Monday, October 3, 2016

9:00-9:20  
Room 1  
Aurora

Opening Ceremony

9:20-10:00  
Room 1  
Aurora

Presidential Address

Chair - Soheyl Bahrami, IFSS President-elect; Ludwig Boltzmann Institute for Experimental & Clinical Traumatology, Vienna, Austria

My Odyssey in Shock Research, Japan Shock Society, Shock Society of North America, European Shock Society, and IFSS  
Hirohito Hisatsuka, President, IFSS; Professor Emeritus, Department of Emergency and Critical Care Medicine, Chiba University Graduate School of Medicine; CEO and Director, Eastern Chiba Medical Center, Chiba, Japan

10:00-11:40  
Room 1  
Aurora

Symposium 1  
Achievement and Future Perspectives of Member Shock Society

Chairs -  
Hirohito Hisatsuka, Professor Emeritus, Department of Emergency and Critical Care Medicine, Chiba University Graduate School of Medicine; CEO and Director, Eastern Chiba Medical Center, Chiba, Japan  
Robert Cooney, Department of Surgery, Upstate Medical University, Syracuse, NY, USA

1. The State of Shock Society, US  
   Ping Wang, Shock Society, USA and Center for Immunology & Inflammation, The Feinstein Institute for Medical Research, Manhasset, NY, USA

2. Achievement and Future Perspectives of the Brazilian Shock Society and Latin-American Sepsis Institute  
   Reinaldo Salomao, Brazilian Shock Society (BSS) Latin American Sepsis Institute; Infectious Diseases / Hospital São Paulo, Escola Paulista de Medicina, Universidade Federal de São Paulo, São Paulo, Brazil

3. The Update of Severe Sepsis in China  
   Yong-Ming Yao, Chinese Shock Society (CSS) and Trauma Research Center, First Hospital Affiliated to the Chinese PLA General Hospital, Beijing, China

4. European Shock Society: Past, Present and Future  
   Jean-Marc Cavaillon, European Shock Society (ESS) and Cytokines & Inflammation Unit, Institut Pasteur, Paris, France

5. Present Status and Future Perspective of Japan Shock Society  
   Shigeto Oda, Japanese Shock Society (JSS) and Department of Emergency and Critical Care Medicine, Chiba University Graduate School of Medicine, Chiba, Japan

6. Society for Shock Studies (Russia) - Current State and Future  
   Viktor V. Moroz, Society for Shock Studies (Russia); V.A. Negovsky Research Institute of General Reanimatology, Moscow, Russia

11:50-12:50  
Room 1  
Aurora

Lunch Seminar 1 Sponsored by LSI Medience Corporation

Chair - Toshiaki Ikeda, Division of Critical Care Medicine, Tokyo Medical University, Hachioji Medical Center, Tokyo, Japan

