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
Hiroyuuki Hirasawa, 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/Organizers -  
Hiroyuuki Hirasawa, 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 and Disaster Medicine, Iwate Medical University, Iwate, Japan
Monday, October 3, 2016 - continued

13:00-15:00  Symposium 2 (parallel session)
Room 1   Aurora
Sepsis and Trauma Associated Coagulopathy

Chairs/Organizers -
Soheyl Bahrami, Ludwig Boltzmann Institute for Experimental & Clinical Traumatology, Vienna, Austria
Toshiaki Iba, Department of Emergency and Disaster Medicine, Juntendo University, Tokyo, Japan

13:00-13:20  1. Circulating Histones and Coagulation Disorder
Toshiaki Iba, Department of Emergency and Disaster Medicine, Juntendo University, Tokyo, Japan

Markus Huber-Lang, Department of Orthopaedic Trauma Surgery, University Hospital of Ulm, Ulm, Germany

13:40-14:00  3. The Role of Fibrinogen in Acute Trauma-induced Coagulopathy: Novel Insights and Therapeutic Options
Heinz Redl, AUVA Trauma Centre Salzburg, Salzburg; Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Vienna, Austria

14:00-14:20  4. The Up-dated Guideline for the Clinical Management of Acute Trauma Hemorrhage and Coagulopathy: The European Perspective
Marc Maegelé, Department of Traumatology, Orthopedic Surgery and Sporttraumatology, Cologne-Merheim Medical Center (CMMC)/ University Witten-Herdecke (Germany), Cologne, Germany

14:20-14:40  5. Coagulation Abnormality During Sepsis and Acute Pancreatitis in Aged Animals
Hiroshi Saito, Department of Surgery, University of Kentucky, Lexington, KY, USA

14:40-15:00  6. Experimentally Approaching the Trauma-induced Coagulopathy
Wenjun Martini, Hemostasis – Damage Control Resuscitation, US Army Institute of Surgical Research, Fort Sam Houston, TX, USA

13:00-14:40  Symposium 4 (parallel session)
Room 2   Cynthia / North
Global Burden of Sepsis

Chairs/Organizers -
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

13:00-13:20  1. Current Situation of Diagnosis and Treatment of Sepsis in Japan
Hiroyasu Ishikura, Department of Emergency and Critical Care Medicine, Faculty of Medicine, Fukuoka University, Fukuoka, Japan

13:20-13:40  2. The Impact of Sepsis in USA
Philip A. Efron, University of Florida, Gainesville, FL, USA

13:40-14:00  3. Sepsis in Developing Countries
Reinaldo Salomao, Infectious Diseases / Hospital São Paulo, Escola Paulista de Medicina, Universidade Federal de São Paulo, São Paulo, Brazil

14:00-14:20  4. Direct Hemoperfusion with Polymyxin-B Immobilized Fiber (PMX-DHP) for Septic Shock Patients in Japan
Toshiaki Ikeda, Division of Critical Care Medicine, Tokyo Medical University, Hachioji Medical Center, Tokyo, Japan

14:20-14:40  5. A Novel Therapeutic Target for Sepsis
Ping Wang, Center for Immunology & Inflammation, The Feinstein Institute for Medical Research, Manhasset, NY, USA
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/Organizers - 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

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

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

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/Organizers - 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

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

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

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

4. Influence of Age on PICS
   Philip A. Efron, University of Florida, Gainesville, FL, USA

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

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

**Symposium 6 (parallel session)**
**Sepsis and Shock: Painstaking Way to Comprehend and Treat Them**

Chairs/Organizers - 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

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

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

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

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

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

**Plenary Lecture 1**

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

**Evening Seminar Sponsored by Coviden Japan Inc.**

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
### Program - as of 08/05/16 - subject to change

