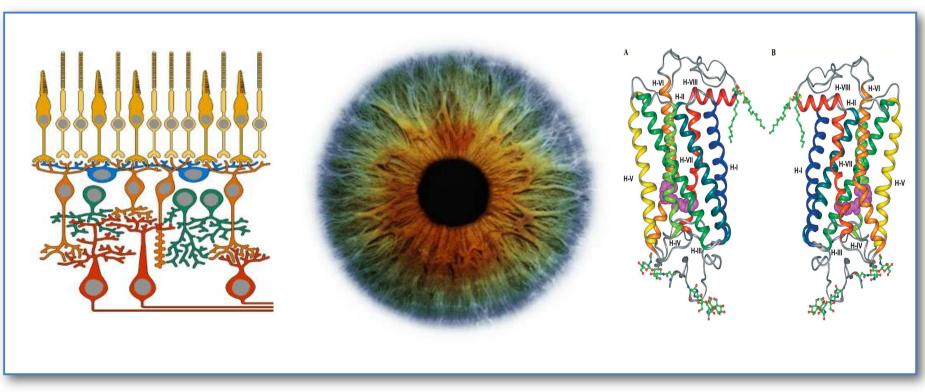
Swiss Eye Research Meeting; January 21 & 22, 2016, Neuchâtel

