

SWISS EXPERIMENTAL SURGERY SYMPOSIUM

*17<sup>th</sup>*

## **Swiss Experimental Surgery Symposium**

**FROM SCIENCE TO TREATMENT**

January 12/13, 2023

University of Fribourg  
Switzerland

[www.sess.ch](http://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 and Full Professor of Surgery: Prof. B. Egger), HFR Fribourg - Cantonal Hospital and Prof. S. Jakob, Full Professor of Intensive Care Medicine of the 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, MEC

## Thursday, January 12, 2023

<b>13:15 - 13:30</b>	<b>Introduction</b>	<i>U. Ultes-Nitsche, B. Egger, S. Jakob</i>
<b>13:30 - 14:30</b>	<b>Department of Surgery and Transplantation, University Hospital Zürich</b> <i>Chairman: Bostjan Humar, ZH</i> Characterization of ischemic injury in uterus transplantation Ex situ liver perfusion The road from extended resection to liver failure Division of tasks in the regenerating liver	<i>K. Sun R. Sousa da Silva D. Birrer E. Breuer</i>
<b>14:30 - 15:30</b>	<b>Department of Intensive Care Medicine, University of Bern</b> <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 Arenicola marina in a rodent cardiac arrest model	<i>Y.-A. Que J. Prazak L. Valente M. Hänggi</i>
<b>15:30 - 16:00</b>	<b>Coffee break</b>	
<b>16:00 - 17:00</b>	<b>Vascular Surgery CHUV and Cardio-Vascular Surgery HUG</b> <i>Chairmen: Sebastien Deglise, CHUV &amp; Christoph Huber, HUG</i> Evaluation of a novel compliance-matching aortic graft in pigs Endovascular aneurysm repair EVAR: are endoleaks type I and III avoidable? An in-vitro study Ex Vivo Analysis of Graft Viability Using 31P Magnetic Resonance Imaging Spectroscopy 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>G. Rovas N. Murith T. Agius V. Sibut-Pinote P. Reymond</i>
<b>17:00 - 18:00</b>	<b>Orthopedics HFR</b> <i>Chairman: Moritz Tannast, UNIFR-HFR</i> The sheep model for simulation of Femoroacetabular Impingement (FAI): idea and 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 13, 2023

<b>8:30 - 9:30</b>	<b>Visceral Surgery Inselspital, Bern</b> <i>Chairwoman: Deborah Stroka, BE, chairman : Guido Beldi, BE</i> Primordial cavity macrophages and mesothelial EGFR-signaling in post-surgical adhesions Challenging liver regeneration dogmas with single cell RNA-seq Outer membrane vesicles as carriers for bacterial ATP lead to local and systemic neutropenia in peritoneal sepsis 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>D. Spari</i>  <i>N. Melin</i>
<b>09:30 - 10:30</b>	<b>Swiss 3R Competence Center</b> <i>Chairman: Leo Bühler, UNIFR-HFR</i> Training of rodent surgeons - current practice and available guidelines Experimental Surgery Outlook – the 3RCC's perspective	<i>P. Seebeck, S. Zeiter</i> <i>A. Mensen</i>
<b>10:30 - 11:00</b>	<b>Coffee break</b>	
<b>11:00 - 12:00</b>	<b>Surgical Research Unit UNIFR-HFR</b> <i>Chairwoman: Carmen Gonelle-Gispert, UNIFR-HFR, chairman: 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>
<b>12:00 - 13:15</b>	<b>Lunch break and poster session</b>	
<b>13:15 - 14:15</b>	<b>Department of Surgery HUG</b> <i>Chairman: Christian Toso, HUG</i> Establishment and characterization of patient-derived lung cancer spheroids Metabolic signature of human skeletal muscle stem cells Impact of liver oxygenation on hepatic carcinogenesis Vertical transmission of liver cancer	<i>V. Serre Beinier</i>  <i>A. Bouche</i> <i>A. Peloso</i> <i>B. Moeckli</i>
<b>14:15 - 14:45</b>	<b>Klaiber's Lecture:</b> <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>
<b>14:45 - 15:15</b>	<b>Coffee break</b>	
<b>15:15 - 16:15</b>	<b>Thoracic Surgery Inselspital, Bern</b> <i>Chairman: Patrick Dorn, BE</i> Development of precision medicine approaches for thoracic tumors Involvement of lactate metabolism in lung cancer initiation and chemotherapy resistance Development of a functional lung microvasculature based on organs-on-chip technologies	<i>R.-W. Peng, L. Zhao</i> <i>T. M. Marti, H. Deng</i>  <i>O. T. Guenat, S. Zeinali</i>
<b>16:15 - 16:30</b>	<b>Closing remarks and fare well drink</b>	<i>B. Egger, S. Jakob</i>

# REGISTRATION / INFORMATION

## Registration

Registration can be done on-line on [www.sess.ch](http://www.sess.ch). All major credit cards are accepted and tickets can be printed on your printer. Until **December 31, 2022** **early bird registrations benefit from a lower fee**. Onsite registration is possible with an additional charge.

## Abstract Submission

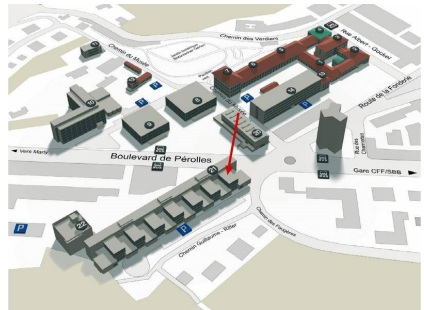
Abstract Submission for poster session on Friday can be submitted by email to [antoine.meyer@h-fr.ch](mailto:antoine.meyer@h-fr.ch). Deadline for submissions is **January 8, 2023**. **Poster prize** (if at least 3 posters are submitted): Posters will be evaluated by a team of experts; the authors of 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](mailto:cristina.dubuis@h-fr.ch) and [vanessa.leroy@h-fr.ch](mailto:vanessa.leroy@h-fr.ch)

## Sponsors:

Herewith we would also like to give our special thanks to all of our sponsors for supporting this meeting. Please visit our sponsor's page on-line on [www.sess.ch](http://www.sess.ch).