XVI. CONGRESS OF THE EUROPEAN SHOCK SOCIETY
„Improvement in care by translational exchange“

September 24 – 26, 2015
www.ess-cologne2015.de

M. Maegele & E. Neugebauer

Final Program

in conjunction with the
14th INTERNATIONAL CONFERENCE ON COMPLEX ACUTE ILLNESS
September 25 – 27, 2015
www.scai-med.org

Cologne, Germany
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Timelines

Aug. 14th, 2015   End of Early Bird Registration

Sept. 24th, 2015  Congress opening ESS 2015

Sept. 25th, 2015  Congress opening ICCAI 2015

Sept. 26th, 2015  Joint Meeting ESS & ICCAI

Congress homepages:

www.ess-cologne2015.de
&
www.iccai.org
„Improvement in care by translational exchange“

Welcome

On behalf of the European Shock Society (ESS) we cordially invite and welcome you to join us for the XVI. Congress of the European Shock Society in Cologne. This Congress will be held in conjunction with the 14th International Conference on Complexity in Acute Illness (ICCAI). The ESS was founded in 1983 and, together with five other shock societies, forms the International Federation of Shock Societies (IFSS). ICCAI is the 14th annual Congress of the Society for Complex Acute Illness (SCAI).

After our successful International Congress of the IFSS in 2008, also together with SCAI, it is now for the second time that both societies decided to hold their (bi)annual meeting together as a joint meeting in the beautiful city of Cologne. In appreciating the tight links in scientific content, aims and work between both societies this Congress will again serve as an optimal platform for high level multidisciplinary scientific exchange and innovation. Shock and Critical Illness are both the result of interaction of complex physiology, complex environment and even more complex and thus difficult decision making. The European Shock Society hosts outstanding epidemiologists, clinicians and basic scientists while ICCAI gathers highly recognized mathematicians, engineers, system biologists, clinicians, modelers and partners from the industry to share the most recent advances in filling translational gaps between the triangle of bench, silicon and bedside for overall improved patient care and outcome. Our dedicated congress topic being “Improvement in care by translational exchange” perfectly matches with this aim.

The Congress is unique in its approach and setting and will be considered as among the premier scientific events 2015 for clinicians and researchers active in the field of trauma, shock and sepsis, presenting state of the art and breaking through research. We are looking forward to share these advancements with innovative partners and sponsors from the industry for translation into products and practice.

Important and novel scientific developments will be shared during plenary sessions, including the European New Investigator Award Competition (ENIAC) session, workshops, oral and poster presentations. The scientific program will be extended by focus sessions organized in collaboration with our partners from SepNET, INTRN (International Trauma Research Network), THOR (Trauma Hemostasis & Oxygenation Research Network), ESTES (European Society for Trauma and Emergency Surgery), as well EU-FP7-funded CENTER-TBI (Collaborative European NeuroTrauma Effectiveness Research in TBI) and TACTIC (Targeted Action to Cure Trauma Induced Coagulopathy) research networks. We are expecting more than 400 international participants and experts from both sides of the Atlantic Ocean and around the globe.

We should, of course, not forget our social events, such as a trip to the wine-growers of Marienthal (a former monastery) at the river Ahr including a hiking trip and a traditional “Kölsch”-evening in a local historic brewhouse.

A warm welcome to Cologne!

Prof. Dr. Edmund A.M. Neugebauer, PhD  
ESS President

Prof. Dr. Marc Maegele, MD  
Congress President
General information

Congress President
Marc Maegle, MD, Professor, Cologne-Merheim Medical Center (CMMC), Department of Trauma and Orthopedic Surgery, Institute for Research in Operative Medicine (IFOM), Witten/Herdecke University, Cologne, Germany

ESS President
Edmund A. M. Neugebauer, PhD, Senior Professor (Witten/Herdecke University) and former Chair of Surgical Research and Director of the Institute for Research in Operative Medicine (IFOM), Witten/Herdecke University, Cologne, Germany

