**Tuesday, October 8, 2019**

**Summer School (Lecture hall)**
14:00 – 14:05 Welcome & aims (M. Huber-Lang, Germany / S. Bahrami, Austria)
14:05 – 14:20 Hemorrhagic shock (HS): as old as human (J-M Cavaillon, France)
14:20 – 14:40 HS-induced circulatory changes (M. Wepler, Germany)
14:40 – 15:00 HS-induced immunological changes (M. Huber-Lang, Germany)
15:00 – 15:20 Strategies to reduce MODS in HS (C. Thiemermann, UK)
15:20 – 15:35 HS modelling (M. Osuchowski, Austria)
15:35 – 16:15 Hands-on: Clinical simulation of shock (M. Wepler, Germany)

**16:15 – 16:30 Coffee Break**

16:30 – 18:00 Hands-on: coagulatory changes / ROTEM (M. Maegele / L. Rodewald, Germany)

**18:00 – 20:00 ESS Board Meeting**

**20:00 – 23:00 Welcome Reception ESS/IFSS**

**Wednesday, October 9, 2019**

**What Apollo Reveals: Innate Immune Response to Trauma /HS (Auditorium)**
**Chairs:** Irshad Chaudry, USA / Frank Hildebrand, Germany
08:00 - 08:20 Welcome ESS/IFSS/Aegean Conf (M. Huber-Lang, Germany / S. Bahrami, Austria / J. Lambris, Greece)
08:20 - 08:40 Spatio-temporal immune response after trauma / HS (J.M. Cavallion, France)
08:40 - 09:00 Cellular innate immune response (T. Billiar, USA)
09:00 - 09:20 Fluid phase immune response (T. Mollnes, Norway)
09:20 - 09:30 oral abstract (tba)
09:30 - 09:40 oral abstract (tba)
09:40 - 09:50 oral abstract (tba)
09:50 – 10:00 oral abstract (tba)

**10:00 – 10:30 Coffee Break**

**Prometheus´ Bestowment: Novel Pathomechanisms in Critical Care (Auditorium)**
**Chairs:** Karim Brohi, UK / Fabienne Venet, France
10:30 - 10:50 Novel pathomechanisms in MODS (C. Thiemermann, UK)
10:50 - 11:10 ROS and systemic inflammation (C. Szabo, Switzerland)
11:10 - 11:30 Potential mechanisms of how HAT therapy improves sepsis survival (D. Remick, USA)
11:30 - 11:40 oral abstract (tba)
11:40 – 11:50 oral abstract (tba)
11:50 - 12:00  oral abstract (tba)
12:00 - 12:10  oral abstract (tba)
12:10 - 12:20  oral abstract (tba)
12:20 - 12:30  oral abstract (tba)

12:30 – 13:30  Lunch

13:30 - 14:30  Poster Session  
(Poster area)
(Organization: B. Relja, Germany / F. Venet, France / T. Skirecki, Poland)
Chairs: Borna Relja, Germany / Mihaly Boros, Hungary / Inge Bauer, Germany / Andrey Kozlov, Austria / Evangelos Giamarellos-Bourboulis, Greece / Stefanie Flohé, Germany

Prometheus and Hephaestus counsel: Clinically relevant Modelling of Critical Care Conditions
(Auditorium)
Chairs: Borna Relja, Germany / Andrea Szabo, Hungary
14:30 - 14:50  Clinical relevance: Precision Medicine in Sepsis  
(T. van der Poll, Netherlands)
(M. Osuchowski, Austria)
15:10 - 15:30  How to model trauma?  
(M. van Griensven, Germany)
15:30 - 15:50  Anything new in hemorrhagic shock?  
(W. Martini, USA)
oral abstract (tba)
15:50 - 16:00  oral abstract (tba)
16:00 - 16:10  oral abstract (tba)
16:10 - 16:20  oral abstract (tba)
16:20 - 16:30  oral abstract (tba)