# SWISS EYE RESEARCH MEETING 2016 (SERM2016)

Venue: Hotel Beaulac, Neuchâtel Date: Jan 21 – Jan 22, 2016



## Thursday; January 21, 2016

10.00 - 10.30WELCOME COFFEE10.30 - 10.45WelcomeCorinne KosticDept Opth, Univ Lausane10.45 - 11.15Team Grimm1 Christian SchoriDept, Opthalmology, University of ZurichAlbert Neutzner11.15 - 11.30Team EscherPascal EscherDifthalmology, University of ZurichAlbert Neutzner11.30 - 12.30Team Langmann1 Anne WolfExperimental Immunology of the Eye, Department of Ophthalmology, Univ. of CologneChristian Grimm12.30 - 13.30LUNCH *UNCH *LUNCH *LUNCH *Christian Grimm13.30 - 14.30Team Behar-Cohen1 Frédéric Mascarelli 2 Alica TorrigliaDp Ophthalmology, Jules Gonin Eye Hospital, Univ of CologneVolker Enzmann14.30 - 15.30Team Paquet-Durand1 Michael PowerInstitute for Ophthalmic Research, University of TubingenVara Arsenijevic15.30 - 15.45Imaging of retinal hypoxikAshwath JayagopalF.Hoffmann-La Roche, LTD, BaselPascal Escher15.45 - 16.00COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAKCOFFEE BREAK * COFFEE BREAKCorinne KosticSPECIAL TALK Reshard Orthorugh Multisensury ProcessesBepartments of Cilincal Radiogr, University of GenevaCorinne Kostic17.5 - 17.30Team ThumannSonja KleinlogelInstitute of Physiology, Univ, UnivCorinne Kostic16.30 - 17.50Team KleinlogelSonja KleinlogelElinet of Clinical Radiogr, CHUV, UNIL, LausanneCorinne Kostic15.30 - 15.45Imaging of retinal hypoxikAshwath Jayagopal <t< th=""><th>TIME</th><th>TEAM / TALK</th><th>SPEAKERS</th><th>AFFILIATION</th><th>MODERATOR</th></t<>	TIME	TEAM / TALK	SPEAKERS	AFFILIATION	MODERATOR
1000       1 Christian Schori       Deprogram (Markadow)         10.45 - 11.15       Team Grimm       1 Christian Schori       Deprogram (Markadow)       Albert Neutzner         11.15 - 11.10       Team Escher       Pascal Escher       Dpt Ophthalmology, Jules Gonin Eye Hospital, UNLL       Albert Neutzner         11.30 - 12.30       Team Langmann       1 Anne Wolf       Experimental Immunology of the Eye, Department of Ophthalmology, Univ. of Cologne       Christian Grimm         12.30 - 13.30       LUNCH *       LUNCH *       LUNCH *       LUNCH *       LUNCH *       Christian Grimm         13.30 - 14.30       Team Behar-Cohen       1 Frédéric Mascarellit 2 Alicia Torrigtia       Dpt Ophthalmology, Jules Gonin Eye Hospital, Univ of Lausanne / INSERM, Paris       Volker Enzmann         14.30 - 15.30       Team Paquet-Durand       2 Manoj Kulkarni 3 Ajees Anabaglu Tekoza 4 Dragana Trifunovic       Institute for Ophthalmology, Jules Gonin Eye Hospital, Univ of Lausanne / INSERM, Paris       Yvan Arsenijevic         15.45 - 16.00       Smin-automand quantitativa analysis of vessal megnetion angigenetist in a mouse       Sabine Uhles       F.Hoffmann-La Roche, LTD, Basel       Pascal Escher         16.00 - 16.30       COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK       COFFEE BREAK * COFFEE BREAK       CorFIEE BREAK       CorFIEE BREAK       CorFIEE BREAK       CorFIEE BREAK         17.15 - 17.30	10.00 - 10.30	WELCOME COFFEE			
10.45 - 11.15       Team Grimm       2 Federica Storti       University of Zurich       Albert Neutzner         11.15 - 11.30       Team Escher       Pascal Escher       Dpt Ophthalmology, Jules Gonin Eye Hospital, UNIL       Albert Neutzner         11.30 - 12.30       Team Langmann       1 Anne Wolf       Experimental Immunology of the Eye, Department of Ophthalmology, Univ. of Cologne       Christian Grimm         12.30 - 13.30       LUNCH *       LUNCH *       LUNCH *       LUNCH *       LUNCH *       LUNCH *       Christian Grimm         13.30 - 14.30       Team Behar-Cohen       1 Frédéric Mascarelli 2 Alicia Torrigila       Dpt Ophthalmology, Jules Gonin Eye Hospital, Univ of Lausanne / INSERM, Paris       Volker Enzmann         14.30 - 15.30       Team Paquet-Durand       1 Michael Power 2 Manoj Kulkarni 3 Ayes Shaboglu Tekgoz 4 Dragana Trifunovic       Institute for Ophthalmic Research, University of Tubingen       Yvan Arsenijevic         15.30 - 15.45       Imaging of relinel hypoxie       Ashwath Jayagopal       F.Hoffmann-La Roche, LTD, Basel       Pascal Escher         16.00 - 16.30       COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK       CorFEE BREAK       CorFEE BREAK       CorFEE BREAK       CoFFEE BREAK       CorFEE BREAK       CorFEE BREAK       CorFEE BREAK       CorFINE Kostic         16.00 - 16.30       COFFEE BREAK * COFFEE BREAK * COFFEE BREAK       COFFE	10.30 - 10.45	Welcome	Corinne Kostic	Dept Ophth., Univ Lausanne	
11.15 - 11.30       Team Escher       Fascar Escher       Eye Hospital, UNIL         11.30 - 12.30       Team Langmann       1 Anne Wolf       Experimental Immunology of the Eye, Department of Ophthalmology, Univ. of Cologne       Christian Grimm         12.30 - 13.30       LUNCH *       LUNCH	10.45 – 11.15	Team Grimm			Albert Neutzner
11.30 - 12.30Team Langmann2 Khalid Rashid 3 Rebecca Scholz 4 Thomas LangmannExperimental Immunology of the bye, Department of Ophthalmology, Univ. of ColognerChristian Grimm12.30 - 13.30LUNCH *LUNCH	11.15 – 11.30	Team Escher			