SCAI President
Andriy Batchinsky, MD, Professor, Research Scientist at the Multiorgan Support and Organ Preservation, Task Area, U.S. Army Institute of Surgical Research, Battlefield Health and Trauma Research Institute and Principal Investigator, The Geneva Foundation, Associate professor of Surgery and Anesthesiology (Adj.) University of Texas Health Science Center at San Antonio, USA

International Program Committee
Chair: M. Maegle
European Shock Society (ESS)  S. Bahrami, I. Bauer, J.M. Cavaillon, M. Huber-Lang, E. A. M. Neugebauer

International Advisory Board
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*SCAI
General information ESS
The primary objective of the European Shock Society is to advance understanding of the pathophysiology and to improve treatment of shock, trauma and sepsis and/or allied disciplines.

The afore mentioned shall be achieved by promoting basic and clinical sciences and encouraging the exchange of knowledge and ideas via scientific meetings and conferences, newsletters and/or personal communication among ESS members and beyond. Additional aspects include professional education and mentoring of the young investigators in the field of shock, trauma, and sepsis.

General information SCAI
The Society for Complex Acute Illness (SCAI) is the host of this international congress.

Inflammation and organ dysfunction that accompany trauma and sepsis are complex, multi-focal problems. Enormous amount of money, both public and private, have been spent on research and clinical care for this constellation of diseases. Though exciting laboratory breakthroughs derived from reductionist approaches await translation to the clinic, few therapeutic options are available today. New paradigms are needed to truly impact care for acute illness.

SCAI was formed based upon the passionate belief that complex systems approaches, involving modeling, simulation, systems biology, chaos theory, and network theory can augment the classical, hypothesis-driven approach that has largely failed to stem the tide of critical illness.

Collaborative Networks
• SepNET (Sepsis Network)
• Surviving Sepsis Campaign (SSC)
• INTRN (International Trauma Research Network)
• THOR (Trauma Hemostasis & Oxygenation Research Network)
• ESTES (European Society for Trauma and Emergency Surgery)
• QOLIBRI (Quality of Life after Brain Injury)
• CENTER-TBI (Collaborative European NeuroTrauma Effectiveness Research in TBI)
• TACTIC (Targeted Action to Cure Trauma Induced Coagulopathy)
• „Stopp the bleeding campaign“ ABC Advanced Bleeding Care
• Patient Blood Management (PBM)

Collaborative Scientific Societies
• ISSF International Federation of Shock Societies
• Society of Shock Studies of Russia
• US Shock Society
• Chinese Shock Society
• Japanese Shock Society

Local Organizing Committee
M. Maegle, E. Neugebauer, J. Kienzle

Scientific Secretariat
Phone +49 (0) 221 570 85 54-3
E-Mail science@ess-cologne2015.de