A New Biomaker Presepsin in the Diagnosis and Evaluation of Sepsis  
Yasushi Suzuki, Department of Critical Care, Disaster and General Medicine, Iwate Medical University, Iwate, Japan
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:00-15:00</td>
<td>Symposium 2 (parallel session) Sepsis and Trauma Associated Coagulopathy</td>
<td>Chairs - Soheyil Bahrami, Ludwig Boltzmann Institute for Experimental &amp; Clinical Traumatology, Vienna, Austria, Toshiaki Iba, Department of Emergency and Disaster Medicine, Juntendo University, Tokyo, Japan</td>
</tr>
<tr>
<td>13:00-13:20</td>
<td>1. Circulating Histones and Coagulation Disorder</td>
<td>Toshiaki Iba, Department of Emergency and Disaster Medicine, Juntendo University, Tokyo, Japan</td>
</tr>
<tr>
<td>13:20-13:40</td>
<td>2. Molecular Management in Polytrauma</td>
<td>Markus Huber-Lang, Department of Traumatology, University of Ulm, Ulm, Germany</td>
</tr>
<tr>
<td>13:40-14:00</td>
<td>3. The Role of Fibrinogen in Acute Trauma-induced Coagulopathy: Novel Insights and Therapeutic Options</td>
<td>Heinz Redl, AUVA Trauma Centre Salzburg, Salzburg; Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Vienna, Austria</td>
</tr>
<tr>
<td>14:00-14:20</td>
<td>4. The Updated Guideline for the Clinical Management of Acute Trauma Hemorrhage and Coagulopathy: The European Perspective</td>
<td>Marc Maegele, Department of Traumatology, Orthopedic Surgery and Sports Traumatology, Cologne-Merheim Medical Center (CMMC)/University Witten-Herdecke (Germany), Cologne, Germany</td>
</tr>
<tr>
<td>14:20-14:40</td>
<td>5. Coagulation Abnormality During Sepsis and Acute Pancreatitis in Aged Animals</td>
<td>Hiroshi Saito, Department of Surgery, University of Kentucky, Lexington, KY, USA</td>
</tr>
<tr>
<td>14:40-15:00</td>
<td>6. Experimentally Approaching the Trauma-induced Coagulopathy</td>
<td>Wenjun Martini, Hemostasis – Damage Control Resuscitation, US Army Institute of Surgical Research, Fort Sam Houston, TX, USA</td>
</tr>
<tr>
<td>13:00-14:40</td>
<td>Symposium 4 (parallel session) Global Burden of Sepsis</td>
<td>Chairs - Reinaldo Salomao, Infectious Diseases / Hospital São Paulo, Escola Paulista de Medicina, Universidade Federal de São Paulo, São Paulo, Brazil, Toshiaki Ikeda, Division of Critical Care Medicine, Tokyo Medical University, Hachioji Medical Center, Tokyo, Japan</td>
</tr>
<tr>
<td>13:00-13:20</td>
<td>1. Current Situation of Diagnosis and Treatment of Sepsis in Japan</td>
<td>Hiroyasu Ishikura, Department of Emergency and Critical Care Medicine, Faculty of Medicine, Fukuoka University, Fukuoka, Japan</td>
</tr>
<tr>
<td>13:20-13:40</td>
<td>2. The Impact of Sepsis in USA</td>
<td>Philip A. Efron, University of Florida, Gainesville, FL, USA</td>
</tr>
<tr>
<td>13:40-14:00</td>
<td>3. Sepsis in Developing Countries</td>
<td>Reinaldo Salomao, Infectious Diseases / Hospital São Paulo, Escola Paulista de Medicina, Universidade Federal de São Paulo, São Paulo, Brazil</td>
</tr>
<tr>
<td>14:00-14:20</td>
<td>4. Direct Hemoperfusion with Polymyxin-B Immobilized Fiber (PMX-DHP) for Septic Shock Patients in Japan</td>
<td>Toshiaki Ikeda, Division of Critical Care Medicine, Tokyo Medical University, Hachioji Medical Center, Tokyo, Japan</td>
</tr>
<tr>
<td>14:20-14:40</td>
<td>5. A Novel Therapeutic Target for Sepsis</td>
<td>Ping Wang, Center for Immunology &amp; Inflammation, The Feinstein Institute for Medical Research, Manhasset, NY, USA</td>
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</tbody>
</table>
Monday, October 3, 2016 - continued

14:40-15:40  Symposium 5 (parallel session)
Room 2
Cynthia / North
Role of Alarmins in Shock and Sepsis

Chairs -
Timothy R. Billiar, Department of Surgery, University of Pittsburgh, Pittsburgh, PA, USA
Ping Wang, Center for Immunology & Inflammation, The Feinstein Institute for Medical Research, Manhasset, NY, USA

14:40-15:00  1. Targeting HMGB1 in the Treatment of Sepsis
Haichao Wang, Laboratory of Emergency Medicine, The Feinstein Institute for Medical Research, Manhasset, NY, USA

