

SWISS EXPERIMENTAL SURGERY SYMPOSIUM

17th

Swiss Experimental Surgery Symposium

FROM SCIENCE TO TREATMENT

January 13/14, 2022

University of Fribourg
Switzerland

www.sess.ch

WELCOME ADDRESS / SCIENTIFIC PROGRAM

Dear Colleagues and Friends

It is our pleasure to **welcome you in Fribourg for the 17th Swiss Experimental Surgery Symposium (SESS)**, which is supported by the Department of Surgery (Chairman: Prof. B. Egger), HFR Fribourg - Cantonal Hospital and the Department of Intensive Care Medicine (Director: Prof. S. Jakob), University of Bern. We are looking forward to an interesting and challenging symposium.

Bernhard Egger, MD, Prof. (founding member 2005)

Stephan Jakob, MD, Prof. (founding member 2005)

Bühler Leo, MD, Prof.

Antoine Meyer, MD

Thursday, January 13, 2022

13:15 - 13:30	Introduction	<i>G. Rainer, B. Egger, S. Jakob</i>
13:30 - 14:30	Department of Surgery and Transplantation of University Hospital Zürich <i>Chairman: Bostjan Humar, ZH</i> The impact of local chemotherapy on the anticancer immune response Ex situ liver perfusion Impact of gender on accelerated regeneration post ALPPS surgery Division of tasks in the regenerating liver	<i>L. Roth M. Müller D. Birrer E. Breuer</i>
14:30 - 15:30	News from the Experimental Surgery Institute, University of Bern <i>Chairman: Stephan Jakob, BE</i> What is needed for a successful translational process? A clinician's perspective Bacteriophages for prophylaxis and treatment of experimental ventilator associated pneumonia due to methicillin resistant St. aureus Endolysins for the treatment of streptococcal infection in an infant rat model of meningitis Hemarina M101- a cell free oxygen carrier from <i>Arenicola marina</i> in a rodent cardiac arrest model	<i>Y.-A. Que D. Cameron L. Valente M. Hänggi</i>
15:30 - 16:00	Coffee break	
16:00 - 17:00	Vascular Surgery CHUV and Cardio-Vascular Surgery HUG <i>Chairmen: Jean-Marc Corpeaux, CHUV & Christoph Huber, HUG</i> Development of a potential bioink from decellularized extra cellular matrix for aortic valve scaffold 3d printing Endovascular aneurysm repair EVAR: are endoleaks type I and III avoidable? An in-vitro study Seeing is believing! Scanning electron microscopy study to evaluate the effects of mechanical manipulations on the endothelial cell injuries during cardiac surgery To balloon or not to balloon! Effects of intra-aortic balloon-pump on coronary blood flow in extra corporeal membrane oxygenation dependent low cardiac output syndrome	<i>K. Ponchant, A. Ibrahim A. Sassi M. Cikirikcioglu P. Raymond</i>
17:00 - 18:00	Experimental Orthopaedic Surgery Groupe, UNIFR-HFR <i>Chairman: Moritz Tannast</i> The sheep model for simulation of Femoroacetabular Impingement (FAI): idea a proof of concept The vascularity of the ovine femoral head: comparison with human beings and implication for surgery and future research A translational approach of similarities in MR imaging between sheep and human beings A prospective controlled study on surgical correction of FAI in the sheep model	<i>C.A. Zurmühle S. D. Steppacher F. Schmaranzer M. Tannast</i>

