

SWISS EXPERIMENTAL SURGERY SYMPOSIUM

15<sup>th</sup>

## **Swiss Experimental Surgery Symposium**

**The Future is the Present**

January 10/11, 2019

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 15th 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)

Antoine Meyer, MD

**Thursday, January 10, 2019**

<b>13:30 - 13:45</b>	<b>Introduction</b>	<i>C. Bochet, B. Egger, S. Jakob</i>
<b>13:45 - 14:45</b>	<b>Department of Surgery and Transplantation of University Hospital Zürich</b> <i>Chairmen: R. Graf, Zürich / B. Egger, Fribourg</i> The impact of HIPEC on the anticancer immune response The role of Gastrokine 1, a gastric tumor suppressor, in pancreatic carcinogenesis Ex-vivo Hypothermic Oxygenated Perfusion of liver grafts prior to transplantation Microstructural analysis of the human ingestive behavior following Roux-en-Y gastric bypass – a prospective observational controlled pilot study	<i>L. Roth S. Steiner  X. Müller  D. Gero</i>
<b>14:45 - 15:45</b>	<b>News from the Experimental Surgery Institute, University of Bern</b> <i>Chairmen: S. Jakob, Bern / D. Mayer, Fribourg</i> Efficacy of phagetherapy for the treatment of ventilator associated pneumonia due to methicillin resistant Staphylococcus aureus: a pilot study in rats The role of right atrial pressure for the cardiac output: an experimental study in pigs Neurogenic progenitor cells as restorative therapy after cardiac arrest	<i>M. Iten  D. Berger  P. Meyer</i>
<b>15:45 - 16:00</b>	<b>Coffee break</b>	
<b>16:00 - 17:00</b>	<b>Translational Biomedical Engineering Current activities of the ARTORG Center</b> <i>Chairmen: S. Weber, Bern / M. Menth, Fribourg</i> Image guidance for ablation of liver tumors – update on today's clinics and outlook Leadless multi-chamber pacing and intra-body communication Bone Anchored Port: Background and Initial Clinical Experience Robotic cochlear implantation – Clinical experience and outlook	<i>P. Tinguely  A. Häberlin M. Caversaccio S. Weber</i>
<b>17:00 - 18:00</b>	<b>Future for patients and researchers</b> <i>Chairmen: O. Dormond, Lausanne/ M. Chilcott, Fribourg</i> Liquid Biopsy: Concept and Potential Applications in Cancer Multisensory-motor integration in peripersonal space mediating self-objects interactions in real and virtual environments Data Management Plan (DMP) & Open Data in Life Science	<i>I. Labgaa A. Serino  C. Lebrand</i>