Congress homepage
www.ess-cologne2015.de
www.iccai.org
## Program Overview

| Thursday  
| Sept. 24, 2015 | Friday  
| Sept. 25, 2015 | Saturday  
| Sept. 26, 2015 | Sunday  
| Sept. 27, 2015 |
| --- | --- | --- | --- |
| 7:00 | 7:00 ESS Breakfast | ESS Breakfast Poster B | ESS V: Selected best poster presentations |
| 7:30 | | | |
| 8:00 | ESS I: Sepsis and Septic Shock | ESS meets ICCAI VI: Open Discussion and Consensus Recommendations: „Precision Medicine: Just big data, or do models have a role? | |
| 8:30 | Coffee break | Lunch Symposium | |
| 9:00 | Welcome and Opening | ICCAI V: Selected best poster presentations | |
| 9:30 | ESS I: Sepsis and Septic Shock | Lunch Symposium | |
| 10:00 | ESS I: Sepsis and Septic Shock | Lunch Symposium | |
| 10:30 | Coffee break | ICCAI VI: Open Discussion and Consensus Recommendations: „Precision Medicine: Just big data, or do models have a role? | |
| 11:00 | Coffee break | | |
| 11:30 | ESS II: German „Network Trauma Research” | | |
| 12:00 | ESS General Assembly | Dinner Symposium | |
| 12:30 | Lunch break | | |
| 1:00 | ESS III: Trauma Hemorrhage and Hemorrhagic Shock | | |
| 1:30 | ESS III: Trauma Hemorrhage and Hemorrhagic Shock | | |
| 2:00 | Trip to the wine-growers of Marienthal at the river Ahr | | |
| 2:30 | Trip to the wine-growers of Marienthal at the river Ahr | | |
| 3:00 | Trip to the wine-growers of Marienthal at the river Ahr | | |
| 3:30 | Trip to the wine-growers of Marienthal at the river Ahr | | |
| 4:00 | 4:00 - 5:15 ESS - ENIAC | | |
| 4:30 | 4:00 - 5:15 ESS - ENIAC | | |
| 5:00 | 4:00 - 5:15 ESS - ENIAC | | |
| 5:30 | 4:00 - 5:15 ESS - ENIAC | | |
| 6:00 | Dinner Symposium | | |
| 6:30 | Welcome Reception & Junior Mixer | | |
| 7:00 | Welcome Reception & Junior Mixer | | |

**ESS**

- ESS I: Sepsis and Septic Shock
- ESS II: German „Network Trauma Research”
- ESS III: Trauma Hemorrhage and Hemorrhagic Shock
- ESS IV: ESS and Friends
- ESS V: Clinical Trial Design and Outcomes
- ESS VI: Danger Signaling in Trauma and Critical Care Medicine
- ESS VII: Animal Model to Patient Translation

**ICCAI**

- ICCAI I: Diagnosis and Realtime Monitoring
- ICCAI II: Critical Illness and Critical State
- ICCAI III: Translational Systems Biology of Inflammation: Focus on TBI
- ICCAI IV: Applications of Mechanistic Modeling Approaches
- ICCAI V: Selected best poster presentations
- ICCAI VI: Open Discussion and Consensus Recommendations: „Precision Medicine: Just big data, or do models have a role?“
### Welcome and Opening

**9:00**  
E. Neugebauer, ESS-President & M. Maegle, Congress-President

### ESS Session I: Sepsis and Septic Shock

**Chair:** M. Bauer (Jena, Germany), H. Redl (Vienna, Austria)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:10</td>
<td>Sepsis: Trends in epidemiology, definition and diagnosis</td>
<td>A. Scherag, Jena, Germany</td>
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<tr>
<td>09:30</td>
<td>The role of the pathogen: Staphylococcus aureus blood stream infections</td>
<td>A. Kaasch, Cologne, Germany</td>
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<tr>
<td>09:50</td>
<td>The role of the host: Evolving concepts from resistance to tolerance</td>
<td>M. Bauer, Jena, Germany</td>
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<tr>
<td>10:10</td>
<td>SEP-3: Nitric oxide and metabolic patterns in early onset of severe sepsis or trauma</td>
<td>A. Kozlov, Vienna, Austria</td>
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<tr>
<td>10:20</td>
<td>SEP-7: Endothelial barrier injury is directly related to kidney dysfunction in resuscitated murine septic shock</td>
<td>F. Zink, Ulm, Germany</td>
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<tr>
<td>10:30</td>
<td>SEP-10: Complement alters cardiac function during sepsis</td>
<td>M. Kalbitz, Ulm, Germany</td>
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<tr>
<td>10:40</td>
<td>SEP-15: A flow model to study lipopolysaccharide-induced endothelial activation and to assess the effect of cytokine modulation</td>
<td>T. Eichhorn, Krems, Austria</td>
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<td>10:50</td>
<td>SEP-16: Responses of the hematopoetic stem and progenitor cell compartment during acute phase of mouse CLP sepsis depend on its severity and outcome</td>
<td>T. Skirecki, Warsaw, Poland</td>
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### ESS Session II: German „Network Trauma Research“