Friday, January 14, 2022

8:30 - 9:30	Laboratory for Visceral and Transplantation Surgery, UniBe <i>Chairwoman: Deborah Stroka, UniBE</i> Primordial cavity macrophages and mesothelial EGFR-signaling in post-surgical adhesions Challenging liver regeneration dogmas with single cell RNA-seq Mapping Origins of Replication in Regenerating Liver Radiation induced liver disease mouse model reveals the role of mitochondria in the disease progression	<i>J. Zindel</i> <i>D. Sanchez-Taltavull</i> <i>N. Dommann</i> <i>N. Melin</i>
09:30 - 10:30	Swiss 3R Competence Center <i>Chairman: Leo Bühler</i> Surgery in rodents - Challenges & pitfalls Experimental Surgery Outlook – the 3RCC's perspective	<i>P. Seebeck, S. Zeiter</i> <i>J. Sandstrom</i>
10:30 - 11:00	Coffee break	
11:00 - 12:00	Surgical Research Unit UNIFR-HFR <i>Chairmen: Carmen Gonelle-Gispert, Leo Bühler, UNIFR-HFR</i> Investigation of liver regeneration in mice deficient for TGFbeta1 in platelets IL6 pathway blockade for the treatment of pancreatic cancer The use of 3D printing to better predict the vascular invasion for locally advanced pancreatic adenocarcinoma	<i>C. Gonelle-Gispert</i> <i>S. Peisl</i> <i>L. Bühler</i>
12:00 - 13:15	Lunch break and poster session	
13:15 - 14:15	Surgical Research Unit HUG <i>Chairman: Christian Toso HUG</i> Establishment and characterization of patient-derived lung cancer spheroids Metabolic signature of human skeletal muscle stem cells Portal hypertension on a chip Vertical transmission of liver cancer	<i>A. Müggler</i> <i>A. Bouche</i> <i>A. Peloso</i> <i>A. Moeckli</i>
14:15 - 14:45	Klaiber's Lecture: <i>Chairman: Bernhard Egger, UNIFR-HFR</i> Das öffentliche Gut der Gesundheit – eine kleine Apologie in eidpraktischer Hinsicht	<i>J.-P. Wils, Radboud University</i>
14:45 - 15:15	Coffee break	
15:15 - 16:15	Thoracic Surgery Laboratory Inselspital, ARTORG Center UniBe <i>Chairman: Ralph Alexander Schmid, Bern</i> Development of a functional lung microvasculature based on organs-on-chip technologies Electrocautery smoke exposure and efficacy of smoke evacuation systems in minimally invasive and open surgery: a prospective randomized observational study Development of precision medicine approaches for thoracic tumors Involvement of lactate metabolism in lung cancer initiation and chemotherapy resistance	<i>O.T. Guenat,</i> <i>D. Ferrari</i> <i>G. Kocher</i> <i>R-W Peng, Y. Gao,</i> <i>W. Ning</i> <i>T.M. Marti, H. Deng</i>
16:15 - 16:30	Closing remarks	<i>B. Egger, S. Jakob</i>

REGISTRATION / INFORMATION

Registration

Registration can be done on-line on www.sess.ch. All major credit cards are accepted and tickets can be printed on your printer. Until **December 31, 2021** **early bird registrations benefit from a lower fee**. Onsite registration is possible with an additional charge.

Abstract Submission

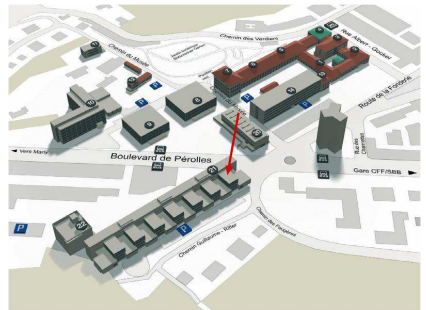
Abstract Submission for poster session on Friday can be submitted by email to antoine.meyer@h-fr.ch. Deadline for submissions is **January 9, 2022**. **Poster prize** (if at least 3 posters are submitted): Posters will be evaluated by a team of experts; the authors of the winning poster will receive **CHF 500.-**.

Venue

Université de Fribourg, Freiburger Universität
Faculté des Sciences -
Mathematisch-Naturwissenschaftliche Fakultät
Boulevard de Pérolles 90
1700 Fribourg
Switzerland

Auditory A120, located on the first floor (red arrow)

Bus from train station: no. 1 direction Marly or no. 3 direction Pérolles. Bus stop: Charmettes.



Language

Official meeting language is **English**. However speakers are allowed to deliver their speeches in German or French as well. Discussions will be held in English.

Accreditation

The event will be accredited by the following organizations:

Swiss Society of Surgery SGC
Swiss Association of Cantonal Veterinaries ASVC/ VSKT

11 CME points
1 day of continuing education for animal experiments

Contact

Secretary of Prof. Dr. med. B. Egger, Cristina Dubuis and Vanessa Leroy
Tel. +41 (0)26 306 25 10, cristina.dubuis@h-fr.ch and vanessa.leroy@h-fr.ch

Sponsors:

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