation in type 1 diabetes, in systemic hypertension and/or hypercholesterolemia and in healthy controls.  
(10min + 5min Discussion)
- 16:30 – 16:45 **R Leitgeb** - High speed quantitative 4d assessment of human retinal blood flow.  
(10min + 5min Discussion)
- 16:45 – 17:00 **G Garhofer** - Retinal vessel analysis – A potential screening tool for ocular and cerebrovascular diseases.  
(10min + 5min Discussion)
- 17:00 – 17:15 **M Lasta** - Effect of dual endothelin receptor blockade on ocular blood flow in patients with glaucoma and healthy subjects.  
(10min + 5min Discussion)

### 17:30 – 18 :30 *Poster Session*

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**19:00 Shuttle Transfer from St. Virgil to M32 – Gala Dinner Location**

## **Saturday February 21<sup>st</sup> 2009**

**07:30 – 08:15 Registration and Coffee**

**08:15 – 10:00 Session: AMD**

Session Chairs: **Jost Jonas** and **Christian Ahlers**

- 08:15 – 08:35 **M Eichhorn** - Anatomical and physiological aspects of blood flow to the posterior eye.  
(20min + 5min Discussion)
- 08:35 – 08:50 **J Jonas** - Combined intravitreal bevacizumab and triamcinolone for exudative age related macular degeneration.  
(10min + 5min Discussion)
- 08:50 – 09:15 **Ch Ahlers** - Neovascular AMD and advanced retinal imaging: New trends and developments and their implications for the clinical ophthalmologist.  
(20min + 5min Discussion)
- 09:15 – 09:30 **I Lanzl** - Dynamic retinal vessel reaction in age, AMD and following VEGF inhibitor therapy.  
(10min + 5min Discussion)
- 09:30 – 09:50 **T Peters** - Subretinal microelectrode arrays for restitution of vision in blind retinitis pigmentosa patients.  
(15min + 5min Discussion)

**10:00 – 10:15 Coffee Break**

**10:15 – 12:00 Session: Ocular Surface – Dry Eye**

Session Chairs: **Elisabeth Messmer** and **Josef Stoiber**

- 10:15 – 10:55 **J Nepp** - Role of hormones for lacrimal tear film quality and lipid phase tear film diagnostics.  
(35min + 5min Discussion)
- 10:55 – 11:15 **E Messmer** – Dry Eye, Osmolarity, and Osmoprotection.  
(15min + 5min Discussion)

- 11:15 – 11:35 **J Stoiber** - Immunmodulation in the cornea: Role of omega-3 fatty acids.  
(15min + 5min Discussion)
- 11:35 – 11:55 **Michael Diestelhorst** - Compliance with topical ocular therapy.  
(15min + 5min Discussion)

### **12:00 – 13:00** *Company Luncheon – MSD*

Moderator: **Herbert A Reitsamer**

- 12:00 – 12:15 **A Hommer** - Medical treatment principles and options in the new EGS Guidelines.
- 12:15 – 12:30 **L Schmetterer** - Carbonic anhydrase inhibitors – an update.
- 12:30 – 12:45 **L Pilunat** – Normal pressure glaucoma - special aspects.

### **13:00 – 14:00** *Company Luncheon – CROMA*

- 13:00 – 13:20 **L Schmetterer** – Management of AMD with nutrients, what is important?
- 13:20 – 13:40 **O Findl** - bromfenac sodium – an ophthalmic nonsteroidal anti-inflammatory drug with global experience.

### **14:00 – 15:45** *Session: Diabetes*

Session Chairs: **Sigfried Priglinger** and **Stefan Egger**

- 14:00 – 14:25 **R Weitgasser** - Diabetic retinopathy - the diabetologist's point of view.  
(20min + 5min Discussion)
- 14:25 – 14:50 **A Wedrich** - Pathophysiology of diabetic retinopathy and maculopathy.  
(20min + 5min Discussion)
- 14:50 – 15:15 **G Kieselbach** - Diabetic retinopathy - diagnosis and treatment - an update.  
(20min + 5min Discussion)
- 15:15 – 15:40 **C Haritoglou** - Diabetic maculopathy - diagnosis and treatment - an update.  
(20min + 5min Discussion)

### **15:45 – 16:00** *Coffee Break*

### **16:00 – 17:30** *Session Glaucoma*

Session Chairs: **Josef Flammer** and **Anton Hommer**

- 16:00 – 16:20 **C Vorwerk** - Excitotoxic damage to the optic nerve in glaucoma – changes in the glutamate cycle and glutamate receptor signaling.  
*(15min + 5min Discussion)*
- 16:20 – 16:40 **C Toris** - How is aqueous humor production regulated?  
*(15min + 5min Discussion)*
- 16:40 – 17:00 **G Garhoefer** - How is aqueous humor outflow facility regulated?  
*(15min + 5min Discussion)*
- 17:00 – 17:20 **HA Reitsamer** - Systemic findings in glaucoma patients.  
*(15min + 5min Discussion)*
- 17:20 – 17:40 **M Mozaffarieh** - Non IOP lowering glaucoma therapy.  
*(15min + 5min Discussion)*

**17:45 – 18:00** *Closing Remarks*