**Chair:** M. Huber-Lang (Ulm, Germany), S.B. Flohé (Essen, Germany)

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<tr>
<th>Time</th>
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<th>Location</th>
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<tbody>
<tr>
<td>11:30</td>
<td>German „Network Trauma Research“: Why? Who? What?</td>
<td>M. Huber-Lang, Ulm, Germany</td>
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<tr>
<td>11:50</td>
<td>Porcine polytrauma models: Do they simulate the clinical setting?</td>
<td>F. Hildebrand, Aachen, Germany</td>
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<tr>
<td>12:00</td>
<td>Long-term model of polytrauma in pigs: First results of a translational project of the “Network Trauma Research”</td>
<td>R. Pfeifer, Aachen, Germany</td>
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<tr>
<td>12:10</td>
<td>The inflammatory response after polytrauma: What is new?</td>
<td>M. van Griensven, Munich, Germany</td>
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<tr>
<td>12:20</td>
<td>Role of ethanol on the danger response in polytrauma</td>
<td>B. Relja, Frankfurt, Germany</td>
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### ESS Session III: Trauma Hemorrhage / Hemorrhagic Shock*

**Chair:** C. Schlimp (Vienna, Austria), B. Bouillon (Cologne, Germany)

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<tr>
<th>Time</th>
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<th>Location</th>
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<tbody>
<tr>
<td>01:50</td>
<td>Platelet function in trauma hemorrhage</td>
<td>C. Schlimp, Vienna, Austria</td>
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<tr>
<td>02:10</td>
<td>The THOR network’s mission to improve prehospital care of hemorrhagic shock</td>
<td>P. Thompson, Nottingham, UK</td>
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<tr>
<td>02:30</td>
<td>HEM-1: Functional capacity of reconstituted blood in 1:1:1 versus 3:1:1 ratios: A thrombelastometry study</td>
<td>A. Driessen, Cologne, Germany</td>
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<td>02:40</td>
<td>T-5: Patterns of multi-organ dysfunction in severely injured patients with haemorrhage</td>
<td>J. Shepherd, London, U.K.</td>
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<td>02:50</td>
<td>HEM-4: Thrombin generation potential declines during trauma hemorrhage despite hemostatic resuscitation</td>
<td>D. Frith, London, U.K.</td>
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<tr>
<td>03:00</td>
<td>HEM-6: Analysis of rat plasma peptidome in hemorrhagic shock</td>
<td>F. Aletti, Milan, Italy</td>
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<tr>
<td>03:10</td>
<td>HEM-9: Formation of leukocyte-platelet aggregates is associated with impaired blood clot firmness: Ex-vivo evidence</td>
<td>J. Zipperle, Vienna, Austria</td>
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<tr>
<td>03:20</td>
<td>HEM-14: Effects of hyperoxia and mild therapeutic hypothermia during resuscitation from porcine hemorrhagic shock</td>
<td>S. Hafner, Ulm, Germany</td>
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*Kindly supported by CSL Behring

**Biotherapies for Life™**
**ESS: European New Investigator Award Competition (ENIAC)**
Chair: J.M. Cavaillon (Paris, France), E. Neugebauer (Cologne, Germany)

10 minute presentations by the candidates followed by Q&A by a panel of five judges. In alphabetical order:

