

14:30 - 15:30

## Opening Ceremony

15:40-16:40

## Opening Plenary Lecture

Chair: **Shinya Goto**

Coagulopathy and Anticoagulation in Covid-19 - what can we learn for future challenges?  
**Daniel Dürschmied**

16:50 - 17:50

## Plenary Lecture for ESCHM

Chair: **Jean-Frederic Brun**

Lessons learnt from comparative hemorheology  
**Ursula Windberger**  
Medizinische Universität Wien, Center for Biomedical Research

18:00 - 19:00

## Rising Star Award Session - 1

Chairs: **Maria Fornal, Ursula Windberger**

RSA1-1 Towards elimination of sublethal blood trauma in mechanical circulatory support

**\*Michael J Simmonds<sup>1,2</sup>**

<sup>1</sup>Menzies Health Institute Queensland, <sup>2</sup>Griffith University, Australia

RSA1-2 Hemorheological changes caused by pituitary adenylate cyclase-activating polypeptide administration during vessel anastomosis regeneration in the rat

**\*Balazs Szabo<sup>1</sup>, Laszlo Adam Fazekas<sup>1</sup>, Adam Varga<sup>1</sup>, Barbara Barath<sup>1</sup>, Vince Szegeczki<sup>2</sup>, Tamas Juhasz<sup>2</sup>, Dora Reglodi<sup>3</sup>, Norbert Nemeth<sup>1</sup>**

<sup>1</sup>Department of Operative Techniques and Surgical Research, University of Debrecen, Faculty of Medicine, Debrecen, Hungary, <sup>2</sup>Department of Anatomy, Histology and Embryology, Faculty of Medicine, University of Debrecen, Debrecen Hungary, <sup>3</sup>Department of Anatomy, Faculty of Medicine, University of Pecs, Pecs, Hungary

19:10 - 20:10

## Free Communication (Video Presentation)

20:20 - 21:50

## **SYMPOSIUM S1: Microperfusion of different inner organs examined by contrast enhanced ultrasound technology or PET/CT**

Chairs: **Dong Yi, Ernst Michael Jung**

S1-1 Potential application of dynamic contrast enhanced ultrasound in predicting microvascular invasion of hepatocellular carcinoma

**\*Yi Dong<sup>1</sup>, Yijie Qiu<sup>1</sup>, Daohui Yang<sup>1</sup>, Dan Zuo<sup>1</sup>, Qi Zhang<sup>1</sup>, Wen-Ping Wang<sup>1</sup>, Ernst Michael Jung<sup>2</sup>**

<sup>1</sup>Zhongshan Hospital, Fudan University, <sup>2</sup>Department of Radiology, University Medical Center Regensburg, Germany

S1-2 New possibilities of contrast enhanced perfusion imaging CEUS for dynamic evaluation of microvascularization

**EM Jung, I Wiesinger**

Interdisciplinary Department for Ultrasound, University Medical Center, Regensburg, Germany

S1-3 Hybrid imaging of ultrasound and PET/CT: a new opportunity?

**Janine Rennert<sup>1</sup>, Jirka Grosse<sup>2</sup>, Ernst Michael Jung<sup>1</sup>**

<sup>1</sup>University Hospital Regensburg, Department of Radiology, Regensburg, Germany, <sup>2</sup>University Hospital Regensburg, Department of Nuclear Medicine, Regensburg, Germany

## **SYMPOSIUM S2: Clinical hemorheology in critically ill patients**

Chairs: **Shohei Moriyama, Michinari Hieda, Masahito Hitosugi**

S2-1 Vascular toxicity in Cardio-Oncology

**\*Shohei Moriyama, Michinari Hieda**

Department of Hematology, Oncology and Cardiovascular Medicine, Kyushu University Hospital

S2-2 Catheter treatment of the leg arterial atherosclerosis ~Endovascular treatment for peripheral arterial disease~

**\*Eiji Karashima**

Shimonoseki City Hospital

S2-3 Advances in Diagnosis and Treatment of Pulmonary Hypertension

**\*Kohtaro Abe**

Department of Cardiovascular Medicine, Kyushu University Hospital

S2-4 Myocardial pathological changes in patients with epilepsy and psychiatric disorders