16:30 – 17:00  Coffee Break

Hippocrates meets Plato: Long term effects of Trauma / Sepsis - ESS/ESTES
(Auditorium)
Chairs: Christoph Joosten, Germany / Luke Leenen, Netherlands
17:00 - 17:20  Clinical consequences after polytrauma  
(C. Joosten, Germany)
17:20 - 17:40  Neutrophil dysfunction during systemic inflammation  
(L. Leenen, NL)
17:40 - 17:50  oral abstract (tba)
17:50 – 18:00  oral abstract (tba)
18:00 – 18:10 Oral abstract (tba)
18:10 - 18:20  oral abstract (tba)
18:20 - 18:30  oral abstract (tba)
18:30 - 18:40  oral abstract (tba)
18:40 - 18:50  oral abstract (tba)
18:50 - 19:00  oral abstract (tba)
Thursday, October 10, 2019

Asklepios in Shock: Novel Therapies in Trauma / Sepsis
(IFSS – Japan Shock) (Auditorium)
Chairs: Hiroyuki Hirasawa, Japan / Mayuki Aibiki, Japan
08:00 - 08:13  Aging and immune response (S. Inoue, Japan)
08:13 - 08:26  Artificial blood (M. Kinoshita, Japan)
08:26 - 08:39  Hydrogen and resuscitation (K. Hayashida, Japan)
08:39 - 08:52  CHDF with cytokine-adsorbing hemofiltration for sepsis (H. Hirasawa, Japan)
08:52 - 09:05  Autophagy in sepsis-induced organ failure (E. Watanabe, Japan)
09:05 - 09:18  DIC in sepsis (S. Gando, Japan)
09:18 - 09:31  Pathogenesis of inflammatory thrombus in sepsis (T. Iba, Japan)
09:31 - 09:44  Immunothrombosis in inflammation - A unifying concept in the coagulopathy of critical illness? (M. Neal, USA)
09:44 - 09:57  Optimal patient selection for anticoagulant therapy in sepsis (K. Yamakawa, Japan)
09:57 - 10:00  Closing remarks (H. Hirasawa, Japan / M. Aibiki, Japan)

10:00 – 10:30 Coffee Break

Dionysus and Hebe: Obesity & Aging (IFSS – US Shock) (Auditorium)
Chairs: Basilia Zingarelli, USA / Elizabeth Kovacs, USA
10:30 - 10:50  Innate immunity in geriatric trauma patients in the ICU (P. Efron, USA)
10:50 - 11:10  Aging and fecal microbiome dysbiosis after burn injury (E. Kovacs, USA)
11:10 - 11:30  Age-dependent metabolic recovery in multiple organ failure (B. Zingarelli, USA)
11:30 - 11:50  Targeting white and brown adipose tissue in sepsis (J. Kaplan, USA)
11:50 - 12:10  The role of adipose tissue in the age-dependent severity of sepsis (H. Saito, USA)
12:10 – 12:20 oral abstract (tba)
12:20 – 12:30 oral abstract (tba)

12:30 – 13:30 Lunch

13:30 - 14:30 Poster Session

(Organization: B. Relja, Germany / F. Venet, France / Tomasz Skirecki, Poland)
Chairs: Fabienne Venet, France / Tomasz Skirecki, Poland / Olaf Picker, Germany / Jean-Marc Cavaillon, France
13:30 – 14:30 Guided poster tours for the summer school attendees
  What is new in HS? (M. Maegele, Germany / M. van Griensven, Germany)
  What is new in MODS? (C. Thiemermann, UK, M. Wepler, Germany)
Olympus Meeting: European New Investigator Award Competition (Auditorium)
(Organization: M. Osuchowsky, Austria)
Chairs: Markus Huber-Lang, Germany / Evangelos Giamarellos-Bourboulis, Greece
Reviewer Board: tba
14:30 - 14:45  Best oral abstract (candidate 1)
14:45 - 15:00  Best oral abstract (candidate 2)
15:00 - 15:15  Best oral abstract (candidate 3)
15:15 - 15:30  Best oral abstract (candidate 4)
15:30 - 15:45  Best oral abstract (candidate 5)