- **SEP-9**: The cardiac dysfunction caused by sepsis in animals with chronic kidney disease is attenuated by inhibiting IκB kinase
  (J. Chen, Queen Mary University of London, William Harvey Research Institute, London, UK)
- **SEP-14**: Complement changes the pH balance during sepsis
  (S. Denk, Department of Orthopedic Trauma, Hand, Plastic and Reconstruction Surgery, University Hospital Ulm, Germany)
- **HEM-2**: Beneficial therapeutic effect of an apoptotic peripheral blood mononuclear cells secretome (APOSEC) supplemented resuscitation after hemorrhagic traumatic shock in rats
  (C. Penzenstadler, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, AUVA, Vienna, Austria)
- **SEP-11**: Anti-ROS treatment by specific mitochondria-targeted antioxidants SkQ1 and mitotempo exacerbate mortality in the acute murine polymicrobial sepsis
  (P. Rademann, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, AUVA, Vienna, Austria)
- **SEP-4**: A novel role of chemokine receptor CXCR4 in the development of immunosuppression during polymicrobial sepsis: Impact on dendritic cell differentiation
  (A. Smirnov, Department of Trauma Surgery, Surgical Research, University Hospital Essen, Germany)

**ESS Poster Session A: Sepsis, Hemorrhage, Outcome**
Chair: M. Huber-Lang (Ulm, Germany), S. Bahrami (Vienna, Austria)

**Welcome Reception & Junior Mixer**
ESS Session IV: ESS and Friends
Chair: S. Bahrami (Vienna, Austria)
I. Bauer (Duesseldorf, Germany)
08:00 Why compartmentalization should be taken into consideration for therapeutic strategies (J.M. Cavaillon, Paris, France: ESS)
08:15 Polytrauma and alcohol: Experimental and clinical evidence for different effects of acute and chronic alcohol consumption on posttraumatic course (I. Marzi, Frankfurt, Germany: ECTES / ESTES)
08:30 Cardiovascular dysfunction and brain death (J. Charpentier, Paris, France: EDTCO)
08:45 Surviving Sepsis Campaign (H. Gerlach, Berlin, Germany: SSC)
09:00 Endothelial hyperpermeability and infusion in shock (H. Hirasawa, Chuo Chiba, Japan: IFSS)

ICCAI Session I: Diagnosis and Realtime Monitoring
Chair: M. Csete (Pasadena, USA)
08:00 Real time monitoring of heart rate complexity in the ICU using the Aesculon Critical Care Monitor (L. Cancio, San Antonio, USA)
08:20 Advanced analysis of arterial waveform for estimation of cardiac function (N. Pahlevan, Pasadena, USA)
08:40 Advanced analysis of EKG for diagnosis of acute MI (S. Chien, Pasadena, USA)
09:00 Sepsis detection in clinical operational databases (V. Herasevich, Rochester, USA)
09:20 Multivariable signatures of illness in physiological monitoring data (T. Moss, Charlottesville, USA)

ESS meets ICCAI Session A: Novel Perspectives and Modeling Approaches in Traumatic Brain Injury (TBI)
Chair: E. Neugebauer (Cologne, Germany)
Y. Vodovoz (Pittsburgh, USA)
10:00 Priorities in TBI research (O. Sakowitz, Heidelberg, Germany)
10:30 Comparative effectiveness research in TBI: The CENTER TBI Project (A. Maas, Edegem, Belgium)
11:00 Imaging and functional brain tests for TBI (M. Csete, Pasadena, USA)
11:30 Modeling in TBI (M. Cohen, San Francisco, USA)

09:30am - 10:00am Coffee break

10:00pm -12:00pm / Room Nuernberg
Workshop: Thromboelastometry-guided management of trauma-induced coagulopathy*
1. How to work with a ROTEM trauma-algorithm
2. Case discussions
3. Hands-on workshop

01:30pm: Trip to the wine-growers of Marienthal at the river Ahr
Walk through the vineyards - Wine tasting & local food - ENIAC Ceremony

*Kindly supported by tem®
07:00am – 08:15am / Room Bremen

**ESS Breakfast Poster Session B: Inflammation, Shock, Trauma**

**Chair:** I. Bauer (Duesseldorf, Germany), A. Kozlov (Vienna, Austria)

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**ESS meets ICCAI Session B: Current Therapies for Single- and Multiorgan Failure**