**\*Marin Takaso, Misa Tojo, Masahito Hitosugi**

Department of Legal Medicine, Shiga University of Medical Science

## **SYMPOSIUM S3: Intracellular signaling in RBC: roles and consequences**

Chairs: **Özlem Yalçın, Philippe Connes**

S3-1 Calcium signaling in red cells induced by mechanical stress and flow

**\*Lars Kaestner**

Saarland University

S3-2 Shear conditioning attenuates the effects of superoxide in red blood cells: Role of generation and signaling of nitrogen species in different cell subpopulations

**\*Marijke Grau<sup>1</sup>, Lennart Kuck<sup>2</sup>, Thomas Dietz<sup>1</sup>, Michael J Simmonds<sup>2</sup>**

<sup>1</sup>German Sport University Cologne, Institute of Cardiovascular Research and Sports Medicine, <sup>2</sup>Griffith University Mechanobiology Research Laboratory

S3-3 Signaling in erythroid cells: role in physiology and contribution to pathological manifestations

**\*Wassim El Nemer**

EFS

S3-4 Impact of oxidative stress and decreased NO bioavailability on eryptosis and red blood cells microparticles in SCA: Consequences on endothelial cells and vascular function

**\*Elie Nader<sup>1,2</sup>, Marc Romana<sup>3,4</sup>, Nicolas Guillot<sup>1,2</sup>, Romain Fort<sup>5</sup>, Emeric Stauffer<sup>1,2,6</sup>, Nathalie Lemonne<sup>7</sup>, Yohann Garnier<sup>3,4</sup>, Sarah Skinner<sup>1,2</sup>, Maryse Etienne-Julan<sup>7</sup>, Mélanie Robert<sup>1,2,8</sup>, Alexandra Gauthier<sup>1,2,9</sup>, Giovanna Cannas<sup>5</sup>, Sophie Antoine-Jonville<sup>3</sup>, Benoit Tressières<sup>10</sup>, Marie-Dominique Hardy-Dessources<sup>3,4</sup>, Yves Bertrand<sup>9</sup>, Céline Renoux<sup>1,2,11</sup>, Philippe Joly<sup>1,2,11</sup>, Marijke Grau<sup>12</sup>, Philippe Connes<sup>1,2</sup>**

<sup>1</sup>Laboratoire Interuniversitaire de Biologie de la Motricité (LIBM) EA7424, Team «Vascular Biology and Red Blood Cell », Université Claude Bernard Lyon , Université de Lyon, Lyon, France, <sup>2</sup>Laboratoire d'Excellence du Globule Rouge (Labex GR-Ex), PRES Sorbonne, Paris, France, <sup>3</sup>Université des Antilles, Pointe-à-Pitre, France, <sup>4</sup>Université de Paris, Paris, France, <sup>5</sup>Département de Médecine Interne, Hôpital Edouard Herriot, Hospices Civils de Lyon, Lyon, France, <sup>6</sup>Centre de Médecine du Sommeil et des Maladies Respiratoires, Hospices Civils de Lyon, Hôpital de la Croix Rousse, Lyon, France, <sup>7</sup>Unité Transversale de la Drépanocytose, Hôpital de Pointe-à-Pitre, Hôpital Ricou, Guadeloupe, France, <sup>8</sup>Erytech Pharma, Lyon, France, <sup>9</sup>Institut d'Hématologie et d'Oncologie Pédiatrique, Hospices Civils de Lyon, Lyon, France, <sup>10</sup>Centre Investigation Clinique Antilles Guyane, 1424 Inserm, Academic Hospital of Pointe-à -Pitre, Guadeloupe, France, <sup>11</sup>Laboratoire de Biochimie et de Biologie Moléculaire, UF de Biochimie des Pathologies érythrocytaires, Centre de Biologie et de Pathologie Est, Hospices Civils de Lyon, Lyon, France, <sup>12</sup>Molecular and Cellular Sport Medicine, Deutsche Sporthochschule Köln, Köln, Germany

S3-5 Phosphoproteomic Changes in Red Blood Cell Membrane by Adenylyl cyclase/Protein kinase A Signaling Pathway and Their Roles on the Mechanical Stress Responses of Red Blood Cells

**\*Elif Ugurel<sup>1,2</sup>, Neslihan Cilek<sup>1,2</sup>, Evrim Goksel<sup>1,2</sup>, Ozlem Yalcin<sup>1,2</sup>**

<sup>1</sup>Koc University School of Medicine Department of Physiology, <sup>2</sup>Koc University Research Center for Translational Medicine