15th

Swiss Experimental Surgery Symposium

The Future is the Present

January 10/11, 2019

University of Fribourg
Switzerland

www.sess.ch
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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 13:45 - 14:45 | **Department of Surgery and Transplantation of University Hospital**  
*Chairmen: R. Graf, Zürich / B. Egger, Fribourg*  
The impact of HIPEC on the anticancer immune response | L. Roth                                        |
|  |  |  | The role of Gastrokine 1, a gastric tumor suppressor, in pancreatic carcinogenesis | S. Steiner                                   |
|  |  |  | Ex-vivo Hypothermic Oxygenated Perfusion of liver grafts prior to transplantation | X. Müller                                    |
|  |  |  | Microstructural analysis of the human ingestive behavior following Roux-en-Y gastric bypass – a prospective observational controlled pilot study | D. Gero                                      |
| 14:45 - 15:45 | **News from the Experimental Surgery Institute, University of Bern**  
*Chairmen: S. Jakob, Bern / D. Mayer, Fribourg*  
Efficacy of phagetherapy for the treatment of ventilator associated pneumonia due to methicillin resistant Staphylococcus aureus: a pilot study in rats | M. Iten                                        |
|  |  |  | The role of right atrial pressure for the cardiac output: an experimental study in pigs | D. Berger                                    |
|  |  |  | Neurogenic progenitor cells as restorative therapy after cardiac arrest | P. Meyer                                     |
| 15:45 - 16:00 | **Coffee break**                                                                        |                                              |
| 16:00 - 17:00 | **Translational Biomedical Engineering Current activities of the ARTORG Center**  
*Chairmen: S. Weber, Bern / M. Menth, Fribourg*  
Image guidance for ablation of liver tumors – update on today’s clinics and outlook | P. Tinguely                                   |
|  |  |  | Leadless multi-chamber pacing and intra-body communication | A. Häberlin                                  |
|  |  |  | Bone Anchored Port: Background and Initial Clinical Experience | M. Caversaccio                               |
|  |  |  | Robotic cochlear implantation – Clinical experience and outlook | S. Weber                                     |
| 17:00 - 18:00 | **Future for patients and researchers**  
*Chairmen: O. Dormond, Lausanne / M. Chilcott, Fribourg*  
Liquid Biopsy: Concept and Potential Applications in Cancer | I. Labgaa                                     |
|  |  |  | Multisensory-motor integration in peripersonal space mediating self-objects interactions in real and virtual environments | A. Serino                                    |
|  |  |  | Data Management Plan (DMP) & Open Data in Life Science | C. Lebrand                                   |
Friday, January 11, 2019

8:30 - 9:30  Organoid and PDX models for optimisation of patient treatments
Chairmen: D. Stroka, Bern / G. Beldi, Bern
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

09:30 - 10:30  Swiss 3R Competence Center
Chairmen: I. Desbaillets, Swiss3rcc / S. Jakob, Bern
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

10:30 - 11:00  Coffee break

11:00 - 12:00  Vascular surgery CHUV
Chairmen: S. Déglise, Lausanne / B. Walpoth, Genève
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

12:00 - 13:15  Lunch break and poster session

13:15 - 14:15  Cells and organ transplantation
Chairmen: L. Bühler, Genève / F. Pugin, Fribourg
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

14:15 - 14:45  Klaiber’s Lecture:
The surgical anatomy of the human liver
Chairman: B. Egger, Fribourg

14:45 - 15:15  Coffee break

15:15 - 16:15  The importance of collaboration between the clinic and basic science for translational research
Chairmen: R. Schmid, Bern / M. Kauper, Fribourg
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

16:15 -16:30  Closing remarks and fare well drink

Please note already in your calendar:
Next SESS in Geneva on February 6th, 2020
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, 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. 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: (* to be confirmed, see www.sess.ch)

Swiss Society of Surgery SGC 11 CME points
Swiss Society of General Internal Medicine SGIM/SSMI 9 CME points
Swiss Society of Intensive Care Medicine SGI *x CME points
Swiss Society of Anesthesiology und Reanimation SGAR/ SSAR 3.5 CME points
Swiss Association of Cantonal Veterinaries ASVC/VSKT 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 and 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.

Further information on www.sess.ch