Friday, October 11, 2019

Immune Dysfunction and Precision Modulation in Trauma and Sepsis (IFSS – China Shock)
(Auditorium)
Chairs: Yong-Ming Yao, China / Timothy Billiar, USA
08:00 - 08:20  Host immunosuppression and its precision regulation in postburn sepsis (Y.-M. Yao, China)
08:20 - 08:40  Caspase-11-mediated pyroptosis promoted DIC in sepsis (B. Lu, China)
08:40 - 09:00  Copy number variation of DEFA1/DEFA3: how genetic background impacts sepsis development and its precision treatment (X.-M. Fang, China)
09:00 - 09:20  Endotoxin inhibition of neutrophil chemotaxis: increased autocrine ATP signaling enhances myosin light chain phosphorylation (B.-W. Sun, China)
09:20 - 09:30  oral abstract (tba ESS)
09:30 - 09:40  oral abstract (tba)
09:40 - 09:50  oral abstract (tba)
09:50 – 10:00  oral abstract (tba)

10:00 – 10:30  Coffee Break

Hermes: Sepsis / Trauma Around the World
(IFSS – Latin America) (Auditorium)
Chairs: Reinaldo Salomao, Brazil / Stefanie Flohe, Germany
10:30 - 10:50  Sepsis in low and middle income countries: how to reduce the inequalities? (R. Salomao, Brazil)
10:50 - 11:10  Sepsis in the US (D. Angus, USA)
11:10 - 11:30  Sepsis in Europe (M. Bauer, Germany)
11:30 - 11:50  key note Micropopulation: Sepsis Microbiome (P. Wischmeyer, USA)
11:50 - 12:00  oral abstract (tba)
12:00 – 12:10  oral abstract (tba)
12:10 – 12:20  oral abstract (tba)
12:20 – 12:30  oral abstract (tba)

12:30 – 13:30  Lunch
13:30 - 14:30  General Assembly ESS (Auditorium)
Markus Huber-Lang, Germany, Evangelos Giamarellos-Bourboulis, Inge Bauer, Germany, Greece, Marcin Osuchowski, Austria

European Collaborative Shock Research (Auditorium)
Chairs: Hans-Christoph Pape, Switzerland / Karim Brohi, UK
14:30 - 14:45  INTRIN / London (K. Brohi, UK)
14:45 - 15:00  CRC1149 Trauma (A. Ignatius, Germany)
15:00 - 15:15  Network Trauma Research (NTF) (B. Relja, Germany)
15:15 - 15:30  TREAT (H.-C. Pape, Switzerland)
15:30 – 15:45  EGIS (European Group for Immunology of Sepsis) (J. Mermejo-Martin, Spain)
15:45 - 16:00  Center TBI (M. Maegele, Germany)
16:00 - 16:15  Hellenic Institute for the Study of Sepsis (E. Giamarellos-Bourboulis, Greece)
16:15 - 16:30  EU – Shockomics (F. Aletti, Italy)

16:30 – 17:00 Coffee Break

ESS 2030 / IFSS 2030: Hades or Olymp?
Past – Presence - Future (Auditorium)
Chairs: Inge Bauer, Germany / Heinz Redl, Austria
17:00 - 17:10  Past ESS (J.-M. Cavaillon, France)
17:10 - 17:20  Present ESS (I. Bauer, Germany)
17:20 - 17:30  Future ESS - Quo vadis? (M. Huber-Lang, Germany)
17:30 - 17:40  Past IFSS (I. Chaudry, USA)
17:40  17:50  Present IFSS (S. Bahrami, Austria)
17:50 - 18:00  Future IFSS - Quo vadis? (Y.M. Yao, China)
18:00 - 18:10  Discussion
18:10 – 18:20  Special Honors
18:20 - 18:30  Closing remarks (E. Giamarellos-Bourboulis, Greece)