**Tuesday, October 4, 2016**

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<tr>
<th>Time</th>
<th>Session / Organizer</th>
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<tbody>
<tr>
<td>8:30-10:30</td>
<td>Symposium 7 Sponsored by Asahi Kasei ZOLL Medical Corporation (parallel session)</td>
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<tr>
<td>Room 1</td>
<td>Pathophysiology and Therapeutic Approach of Post-Cardiac Arrest Syndrome</td>
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<tr>
<td>Aurora</td>
<td>Chairs/Organizers - Clifton W. Callaway, Department of Emergency Medicine, University of Pittsburgh, Pittsburgh, PA, USA Mayuki Aibiki, Emergency and Critical Care Medicine, Ehime University Graduate School of Medicine, Ehime, Japan</td>
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<tr>
<td>8:30-9:00</td>
<td>1. <strong>Keynote</strong> - Post-Cardiac Arrest Syndrome: The New Science</td>
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<td>Robert W. Neumar, Department of Emergency Medicine, University of Michigan Medical School, Ann Arbor, MI, USA; International Liaison Committee on Resuscitation</td>
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<tr>
<td>9:00-9:15</td>
<td>2. Molecular Mechanisms of Ischemic Brain Damage</td>
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<td>Hiroyuki Uchino, Department of Anesthesiology, Tokyo Medical University, Tokyo, Japan</td>
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<tr>
<td>9:15-9:30</td>
<td>3. Post-cardiac Arrest Brain Injury</td>
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<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>
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<td>Shoji Kawakami, Department of Cardiovascular Medicine, National Cerebral and Cardiovascular Center, Osaka, Japan</td>
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<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>
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<td>Masafumi Kitakaze, Department of Clinical Medicine and Development, National Cerebral and Cardiovascular Center, Osaka, Japan</td>
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<tr>
<td>10:00-10:30</td>
<td>Time for Questions and Answers</td>
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<th>Time</th>
<th>Session / Organizer</th>
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<tr>
<td>8:30-9:45</td>
<td>Oral Session 1 (parallel session)</td>
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<tr>
<td>Room 2</td>
<td>O1-1–O1-5</td>
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<td>Cynthia / North</td>
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<tr>
<td>9:45-11:00</td>
<td>Oral Session 2 (parallel session)</td>
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<tr>
<td>Room 2</td>
<td>O2-1–O2-5</td>
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<td>Cynthia / North</td>
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### Symposium 8 Sponsored by Baxter Limited (parallel session)
**Blood Purification and ECMO for Sepsis and Septic Shock**

Chairs/Organizers - 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

**Room 1**

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

10:50-11:10
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

11:30-11:50
4. **Immunomodulating Blood Purification System in Sepsis and Septic Shock**
   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

**Room 2**

**Oral Session 3 (parallel session)**
O3-1–O3-6
**Wednesday, October 5, 2016**

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<tr>
<th>Time</th>
<th>Session/Room</th>
<th>Details</th>
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<tr>
<td>9:00-10:45</td>
<td>Oral Session 4 (parallel session)</td>
<td>Room 1 Aurora O4-1-O4-7</td>
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<tr>
<td>9:00-10:45</td>
<td>Oral Session 5 (parallel session)</td>
<td>Room 2 Cynthia / North O5-1-O5-7</td>
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<tr>
<td>9:00-10:24</td>
<td>Poster Sessions (parallel session)</td>
<td>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)</td>
</tr>
<tr>
<td>10:55-11:55</td>
<td>Plenary Lecture 2</td>
<td>Room 1 Aurora  Chair - Timothy G. Buchman, Critical Care Center, Emory University School of Medicine, Atlanta, GA, USA Molecular Foundations of Bioelectronic Medicine <strong>Kevin J. Tracey</strong>, The Feinstein Institute for Medical Research, Manhasset, NY, USA</td>
</tr>
<tr>
<td>12:05-13:05</td>
<td>Lunch Seminar 2 Sponsored by Toray Industries, Inc. / Toray Medical Co., Ltd.</td>
<td>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 <strong>Kent Doi</strong>, Department of Emergency and Critical Care Medicine, The University of Tokyo, Tokyo, Japan</td>
</tr>
<tr>
<td>12:05-13:05</td>
<td>Lunch Seminar 3</td>
<td>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 <strong>Koji Eto</strong>, 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</td>
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### Wednesday, October 5, 2016 - continued

**13:15-15:15**  
*Symposium 9 (parallel session)*  
**Room 1**  
**Aurora**

* Immunopathology of Traumatic Brain Injury  
  
Chairs/Organizers -  
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

1. **Alcohol-Neuromimmune Interactions in 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

2. **Traumatic Brain Injury Induces Apoptosis and Exhaustion of T Cells with Increased Mortality after Sepsis**  
   Shigeaki Inoue, Tokai University School of Medicine, Kanagawa, Japan

3. **The Role of Innate Immunity in the Traumatic Brain Injury-induced Immune Suppression Syndrome**  
   Steven J. Schwulst, Department of Surgery, Northwestern University, Chicago, IL, USA

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

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

5. **Monitoring and Treatment Strategies for Physiopathological Responses in Severe TBI: A Primary to Cuaternary Injury Approach**  
   Andres Mariano Rubiano Escobar, Department of Neurosurgery, Neuroscience Research Institute, El Bosque University, Bogota, Colombia

6. **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

7. **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
### Symposium 11 (parallel session)