15:00-15:20  2. Effect of High Mobility Group Box-1 Protein (HMGB1) on Host Immune Response and Its Regulatory Mechanism After Major Burns
Yong-Ming Yao, Trauma Research Center, First Hospital Affiliated to the Chinese PLA General Hospital, Beijing, China

15:20-15:40  3. From Pamps and Alarmins to Tolerogens in Shock / Sepsis: What We Are Learning from Innate Regulatory Lymphocytes
Alfred Ayala, Department of Surgery, Rhode Island Hospital; Division of Surgical Research, Brown University, Providence, RI, USA

15:00-17:00  Symposium 3 (parallel session)
Room 1
Aurora
Persistent Inflammation, Immunosuppression and Catabolism Syndrome (PICS)

Chairs -
Lyle L. Moldawer, Department of Surgery, University of Florida College of Medicine, Gainesville, FL, USA
Jean-Marc Cavaillon, Cytokines & Inflammation Unit, Institut Pasteur, Paris, France

15:00-15:20  1. Persistent Inflammation, Immunosuppression and Catabolism Syndrome: A New Form of Chronic Critical Illness
Lyle L. Moldawer, Department of Surgery, University of Florida College of Medicine, Gainesville, FL, USA

15:20-15:40  2. Concomitant Inflammation and Immunosuppression
Jean-Marc Cavaillon, Cytokines & Inflammation Unit, Institut Pasteur, Paris, France

15:40-16:00  3. Bench to Bedside Research on Critical Illness Myopathy (CIM) and Ventilator Induced Diaphragm Muscle Dysfunction (VIDD): Mechanisms and Interventions
Lars G. Larsson, Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden

16:00-16:20  4. Influence of Age on PICS
Philip A. Efron, University of Florida, Gainesville, FL, USA

16:20-16:40  5. Long Term Cognitive and Functional Declines Following Sepsis
Djillali Annane, Raymond Poincaré Hospital (APHP), University of Versailles, Garches, France

16:40-17:00  6. Inflammation Associated Epigenetics and Metabolism: Novel Treatment Targets
Charles E. McCall, Department of Molecular Medicine, Wake Forest University Medical Center, Winston Salem, NC, USA
Monday, October 3, 2016 - continued

15:40-17:20  Symposium 6 (parallel session)
            Room 2  Sepsis and Shock: Painstaking Way to Comprehend and Treat Them
            Cynthia / North

            Chairs -
            Marcin F. Osuchowski, Department of Intensive Care, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, AUVA Research Center, Vienna, Austria
            Satoshi Ono, Department of Critical Care Medicine, Tokyo Medical University Hachioji Medical Center, Tokyo, Japan

15:40-16:00  1. Mouse Sepsis Models in the Post-PNAS Reality: Still Viable or Utterly Helpless?
            Marcin F. Osuchowski, Department of Intensive Care, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, AUVA Research Center, Vienna, Austria

16:00-16:20  2. Impact of Immunosenescence on Sepsis: T Cell Exhaustion and Secondary Infection After Sepsis in the Elderly
            Shigeaki Inoue, Tokai University School of Medicine, Kanagawa, Japan

16:20-16:40  3. Understanding the Heterogeneity of the Host Response to Infection May Direct Therapy
            Daniel Remick, Department of Pathology and Laboratory Medicine, Boston University School of Medicine, Boston, MA, USA

16:40-17:00  4. Artesunate Protects Against the Organ Injury and Dysfunction Induced by Severe Hemorrhage and Resuscitation
            Chris Thiemermann, William Harvey Research Institute, Queen Mary University of London, London, UK

17:00-17:20  5. The Effective Therapy Using Endotoxin Tolerance Against Lethal Septicemia
            Manabu Kinoshita, Department of Immunology and Microbiology, National Defense Medical College, Saitama, Japan

17:20-18:20  Plenary Lecture 1
            Room 1  Aurora

            Chair - Masataka Majima, Department of Pharmacology, Kitasato University School of Medicine, Kanagawa, Japan

            Innate Immunity and Inflammation
            Shizuo Akira, Laboratory of Host Defense, WPI Immunology Frontier Research Center, Osaka University, Osaka, Japan

