## SERM 2020 Jan 23 + 24, Delémont, JU

Thursday 23 <sup>rd</sup> January 2020		
10:00 - 10:45	Welcome coffee	
10:45 - 12:30	Session 1	
12:30 - 14:00	Lunch	
14:00 - 16:00	Session 2	
16:00 - 16:30	Coffee break	
16:30 – 17:15	Special lecture: Dominik Fischer University of Tübingen, Germany «Surgical challenges with retinal gene therapy»	
17:15 - 18:30	Session 3	
19:30	Networking dinner	

Friday 24 <sup>th</sup> January 2020		
08:00-09:30	Session 4	c
09:30 - 10:00	Coffee break	SWISS
10:00 - 11:30	Session 5	Sh
11:30 – 12:15	Special lecture: Koji Nishiguchi University Graduate School of Medicine, Sendai, Japan «The new frontier of gene therapy research»	
12:15 - 14:00	Lunch	
14:00 - 16:00	Session 4	



For more information: www.serm.ch

### Interview with Dr. Corinne Kostic, Lausanne

# Where is the Swiss Eye Research Meeting heading to?

The Swiss Eye Research Meeting gathers scientists in the field of ophthalmologic research. It offers a platform to present the latest progress of the research groups and an ample opportunity of discussion and exchange. When visiting the meeting I have been impressed: The room was crammed full, no checking of e-mails and other pastimes but attentive listening and knowledgeable discussions. In 2020, the Swiss Eye **Research Meeting will take place** independently of the Swiss Eye Week. Ophta asked Dr Kostic about the past and the future of this indispensable meeting.

### What is the aim of the Swiss Eye Research Meeting?

The goal of the Swiss Eye Research Meeting (SERM) is to help the Swiss ophthalmological researchers to communicate and also to become aware of the excellent research performed in our country. Many



Dr. phil. Corinne Kostic, PhD, organizer of the Swiss Eye Research Meeting and Swiss OphthAward laureate of 2014.

participants could explain how this meeting already has raised opportunities for collaborations and how it continues to reinforce the links between eye researchers. Each year, two additional European experts are invited to share their knowledge with our eye researchers by presenting their work in special talks and interacting with them during the two days of the meeting.

Finally, and most importantly, the SERM has always been keen on providing a platform for young researchers and students to showcase their work. For many of them, this meeting is the opportunity to practice a formal English presentation before being confronted to international meetings.

### Which is your target group?

We really wish to target as many Swiss eye researchers as possible, in academia from the youngest (masters, PhD students) to most reputable researchers (principal investigator, professors), but also technicians or researchers in pharmaceutical companies as well as ophthalmologists open to research.

Which kind of research will be discussed?

The focus of the meeting lies on retinal research as a model system for neuroscience. In particular, retinal physiology and pathophysiology such as the mechanisms of development and degeneration in animal models as well as in human are presented. Of course, the meeting is also open for presentation of different ophthalmological fields, but so far the community is very active in retina research.

### What is the impact of this research for Swiss and international ophthalmology?

We have internationally recognized research groups which participate actively to the increase of basic knowledge about vision and the genetic factors implicated, to the understanding of diseases (AMD, RP, Diabetic retinopathy ...) and to the development of new therapies. Over 40 papers have been published in 2019 by the groups which participated to the last SERM. Thus I believe we can decently view this meeting as an excellent indicator of the new topics in ophthalmology research.

### Why do you change to a separate meeting?

We, that is the Principal Investigators of Swiss research groups, agree that the SERM and the Swiss Eye Week are complementary but we realized that the needs and constraints differ. For the organization of these meetings it seems advantageous to split the two events in order to have more choices for the location (smaller number of participants and different requirements for meeting rooms), the dates, and the budget allocated to the different needs.

This decision doesn't mean that we need to break any connections between SERM and SSO. As I mentioned both are complementary and involve transmitting knowledge in ophthalmology, one for young clinicians and the other as a platform for researchers. Of course, the SERM will always be open to clinicians interested in research as well.

#### Who are your collaborators?

First, concerning all decisions about the format of the meeting, I am not alone. I have consulted the different PIs of the Swiss research groups in order to obtain the most consensual view on the development of this meeting. In my opinion this meeting is theirs as well. Then, I also have some administrative help (editing the proceedings, web site, and in the future the welcoming of participants on site) from my direct colleague, Caroline Bircher.

### About your person: how long have you been organizing the meeting, what does it mean to you (besides the fact that it means a lot of work), what are your research focuses in Lausanne?

I was really touched and honored when Christian Grimm handed me the witness five years ago. Initially, this meeting started as a friendly meeting between some retinal researchers and I am doing my best to keep this familial spirit of cooperation without too much ceremonial. I am grateful to the participants to accept the way it is, with the inevitable little problems, their implication (they represent 90% of the talks!) and their loyalty. For me, it's really a positive experience to manage a meeting, even if sometimes, crucial points such as budget or meeting location can be worrisome!

About my research, after having shown the efficacy of the lentiviral vector to target RPE (Kostic et al. 2003) and its limits to transduce photoreceptor cells (Grüter et al. 2005, Calame et al. 2011), we used this vector to restore visual function in two murine models of Leber Congenital Amaurosis (LCA) caused by RPE65 gene defect, an early-onset visual deficiency (Bemelmans et al. 2006, Kostic et al. 2011). We then evaluated the safety of this vector in non-human primates (Matet et al. 2017). We are now focusing on vectors targeting photoreceptors in a model of ciliopathy (collaboration with Prof Y. Arsenijevic (UNIL), Prof C. Rivolta (UNIL) and Prof D. Sharon (Hadassah-Hebrew University Medical Center).

In parallel, gene therapy clinical trials in ophthalmology are pointing out the need to develop objective tests to evaluate poor vision or weak changes in visual function. We are thus exploring the pertinence to use pupillometry as an indicator of retinal function. Using various mouse models specifically deleted for particular photosensitive cells (no rods, no cones or no rod nor cones), we identified specific parameters of the pupil light response to measure the different inputs of these photosensitive cells and thus estimate the retinal function (Kostic et al. 2016, Kircher et al. 2019). We are now working on other mouse models of retinal degeneration and on the translation of this knowledge to human application. The ultimate goal is to provide an alternative test to characterize photoreceptor loss of function during retinal degeneration or to identify functional recovery after innovative therapy such as gene therapy.

### Dr. Kostic, thank you for the interview, and we wish you a very successful meeting. •

Interview: Ulrike Heller-Novotny

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#### Littérature

- Die Sammlung Othmar Huber, Texte Matthias Frehner. Red. Anette Schindler & Regine Helbling.Hrsg. Glarner Kunstverein, Glarus 1995; ISBN 3-9520472-7-9.
- 2. Picasso, Raphael Bouvier; Hatje Cantz Verlag 2019; ISBN 978-3-7757-4504-8.
- Dr. phil Berta Huber-Bindschedler. Jahrbuch des Historischen Vereins des Kantons Glarus, Band 61, 1966. http://doi.org/10.5169/seals-584588
- Berta Huber-Bindschedler: www.bindschedler.name/ personen/personen-ab-20-jahrhundert/huber-bindschedler-bertha/