**Background Mechanisms of Major Surgery-induced Septic Complications**

**Chairs/Organizers**
- 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

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>13:15-13:30</td>
<td>Surgery Induced Septic Complications in Myanmar: A Single Center Experience</td>
<td>Kyaw Htet, Department of GI and HBP Surgery, No. 2 Defence Services General Hospital, Nay Pyi Taw, Myanmar</td>
</tr>
<tr>
<td>13:30-13:45</td>
<td>Selective Management of Unexpected Complications by Delayed Surgical Management of Oesophageal Perforation and Therapeutic Endoscopy</td>
<td>Sirikan Limpakan (Yamada), Division Chief of Gastrointestinal Surgery and Endoscopy, Department of Surgery, Chiang Mai University, Chiang Mai, Thailand</td>
</tr>
<tr>
<td>13:45-14:00</td>
<td>Chemokine-chemokine Receptor Network and Esophagectomy for Esophageal Squamous Cell Carcinoma</td>
<td>Hiroya Takeuchi, Department of Surgery, Keio University School of Medicine, Tokyo, Japan</td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>Immunological Evaluation of the Postoperative Complications after Esophagectomy</td>
<td>Hironori Tsujimoto, Department of Surgery, National Defense Medical College, Saitama, Japan</td>
</tr>
<tr>
<td>14:15-14:30</td>
<td>The Predictive Role of Lipid Mediators for Postoperative Complications after Gastrointestinal Surgery</td>
<td>Akihisa Matsuda, Department of Surgery, Nippon Medical School Chiba Hokusoh Hospital, Chiba, Japan</td>
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<tr>
<td>14:30-14:45</td>
<td>Background of Major Hepato-biliary-pancreatic Surgery-induced Sepsis</td>
<td>Yu Katayose, Department of Surgery, Tohoku Rosai Hospital, Miyagi, Japan</td>
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<tr>
<td>14:45-15:00</td>
<td>Early Detection and Treatment for Postoperative Liver Failure Based on the Mechanistical Insights</td>
<td>Itaru Endo, Department of Gastroenterological Surgery, Yokohama City University School of Medicine, Kanagawa, Japan</td>
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<tr>
<td>15:00-15:15</td>
<td>Relationship Between Surgical Stress Induced Hyperglycemia and Septic Complications: What Is Optimal Perioperative Glycemic Control?</td>
<td>Kazuhiro Hanazaki, Department of Surgery, Kochi Medical School, Kochi, Japan</td>
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### Symposium 10 (parallel session)

**Room 1**

**Aurora**

Chairs/Organizers -
Craig Coopersmith, Emory University, Atlanta, GA, USA
Joji Kotani, Department of Emergency, Disaster and Critical Care Medicine, Hyogo College of Medicine, Hyogo, Japan

#### 15:30-17:30

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
<th>Institution(s)</th>
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<tbody>
<tr>
<td>15:30-15:54</td>
<td><strong>1. Gut Epithelial Integrity in Sepsis</strong></td>
<td>Craig Coopersmith</td>
<td>Emory University, Atlanta, GA, USA</td>
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<tr>
<td>15:54-16:18</td>
<td><strong>2. Nutrition Management of Critically Ill Patients: Evidences and Practice</strong></td>
<td>Joji Kotani</td>
<td>Department of Emergency, Disaster and Critical Care Medicine, Hyogo College of Medicine, Hyogo, Japan</td>
</tr>
<tr>
<td>16:18-16:42</td>
<td><strong>3. Dynamic Changes of Gut Microbiota in Critically Ill Patients</strong></td>
<td>Kentaro Shimizu</td>
<td>Department of Traumatology and Acute Critical Medicine, Osaka University Graduate School of Medicine, Osaka, Japan</td>
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<tr>
<td>16:42-17:06</td>
<td><strong>4. Application of Therapeutic Medical Gas for Bowel Dysfunction</strong></td>
<td>Atsunori Nakao</td>
<td>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>
<td>17:06-17:30</td>
<td><strong>5. Toll-like Receptor Stimulation Reverses Antibiotic-induced Gut Defense Impairment</strong></td>
<td>Lee-Wei Chen</td>
<td>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 08/05/16 - subject to change

Wednesday, October 5, 2016 - continued

15:30-17:30  
Room 2  
Symposium 12 (parallel session)  
Microcirculation and Endothelial Damage in Sepsis and Shock

Chairs/Organizers -  
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

15:30-15:50  
1. The potential of Near-infrared Spectroscopy As an Oxygenation Index of Pivotal Organs and Tissue Oxygenation in Critically Ill Patients  
Yasuyuki Kakihana, Department of Emergency and Intensive Care Medicine, Kagoshima University, Kagoshima, Japan

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

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

16:30-16:50  
4. Integrin-mediated Cross Talk Between Coagulation and Inflammation  
Motomu Shimaoka, Mie University Graduate School of Medicine, Mie, Japan

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

17:10-17:30  
6. Glycocalyx, 'Missing' Link Between Endothelium and Microcirculation  
Christa Boer, Department of Anesthesiology, VU University Medical Center, Amsterdam, The Netherlands