18:30-19:30  Evening Seminar Sponsored by Covidien Japan Inc.
            Room 1  Aurora

            Chair - Hiroyuki Uchino, Department of Anesthesiology, Tokyo Medical University, Tokyo, Japan

            The Potential Usefulness of Regional Cerebral Oxygen Saturation (rSO2) Monitoring for Better Cardiopulmonary Cerebral Resuscitation (CPCR) and Post-cardiac Arrest Care
            Tomohiko Orita, Department of Emergency and Critical Care Medicine, Saiseikai Yokohamashi Tobu Hospital, Yokohama, Japan
### Symposium 7 Sponsored by Asahi Kasei ZOLL Medical Corporation (parallel session)

**Pathophysiology and Therapeutic Approach of Post-Cardiac Arrest Syndrome**

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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Presenters</th>
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<tbody>
<tr>
<td>8:30-9:00</td>
<td>1. <strong>Keynote</strong> - Post-Cardiac Arrest Syndrome: The New Science</td>
<td>Aurora</td>
<td>Robert W. Neumar, Department of Emergency Medicine, University of Michigan Medical School, Ann Arbor, MI, USA; International Liaison Committee on Resuscitation</td>
</tr>
<tr>
<td>9:00-9:15</td>
<td>2. Molecular Mechanisms of Ischemic Brain Damage</td>
<td></td>
<td>Hiroyuki Uchino, Department of Anesthesiology, Tokyo Medical University, Tokyo, Japan</td>
</tr>
<tr>
<td>9:15-9:30</td>
<td>3. Post-cardiac Arrest Brain Injury</td>
<td></td>
<td>Clifton W. Callaway, Department of Emergency Medicine, University of Pittsburgh, Pittsburgh, PA, USA</td>
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<tr>
<td>9:30-9:45</td>
<td>4. Cardiologist's Perspective of Post-cardiac Arrest Syndrome</td>
<td></td>
<td>Shoji Kawakami, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan</td>
</tr>
<tr>
<td>9:45-10:00</td>
<td>5. How to Provide the Cardioprotection for the Ischemic Heart – A Lesson from the J-WIND Trial</td>
<td></td>
<td>Masafumi Kitakaze, Department of Clinical Medicine and Development, National Cerebral and Cardiovascular Center, Osaka, Japan</td>
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**Time for Questions and Answers**

### Oral Session 1 (parallel session)

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<th>Time</th>
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<tr>
<td>8:30-9:45</td>
<td>O1-1—O1-5</td>
<td>Cynthia / North</td>
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### Oral Session 2 (parallel session)

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<th>Time</th>
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<th>Location</th>
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<tr>
<td>9:45-11:00</td>
<td>O2-1—O2-5</td>
<td>Cynthia / North</td>
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</table>
Tuesday, October 4, 2016  - continued

10:30-12:30  Symposium 8 Sponsored by Baxter Limited (parallel session)
Room 1  Blood Purification and ECMO for Sepsis and Septic Shock
Aurora

Chairs -
Patrick M. Honore, ICU Department, Universitair Ziekenhuis Brussel, Vrije Universiteit Brussel, Brussels, Belgium
Osamu Nishida, Department of Anesthesiology and Critical Care Medicine, Fujita Health University School of Medicine, Aichi, Japan

10:30-10:50  1. ECMO in Septic Shock: When to Use It and Not to Use It?
Tao-Min Huang, Department of Internal Medicine, National Taiwan University Hospital and College of Medicine, Taichung, Taiwan

10:50-11:00  2. The Pathophysiology of AKI and the Rational for Blood Purification
Hernando Gomez, Critical Care Medicine, Center for Critical Care Nephrology and The CRISMA Center, University of Pittsburgh, Pittsburgh, PA, USA

11:10-11:30  3. Endotoxin Adsorption Therapy for Septic Shock
Kent Doi, Department of Emergency and Critical Care Medicine, The University of Tokyo, Tokyo, Japan