13.30 - 14.30Team Behar-Cohen1 Frédéric Mascarelli 2 Alicia Torriglia 3 Pierre-Raphael Rotschild 4 Laura Kowalczuk 5 Alexandre MatetDpt Ophthalmology, Jules Gonin Eye Hospital, Univ of Lausanne / INSERM, ParisVolker Enzmann14.30 - 15.30Team Paquet-Durand1 Michael Power 2 Manoj Kulkarni 3 Ayse Sahaboglu Tekgoz 4 Dragana TrifunovicInstitute for Ophthalmic Research, University of TubingenYvan Arsenijevic15.30 - 15.45Imaging of relinal hypoxiaAshwath JayagopalF.Hoffmann-La Roche, LTD, BaselPascal Escher15.45 - 16.00Semi-automated quantitative analysis of vessel model of relina angiogenesisSabine UhlesF.Hoffmann-La Roche, LTD, BaselPascal Escher16.00 - 16.30COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAKCOFFEE BREAK * COFFEE BREAKCoFFEE BREAKCorrinne Kostic17.15 - 17.30Team MurrayPawel MatuszCHUV, UNIL, LausanneCorinne Kostic17.30 - 17.45Team KleinlogelSonja KleinlogelInstitute of Physiology, Univ BernMatthias Seeliger17.45 - 18.00APERO * APERO * APERO * APERO * APERO * APERO * APERO	11.30 – 12.30	Team Langmann	2 Khalid Rashid 3 Rebecca Scholz	Eye, Department of	Christian Grimm
13.30 - 14.30Team Behar-Cohen2 Alicia Torriglia 3 Pierre-Raphael Rotschild 4 Laura Kowalczuk 5 Alexandre MatetDpt Ophthalmology, Jules Gonin Eye Hospital, Univ of Lausanne / INSERM, ParisVolker Enzmann14.30 - 15.30Team Paquet-Durand1 Michael Power 2 Manoj Kulkarni 3 Ayse Sahaboglu Tekgoz 4 Dragana TrifunovicInstitute for Ophthalmic Research, University of TubingenYvan Arsenijevic15.30 - 15.45Imaging of relinal hypoxiaAshwath JayagopalF.Hoffmann-La Roche, LTD, BaselPacal Escher15.45 - 16.00Semi-automated quantitative analysis of vessel regression and pericyte detachment in a mouse model of relina angiogenesisSabine UhlesF.Hoffmann-La Roche, LTD, BaselPacal Escher16.00 - 16.30COFFEE BREAK * COFFEE BREAKSopartments of Clinical Neurosciences and Department of Radiology, CHUV, UNIL, LausanneCorinne Kostic Carinne Kostic Departments of Schucz17.15 - 17.30Team MurrayPawel MatuszCHUV, UNIL, Lausanne Institute of Physiology, Univ Bern Institute of Physiology, Univ BernMathias Seeliger17.30 - 17.45Team KleinlogelSonja KleinlogelInstitute of Physiology, Univ Bern Institute of Physiology, Univ BernMathias Seeliger17.30 - 17.45Team ThumannNina HarmeningUniversity of GenevaAPERO * APERO * APERO * APERO * APERO * APEROAPERO	12.30 – 13.30	LUNCH *		CH * LUNCH * LUNCH	
14.30 - 15.30Team Paquet-Durand2 Manoj Kulkarni 3 Ayse Sahaboglu Tekgoz 4 Dragana TrifunovicInstitute for Ophthalmic Research, University of TubingenYvan Arsenijevic15.30 - 15.45Imaging of retinal hypoxiaAshwath JayagopalF.Hoffmann-La Roche, LTD, BaselPacal Escher15.45 - 16.00Semi-automated quantitative analysis of vessel regression and pericyte detachment in a mouse model of retina angiogenesisSabine UhlesF.Hoffmann-La Roche, LTD, BaselPacal Escher16.00 - 16.30COFFEE BREAK * COFFEE B	13.30 – 14.30	Team Behar-Cohen	2 Alicia Torriglia 3 Pierre-Raphael Rotschild 4 Laura Kowalczuk 5 Alexandre Matet	Eye Hospital, Univ of Lausanne /	Volker Enzmann
InstructionInstructio	14.30 – 15.30	Team Paquet-Durand	2 Manoj Kulkarni 3 Ayse Sahaboglu Tekgoz		Yvan Arsenijevic
15.45 – 16.00       regression and period eterachment in a mouse model of retina angiogenesis       Sabine Uhles       F.Hoffmann-La Roche, LTD, Basel         16.00 – 16.30       COFFEE BREAK * COFFEE BREAK       COFFEE BREAK * COFFEE BREAK         SPECIAL TALK       MICAH MURRAY: Reshaping Vision through Multisens-v Processes       Departments of Clinical Neurosciences and Department of Radiology, CHUV, UNIL, Lausanne       Corinne Kostic         17.15 – 17.30       Team Murray       Pawel Matusz       CHUV, UNIL, Lausanne       Mathias Seeliger         17.30 – 17.45       Team Kleinlogel       Sonja Kleinlogel       Institute of Physiology, Univ Bern       Mathias Seeliger         17.45 – 18.00       APÉRO * APÉRO       APÉRO * APÉRO	15.30 – 15.45	Imaging of retinal hypoxia	Ashwath Jayagopal	F.Hoffmann-La Roche, LTD, Basel	
SPECIAL TALK 16.30 – 17.15MICAH MURRAY: Reshaping Vision through Multisensory ProcessesDepartments of Clinical Neurosciences and Department of Radiology, CHUV, UNIL, LausanneCorinne Kostic17.15 – 17.30Team MurrayPawel MatuszCHUV, UNIL, LausanneMatuszMatuszCHUV, UNIL, Lausanne17.30 – 17.45Team KleinlogelSonja KleinlogelInstitute of Physiology, Univ BernMatthias Seeliger17.45 – 18.00Team ThumannNina HarmeningUniversity of GenevaMatthias Seeliger19.30APÉRO * APÉRO * APÉROAPÉRO * APÉRO * APÉROAPÉRO * APÉRO	15.45 – 16.00	regression and pericyte detachment in a mouse	Sabine Uhles	F.Hoffmann-La Roche, LTD, Basel	Pascal Escher
SPECIAL TALK 16.30 – 17.15       MICAH MURRAY: Reshaping Vision through Multisens-reserves       Neurosciences and Department of Radiology, CHUV, UNIL, Lausanne       Corinne Kostic         17.15 – 17.30       Team Murray       Pawel Matusz       CHUV, UNIL, Lausanne       Matusz       CHUV, UNIL, Lausanne       Matusz       Matusz <th>16.00 - 16.30</th> <th colspan="3">COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK</th>	16.00 - 16.30	COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK * COFFEE BREAK			
17.10       17.00       17.00       17.00       17.00       17.00       1000000000000000000000000000000000000				Neurosciences and Department of Radiology, CHUV, UNIL,	Corinne Kostic
17.45 - 18.00     Team Thumann     Nina Harmening     University of Geneva     APÉRO     * APÉRO     * APÉRO     * APÉRO     * APÉRO     * APÉRO     * APÉRO	17.15 – 17.30	Team Murray	Pawel Matusz	CHUV, UNIL, Lausanne	
19.30 APÉRO * APÉRO * APÉRO * APÉRO * APÉRO * APÉRO	17.30 – 17.45	Team Kleinlogel	Sonja Kleinlogel	Institute of Physiology, Univ Bern	Matthias Seeliger
	17.45 – 18.00	Team Thumann	Nina Harmening	University of Geneva	
	19.30 20.00				