## Friday, January 11, 2019

<b>8:30 - 9:30</b>	<b>Organoid and PDX models for optimisation of patient treatments</b> <i>Chairmen: D. Stroka, Bern/ G. Beldi, Bern</i> HCC- in vitro and in vivo patient-derived xenograft models to study hepatocellular carcinoma Liver Regeneration : Function of Tight junctions in liver regeneration RILD : Radiation-induced liver disease mouse model using X-RAD SmART Transgenics-Production of Ajuba knockout mice by pronuclear CRISPR/Cas9 pronuclear injection	<i>J. Gavini</i>  <i>F. Baier</i> <i>N. Melin</i>  <i>N. Dommann</i>
<b>09:30 - 10:30</b>	<b>Swiss 3R Competence Center</b> <i>Chairmen: I. Desbaillets, Swiss3rcc / S. Jakob, Bern</i> Introduction to the Swiss 3R Competence Center Rodent refinement : tricks from the field Happy sheep make happy surgeons, scientists and vets. Practical refinement before, during and after sheep surgeries Protocol refinement in blind minipigs implanted with a retinal prosthesis to restore vision	<i>I. Desbaillets</i> <i>G. Ferrand</i> <i>S. Zeiter</i>  <i>D. Ghezzi</i>
<b>10:30 - 11:00</b>	<b>Coffee break</b>	
<b>11:00 - 12:00</b>	<b>Vascular surgery CHUV</b> <i>Chairmen: S. Déglise, Lausanne / B. Walpoth, Genève</i> Local delivery of H2S limits the development of intimal hyperplasia in human vein segments The ACE inhibitor Zofenopril is more potent than enalapril in limiting intimal hyperplasia after carotid artery stenosis in hypertensive mice Benefits of H2S during renal ischemia-reperfusion injury Biphasic drug delivery system to prevent intimal hyperplasia in open vascular surgical procedures	<i>F. Allagnat</i>  <i>D. Macabrey</i>  <i>A. Longchamp</i> <i>F. Saucy</i>
<b>12:00 - 13:15</b>	<b>Lunch break and poster session</b>	
<b>13:15 - 14:15</b>	<b>Cells and organ transplantation</b> <i>Chairmen: L. Bühler, Genève / F. Pugin, Fribourg</i> Co-culture and encapsulation of neonatal porcine islets with mesenchymal stem cells from different origins Benefits of hydrogen sulfide in ischemia-reperfusion injury : the smell of renal protection Platelets in liver regeneration	<i>C. Gonelle</i>  <i>A. Longchamp</i>  <i>A. Balaphas</i>
<b>14:15 - 14:45</b>	<b>Klaiber's Lecture:</b> The surgical anatomy of the human liver <i>Chairman: B. Egger, Fribourg</i>	<i>J. Fasel; Geneva</i>
<b>14:45 - 15:15</b>	<b>Coffee break</b>	
<b>15:15 - 16:15</b>	<b>The importance of collaboration between the clinic and basic science for translational research</b> <i>Chairmen: R. Schmid, Bern / M. Kauper, Fribourg</i> Targeting therapy-resistant thoracic tumors Interrogating the tumor microenvironment in lung cancer Involvement of mitochondrial metabolism in lung cancer therapy resistance Bioartificial lung-on-chip for precision medicine applications	<i>R.-W. Peng, H. Yang, D. Xu</i> <i>S. R. R. Hall</i> <i>T. M. Marti, Y. Gao</i>  <i>O. T. Guenat,</i> <i>P. Zamprogno</i> <i>B. Egger, S. Jakob</i>
<b>16:15 - 16:30</b>	<b>Closing remarks and fare well drink</b>	

# 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, 2018 [early bird registrations benefit from a lower fee](#). Onsite registration is possible with an additional charge.

## Abstract Submission

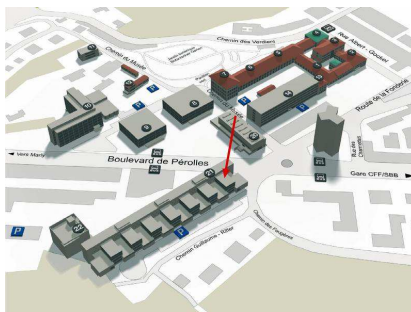
Abstract Submission for poster session on Friday can be submitted by email to [antoine.meyer@h-fr.ch](mailto:antoine.meyer@h-fr.ch). Deadline for submissions is January 7, 2019. **Poster prize** (if at least 5 posters are submitted): Posters will be evaluated by a team of experts; the authors of the 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 Society of General Internal Medicine SGIM/SSMI  
Swiss Society of Intensive Care Medicine SGI  
Swiss Society of Anesthesiology und Reanimation SGAR/ SSAR  
Swiss Association of Cantonal Veterinaries ASVC/ VSKT

(\* to be confirmed, see [www.sess.ch](http://www.sess.ch))

11 CME points  
9 CME points  
\*x CME points  
3.5 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, Fax +41 (0)26 306 25 11, [cristina.dubuis@h-fr.ch](mailto:cristina.dubuis@h-fr.ch) and [vanessa.leroy@h-fr.ch](mailto:vanessa.leroy@h-fr.ch)

## Sponsors: Anklin AG – ERBE Swiss AG - ETHICON

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).