Yoshitaka Hara, Department of Anesthesiology and Critical Care Medicine, Fujita Health University School of Medicine, Aichi, Japan

11:50-12:10  5. Continuous Hemodiafiltration with a Cytokine-Adsorbing Hemofilter in Patients with Septic Shock
Hidetoshi Shiga, Emergency and Intensive Care Center, Teikyo University Chiba Medical Center, Chiba, Japan

12:10-12:30  6. Membrane Adsorption As a Key Modality in Blood Purification for Sepsis in the Future
Patrick M. Honore, ICU Department, Universitair Ziekenhuis Brussel, Vrije Universiteit Brussel, Brussels, Belgium

11:00-12:30  Oral Session 3 (parallel session)
Room 2  O3-1–O3-6
Cynthia / North
**Program**  - as of 08/24/16 - subject to change

**Wednesday, October 5, 2016**

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<tr>
<th>Time</th>
<th>Session/Room</th>
<th>Details</th>
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</table>
| 9:00-10:45 | Oral Session 4 (parallel session)  | Room 1: Aurora  
O4-1–O4-7                                                                 |
| 9:00-10:45 | Oral Session 5 (parallel session)  | Room 2: Cynthia / North  
O5-1–O5-7                                                                 |
| 9:00-10:24 | Poster Sessions (parallel session) | Room 3: Cynthia / South  
1. Sepsis 1  (P1-1–P1-12)  
2. Sepsis 2  (P2-1–P2-12)  
3. Shock 1  (P3-1–P3-12)  
4. Shock 2  (P4-1–P4-12)  
5. Inflammation (P5-1–P5-12)  
6. Organ Failure (P6-1–P6-12) |
| 10:55-11:55 | Plenary Lecture 2 | Room 1: Aurora  
Chair - Timothy G. Buchman, Critical Care Center, Emory University School of Medicine, Atlanta, GA, USA  
Molecular Foundations of Bioelectronic Medicine  
Kevin J. Tracey, The Feinstein Institute for Medical Research, Manhasset, NY, USA |
| 12:05-13:05 | Lunch Seminar 2 Sponsored by Toray Industries, Inc. / Toray Medical Co., Ltd. | Room 1: Aurora  
Chair - Osamu Nishida, Department of Anesthesiology and Critical Care Medicine, Fujita Health University School of Medicine, Aichi, Japan  
Role of Endotoxin in Septic AKI  
Kent Doi, Department of Emergency and Critical Care Medicine, The University of Tokyo, Tokyo, Japan |
| 12:05-13:05 | Lunch Seminar 3 | Room 2: Cynthia / North  
Chair - Manabu Kinoshita, Department of Immunology and Microbiology, National Defense Medical College, Saitama, Japan  
Universal Platelet Products using iPS Cell Technology  
Koji Eto, Department of Clinical Application Research, Center for iPS Cell Research and Application (CiRA), Kyoto University, Kyoto; Department of Innovation Stem Cell Therapy, Chiba University Graduate School of Medicine, Chiba, Japan |
**Wednesday, October 5, 2016 - continued**

**Symposium 9 (parallel session)**

**Immunopathology of Traumatic Brain Injury**

**Chairs** -
- Irshad H. Chaudry, Department of Surgery, University of Alabama at Birmingham, Birmingham, AL, USA
- Daniel Remick, Department of Pathology and Laboratory Medicine, Boston University School of Medicine, Boston, MA, USA

**Basic Science Symposium on Traumatic Brain Injury**

   Patricia E. Molina, Department of Physiology and Alcohol & Drug Abuse Center of Excellence, Louisiana State University Health Sciences Center, New Orleans, LA, USA

   Shigeaki Inoue, Tokai University School of Medicine, Kanagawa, Japan

   Steven J. Schwulst, Department of Surgery, Northwestern University, Chicago, IL, USA