# Friday; January 22, 2016

TIME	TEAM / TALK	SPEAKERS	AFFILIATION	MODERATOR
8.30 – 9.30	Team Rivolta	1 Katarina Cisarova 2 Konstantinos Nikopoulos 3 Andrea Prunotto 4 Beryl Royer-Bertrand	Department of Medical Genetics, University of Lausanne	Wolfang Berger
9.30 – 10.15	Team Enzman/Zinkernagel	1 Miriam Reisenhofer 2 Carolyn Trepp 3 Chantal Dysli	Dept of Ophthalmology, Inselspital, University of Bern	
10.15 – 10.45	COFFEE BREAK * COFF	EE BREAK <b>*</b> COFFEE BREAK	* COFFEE BREAK * COF	FEE BREAK
10.45 – 11.15	Team Berger	1 Andrina Stäubli 2 Amit Tiwari	Institute of Medical Molecular Genetics, University of Zürich	Daniel Schorderet
11.15 – 11.30	Team Neuhauss	Stephanie Niklaus	Institute of Molecular Life Sciences, University of Zürich	Damer Schorderet
SPECIAL TALK 11.30 – 12.30	MASSIMILIANO ANDREAZZOLI: Specification of early retinal progenitors: a role for the transcription factor Rx1 and its target genes		Unit of Cell Biology and Development, Dept of Biology, University of Pisa, Pisa, Italy	Sarah Decembrini
12.30 - 13.30	LUNCH *	LUNCH * LUNCH * LUN	CH * LUNCH * LUNCH	
13.30 – 14.00	Team Seeliger	1 Suzanne Beck 2 Regine Mühlfriedel	Institute for Ophthalmic Research, University of Tubingen	Sonja Kleinlogel
14.00 – 14.45	Team Arsenijevic	1 Sarah Decembrini 2 Florian Udry 3 Alexandre Matet	Dpt Ophthalmology, Jules Gonin Eye Hospital, University of Lausanne	Stephan Neuhauss
14.45 – 15.30	Team Schorderet	1 Linda Bapst-Wicht 2 Fatima Taki 3 Imen Habibi	Institut de Recherche en Ophtalmologie (IRO), Sion	Francine Behar- Cohen
15.45 – 16.00	AWARDS FO	OR BEST PRESENTATIO	ONS: RETINA SUISSE	
16.00	FAREWELL COFFEE * FAREWELL COFFEE * FAREWELL COFFEE * FAREWELL COFFEE * FAREWELL COFFEE			