Parallel Sessions (Seminar Room)

Wednesday, October 9, 2019

13:30 – 14:30
IFSS Board Meeting
Chairs: Soheyl Bahrami, Austria

14:30 – 18:30
ROTEM-Workshop
Chairs: Marc Maegele, Germany / Herbert Schöchl, Austria
**Hellenic Sepsis Study Group Meeting (English)**

**Chairs: Iraklis Tsangaris, Greece / Charalombos Gogos, Greece**

08:00 - 08:15 Platelets and anti-platelets in sepsis (*K. Akinisoglou, Greece*)
08:15 - 08:40 New antimicrobials to combat resistance (*G. Dimopoulos, Greece*)
08:40 - 09:00 The interaction between the immune response and the vascular endothelium in septic shock: a two-way street? (*J. Bermejo-Martin, Spain*)
09:00 - 09:20 How early vascular endothelium informs of the advent of sepsis? The PROUD study (*E. Giamarellos-Bourboulis, Greece*)
09:20 - 09:35 A randomized prospective clinical trial to assess the role of procalcitonin-guided antimicrobial therapy to reduce long-term infections sequelae: Results of the PROGRESS trial (*E. Kyriazopoulou, Greece*)
09:35 - 09:50 Personalized immunotherapy in sepsis: how to study? (*E. Giamarellos-Bourboulis, Greece*)
09:50 – 10:00 best sepsis oral abstract (*tba*)

**10:00 – 10:30 Coffee Break**

**IFSS - Russian Shock SSSR (Russian – English translation)**

**Chair: Vladimir Pisarev, Russia**

10:30 - 10:55 Perfluorancarbones in critical care (*V. Moroz, Russia*)
10:55 - 11:20 Shock: clinical and anatomical analysis (*A. Golubev, Russia*)
11:20 - 11:45 Septic shock: problems of pathogenesis, diagnosis, and treatment (*V. Kulabuchov, Russia*)
11:45 - 11:55 Nosocomial pneumonia: role in septic shock development (*A. Kuzovlev, Russia*)
11:55 - 12:05 Metabolic alterations in traumatic shock: correction by deferoxamin (*V. Dolgih, Russia*)
12:05 - 12:15 Microbiota as an organ and the role of its total dysfunction in septic shock (*N. Beloborodova, Russia*)
12:15 - 12:25 Young scientist study: Specificity of gut microbiota in critically ill patients: quantity, quality and function (*E. Chernevskaya, Russia*)
12:25 - 12:30 Closing remarks (*V. Pisarev, Russia*)

**12:30 – 13:30 Lunch**

**IFSS- Rusian Shock SSSR (Russian – English translation)**

**Chairs: Artem N. Kuzovlev, Russia**

14:30 - 14:55 Genetic and immune regulation biomarkers in sepsis and shock patients (*V. Pisarev, Russia*)
14:55 - 15:20 Endotoxicosis as a course of shock development (*A. Lodyagin, Russia*)
15:20 - 15:45 Critical illness in acute poisoning with narcotic drugs (*G. Livanov, Russia*)
15:45 - 15:55  Endotoxic shock in acute poisoning with the cauterizing substances (B. Batocirenov, Russia)
15:55 - 16:05  Strategy of prevention of the intra-surgery massive hemorrhage in children (E. Spiridonova, Russia)
16:05 - 16:15  Cardiogenic shock at a prehospital stage: management and prevention (A. Zakcharova, Russia)
16:15 - 16:25  Young scientist study: Microvascular alterations in rat skin during hemorrhagic shock and after resuscitation with autologous blood and crystalloids (I. Ryzkhov, Russia)
16:20 - 16:30  oral abstract (tba)

Saturday, October 12, 2019

09:00 – 19:00  By invitation only
Wiggers-Bernard Conference
(Organization: Marcin Osuchowski, Austria)