**Clinical/Translational Science Symposium on Traumatic Brain Injury**

14:15-14:35  4. **Estrogens for the Treatment of Traumatic Brain Injury**
   Irshad H. Chaudry, Department of Surgery, University of Alabama at Birmingham, Birmingham, AL, USA

14:35-14:55  5. **Development of a Stretch-induced Neurotrauma Model for Medium-throughput Screening in vitro: Identification of Rifampicin As a Neuroprotectant**
   Csaba Szabo, Department of Anesthesiology, University of Texas Medical Branch, Galveston, TX, USA

14:55-15:15  6. **Mild Traumatic Brain Injury but Not Tail Trauma Augments Pulmonary Clearance of Bacteria via Release of Substance P**
   Daniel Remick, Department of Pathology and Laboratory Medicine, Boston University School of Medicine, Boston, MA, USA
Wednesday, October 5, 2016  -  continued

13:15-15:15  Symposium 11 (parallel session)
Room 2
Cynthia / North

Background Mechanisms of Major Surgery-induced Septic Complications

Chairs -
Yuko Kitagawa, Department of Surgery, Keio University School of Medicine, Tokyo, Japan
Masao Miyashita, Department of Surgery, Nippon Medical School Chiba Hokusoh Hospital, Chiba, Japan

13:15-13:30
1. Surgery Induced Septic Complications in Myanmar: A Single Center Experience
   Kyaw Htet, Department of GI and HBP Surgery, No. 2 Defence Services General Hospital, Nay Pyi Taw, Myanmar

13:30-13:45
2. Selective Management of Unexpected Complications by Delayed Surgical Management of Oesophageal Perforation and Therapeutic Endoscopy
   Sirikan Limpakan (Yamada), Division Chief of Gastrointestinal Surgery and Endoscopy, Department of Surgery, Chiang Mai University, Chiang Mai, Thailand

13:45-14:00
3. Chemokine-chemokine Receptor Network and Esophagectomy for Esophageal Squamous Cell Carcinoma
   Hiroya Takeuchi, Department of Surgery, Keio University School of Medicine, Tokyo, Japan

14:00-14:15
4. Immunological Evaluation of the Postoperative Complications after Esophagectomy
   Hironori Tsujimoto, Department of Surgery, National Defense Medical College, Saitama, Japan

14:15-14:30
5. The Predictive Role of Lipid Mediators for Postoperative Complications after Gastrointestinal Surgery
   Akihisa Matsuda, Department of Surgery, Nippon Medical School Chiba Hokusoh Hospital, Chiba, Japan

14:30-14:45
6. Background of Major Hepato-biliary-pancreatic Surgery-induced Sepsis
   Yu Katayose, Department of Surgery, Tohoku Rosai Hospital, Miyagi, Japan

14:45-15:00
7. Early Detection and Treatment for Postoperative Liver Failure Based on the Mechanistical Insights
   Itaru Endo, Department of Gastroenterological Surgery, Yokohama City University School of Medicine, Kanagawa, Japan

15:00-15:15
8. Relationship Between Surgical Stress Induced Hyperglycemia and Septic Complications: What Is Optimal Perioperative Glycemic Control?
   Kazuhiro Hanazaki, Department of Surgery, Kochi Medical School, Kochi, Japan
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<tr>
<th>15:30-17:30</th>
<th>Symposium 10 (parallel session)</th>
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<tbody>
<tr>
<td>Room 1</td>
<td>Critical Illness and the Gut</td>
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<td>Aurora</td>
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Chairs -
Craig Coopersmith, Emory University, Atlanta, GA, USA
Joji Kotani, Department of Emergency, Disaster and Critical Care Medicine, Hyogo College of Medicine, Hyogo, Japan