#### Presentations of the teams: SPECIAL TALKS

#### MICAH MURRAY RESHAPING VISION THROUGH MULTISENSORY PROCESSES Departments of Clinical Neurosciences and Department of Radiology, CHUV, UNIL, Lausanne.

# MASSIMILIANO ANDREAZZOLI SPECIFICATION OF EARLY RETINAL PROGENITORS: A ROLE FOR THE TRANSCRIPTION FACTOR RX1 AND ITS TARGET GENES Unit of Cell Biology and Development, Dept of Biology, University of Pisa, Pisa, Italy. Pisa, Italy.

#### Team ARSENIJEVIC (Dpt Ophthalmology, Jules Gonin Eye Hospital, University of Lausanne):

#### SPEAKERS:

- Sarah Decembrini
   Retinal organoid formation in micro-culture arrays
- Florian Udry Development of an in vitro model for type II Leber congenital amaurosis
- Alexandre Matet Safety study of a lentiviral-based RPE65 gene therapy in healthy non-human primates

#### Team BEHAR-COHEN (Dpt Ophthalmology, Jules Gonin Eye Hospital, University of Lausanne, INSERM, Paris):

#### SPEAKERS:

- Frédéric Mascarelli Amyloid Precursor-Like Protein 2 deletion-induced retinal synaptopathyrelated to congenital stationary night blindness: structural, functional and molecular characteristics
   Alicia Torriglia Retinal and lens alterations induced by glucocorticoids
- **Pierre-Raphael Rotschild** Implication of outer blood retinal barrier breakdown in early stages of diabetic retinopathy
- Laura Kowalczuk
   Placental growth factor levels in the aqueous humor of patients with idiopathic macular telangiectasia
   type 1: rationale for the clinical effect of intravitreous afibercept
- Alexandre Matet
   Macular telangiectasia type 1: capillary density and microvascular abnormalities assessed by optical coherence tomography angiography

#### Swiss Eye Research Meeting; January 21 & 22, 2016, Neuchâtel

#### Team BERGER (Institute of Medical Molecular Genetics, University of Zürich):

#### SPEAKERS:

- Andrina Stäubli Functional studies on cataract-associated mutations in SLC16A12.
- Amit Tiwari
   Next generation sequencing based identification of disease-associated mutations in Swiss patients with retinal dystrophies

#### Team ESCHER (Dpt Ophthalmology, Jules Gonin Eye Hospital, University of Lausanne):

#### SPEAKERS:

Pascal Escher Novel mechanisms in NR2E3-linked retinal degenerations

#### Team ENZMAN/ZINKERNAGEL (Exp. Ophthalmology, Dept of Ophthalmology, Inselspital, University of Bern):

#### SPEAKERS:

- **Miriam Reisenhofer** Five ways to die cell death pathways in retinal degeneration
- **Carolyn Trepp** Pre-differentiated human adult stem cells as a tool to rescue retinal degeneration
- Chantal Dysli Retinal fluorescence lifetime characteristics in Abca4(-/-) mice and patients with Stargardt disease

#### Team GRIMM (Lab for Retinal Cell Biology, Dept. of Ophthalmology, University of Zürich):

#### SPEAKERS:

- Christian Schori
   Identification of Hypoxia-Related Biomarkers in Age-Related Macular Degeneration
- Federica Storti Lipoprotein genes in the eye: a local role