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<thead>
<tr>
<th>15:30-15:54</th>
<th>1. Gut Epithelial Integrity in Sepsis</th>
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<tr>
<td></td>
<td>Craig Coopersmith, Emory University, Atlanta, GA, USA</td>
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<tr>
<th>15:54-16:18</th>
<th>2. Nutrition Management of Critically Ill Patients: Evidences and Practice</th>
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<tbody>
<tr>
<td></td>
<td>Joji Kotani, Department of Emergency, Disaster and Critical Care Medicine, Hyogo College of Medicine, Hyogo, Japan</td>
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<tr>
<th>16:18-16:42</th>
<th>3. Dynamic Changes of Gut Microbiota in Critically Ill Patients</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Kentaro Shimizu, Department of Traumatology and Acute Critical Medicine, Osaka University Graduate School of Medicine, Osaka, Japan</td>
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<tr>
<th>16:42-17:06</th>
<th>4. Application of Therapeutic Medical Gas for Bowel Dysfunction</th>
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<tbody>
<tr>
<td></td>
<td>Atsunori Nakao, Department of Emergency and Critical Care Medicine, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan</td>
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<tr>
<th>17:06-17:30</th>
<th>5. Toll-like Receptor Stimulation Reverses Antibiotic-induced Gut Defense Impairment</th>
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<tbody>
<tr>
<td></td>
<td>Lee-Wei Chen, Department of Surgery, Kaohsiung Veterans General Hospital, Kaohsiung; Institute of Emergency and Critical Care Medicine, National Yang-Ming University, Taipei, Taiwan</td>
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### Program - as of 08/24/16 - subject to change

**Wednesday, October 5, 2016** - continued

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chairs</th>
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</table>
| 15:30-17:30 | **Symposium 12 (parallel session)**  
Microcirculation and Endothelial Damage in Sepsis and Shock  
**Chairs**  
E. Christiaan Boerma, Department of Intensive Care, Medical Center Leeuwarden, Leeuwarden; Department of Translational Physiology, Academic Medical Center Amsterdam, Amsterdam, The Netherlands  
Toshishige Shibamoto, Department of Physiology II, Kanazawa Medical University, Ishikawa, Japan | E. Christiaan Boerma, Toshishige Shibamoto, Yasuyuki Kakihana, E. Christiaan Boerma, Perenlei Enkhbaatar, Motomu Shimaoka, Yasuo Okamoto, Christa Boer |
| 15:30-15:50 | 1. The potential of Near-infrared Spectroscopy As an Oxygenation Index of Pivotal Organs and Tissue Oxygenation in Critically II Patients  
Yasuyuki Kakihana, Department of Emergency and Intensive Care Medicine, Kagoshima University, Kagoshima, Japan |  
Yasuyuki Kakihana |
| 15:50-16:10 | 2. Capillary Recruitment During Fluid Resuscitation Is Limited in Sepsis  
E. Christiaan Boerma, Department of Intensive Care, Medical Center Leeuwarden, Leeuwarden; Department of Translational Physiology, Academic Medical Center Amsterdam, Amsterdam, The Netherlands | E. Christiaan Boerma |
| 16:10-16:30 | 3. The Role of Arginine Vasopressin Receptors in Microvascular Hyper-permeability During Septic Shock  
Perenlei Enkhbaatar, Department of Anesthesiology, University of Texas Medical Branch, Galveston, TX, USA | Perenlei Enkhbaatar |
| 16:30-16:50 | 4. Integrin-mediated Cross Talk Between Coagulation and Inflammation  
Motomu Shimaoka, Mie University Graduate School of Medicine, Mie, Japan | Motomu Shimaoka |
| 16:50-17:10 | 5. S1P₂, A Receptor for the Lysophospholipid Mediator Sphingosine 1-phosphate, Protects Against Vascular Barrier Disruption  
Yasuo Okamoto, Department of Physiology, Kanazawa University Graduate School of Medical Sciences, Ishikawa; Department of Pharmacology, Kawasaki Medical University, Okayama, Japan | Yasuo Okamoto |
| 17:10-17:30 | 6. Glycocalyx, 'Missing' Link Between Endothelium and Microcirculation  
Christa Boer, Department of Anesthesiology, VU University Medical Center, Amsterdam, The Netherlands | Christa Boer |