#### Team KLEINLOGEL (Institute of Physiology, University of Bern):

#### SPEAKERS:

Sonja Kleinlogel Next-generation optogenetics for vision recovery

#### Team LANGMANN (Experimental Immunology of the Eye, Department of Ophthalmology, Univ. of Cologne):

#### SPEAKERS:

- Anne Wolf Expression and function of myocyte enhancer factor 2c (Mef2c) in the retina.
- Khalid Rashid Microglia-specific expression of Translocator Protein (18kDa) (TSPO) and its therapeutic role in retinal degenerations
- **Rebecca Scholz** Targeting translocator protein (18 kDa) (TSPO) dampens pro-inflammatory microglia reactivity in the retina and protects from degeneration
- Thomas Langmann Interferon-beta signalling in retinal microglia attenuates pathological neovascularization

#### Team MURRAY (Dept. of Clinical Neurosciences and Dept. of Radiology, CHUV, UNIL, Lausanne):

SPEAKERS:

• Pawel Matusz Contribution of rod and cone pathways to the photic blink reflex and their interplay with pupillary light reflexes

#### Team NEUHAUSS (Institute of Molecular Life Sciences, University of Zürich):

SPEAKERS:

• Stephanie Niklaus Glutamate Homeostasis at the First Visual Synapse

#### Team PAQUET-DURAND (Institute for Ophthalmic Research, University of Tubingen):

SPEAKERS:

- Michael Power
   Live cell Ca+imaging in cone photoreceptors
- Manoj Kulkarni
   Calcium dynamics in degenerating cone photoreceptors
- Ayse Sahaboglu Tekgoz The neuroprotective effect of PARP Inhibition in retinal degeneration
- **Dragana Trifunovic** HDAC inhibition protects degenerating cones

### Team RIVOLTA (Department of Medical Genetics, University of Lausanne):

#### SPEAKERS:

•	Katarina Cisarova	Whole exome screening and indentification of novel ve families with cone-rod dystrophy	ariants in a cohort of 28 Greek and Swedish					
•	Beryl Royer-Bertrand	UV light signature in conjunctival melanoma; not only	skin should be protected from solar radiation					
•	Andrea Prunotto	Gene Ontology Landscapes of Corticosteroid-Treated	Neuroretina					
٠	Konstantinos Nikopoulo	whole exome sequencing reveals RCBTB1 as a nove	l inherited retinal dystrophy gene					
Теа	Team SCHORDERET (Institut de Recherche en Ophtalmologie (IRO), Sion):							
SPEAKERS:								
•	Linda Bapst-Wicht	Aberrant retinotectal projections in Hmx1 KO mouse.						
•	Fatima Taki	Identification of cone opsin differences in photoreceptor degeneration in Rpe65-mediated LCA disease						
٠	Imen Habibi	Confirmation of ZNF408 as a retinitis pigmentosa gen	e					
Tear	n SEELIGER (Division Oc	ular Neurodegen., Centre for Ophthalmol., Inst Ophthalr	nic Res., Univ. of Tübingen):					
S	PEAKERS:							
•	Susanne C. Beck	Less is more – Reduction of cellular protein production degenerations	Less is more – Reduction of cellular protein production as a corrective measure in inherited retinal degenerations					
Regine Mühlfriedel		A key role for CNG channels in both PDE6A- and PDE6B-driven forms of cGMP-related retinitis pigmentosa						
Team THUMANN (Department of Clinical Neurosciences, Divison Ophth., University of Geneva):								
SP	EAKERS:							
•	Nina Harmening	Transposon-based ex vivo gene therapy to treat age-	elated macular degeneration					
INDI	VIDUAL Speakers:							
ASHWATH JAYAGOPAL		Imaging of retinal hypoxia	F.Hoffmann-La Roche, LTD					
SABINE UHLES		Semi-automated quantitative analysis of vessel regression a retina angiogenesis	and pericyte detachment in a mouse model of <b>F.Hoffmann-La Roche, LTD</b>					

MANY THANKS TO THE SPONSORS OF THE SWISS EYE RESEARCH MEETING...