**Chair:** A. Batchinsky (San Antonio, USA), L. Cancio (San Antonio, USA)

- 08:15 Minimally invasive scalable modular extracorporeal life support for critically ill: A requirement-driven intervention platform (A. Batchinsky, San Antonio, USA)
- 08:35 Treatment of sepsis in the ICU using modern blood purification techniques (C. Krenn, Vienna, Austria)
- 08:55 High frequency ventilation to avoid and treat ARDS in neonates and adults (D. Null, San Francisco, USA)
- 09:15 Lactic acid enhanced CO2 removal (V. Scaravilli, Monza, Italy)
- 09:35 Renal support for the difficult burn patient (M. K. Chung, San Antonio, USA)
- 09:55 Multiorgan support with a multidisciplinary team (L. Cancio, San Antonio, USA)

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**ESS Session V: Clinical Trial Design and Outcomes**

**Chair:** E. Neugebauer (Cologne, Germany), I. Marzi (Frankfurt a.M., Germany)

- 11:00 Clinical trial design (I. Roberts, London, U.K.)
- 11:30 In-silico-modelling of clinical trials (S. Chang, Pittsburgh, USA)
- 12:00 Multidimensional outcome in patients after traumatic brain injury (N. von Steinbüchel-Rheinwall, Goettingen, Germany)
- 12:30 TOP-ART: Translating shock research from bench to bedside (C. Thiemann, London, U.K.)

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**Room Hannover**

**10:15 - 10:45**

**ESA Space Medicine - „Doc, we have a problem“ - Volker Damann (European Space Agency, Cologne, Germany)**

**Room Cologne**

**10:45am - 11:00am Coffee break**

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**ICCAI Session II: Critical Illness and Critical State**

**Chair:** C. Krenn (Vienna, Austria), J. Cannon (San Antonio, USA)

- 11:00 Updates from Critical Care Medicine (T. Buchmann, Atlanta, USA)
- 11:20 Updates from Journal of Critical Care (P. Lumb, Los Angeles, USA)
- 11:40 Coagulation disturbances in trauma (M. Cohen, San Francisco, USA)
- 12:00 Prediction of cardiovascular collapse for early ECMO (J. Blum, New York, USA)
- 12:20 Extracorporeal life support: Evidence to intervene earlier? (J. Cannon, San Antonio, USA)
- 12:40 Management of hemorrhage: What should be considered at the bedside? (J. Fazakas, Budapest, Hungary)

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**Saturday, Sept. 26, 2015**

**Room Hannover**

**Lunch-Symposium:**

**Role of fibrinogen in trauma hemorrhage and trauma-induced coagulopathy**

**Chair:** W. Stevens (Paris, France)

- 01:00 Preclinical data from the animal lab (W. Martini, San Antonio, USA)
- 01:20 Clinical evidence for supplementation (D. Fries, Insbruck, Austria)
- 01:40 Current guideline recommendation (O. Grottke, Aachen, Germany)

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*Kindly supported by*
Final Program

Room Hannover

ICCAI Session III:
Translational Systems Biology of Inflammation: Focus on TBI
Chair: M. Csete (Pasadena, USA)
T. Buchman (Atlanta, USA)
02:00 Biomarkers in TBI
(A. Büki, Pécs, Hungary)
02:30 Modeling of inflammation in TBI
(Y. Vodovotz, Pittsburgh, USA)
03:00 Insights from models of neural circuit dynamics
(S. Sarma, Baltimore, USA)
03:30 From neural models to dynamic control of anesthesia:
Insights from thermodynamics
(W. Haddad, Atlanta, USA)

Room Cologne

ESS Session VI:
Danger Signaling in Trauma and Critical Care Medicine
Chair: W. Junger (Boston, USA), W. Xiao (Boston, USA)
02:00 Genomics of inflammation and injury: Data from the Glue Grand (W. Xiao, Boston, USA)
02:20 Small - Smaller - Smallest: Extracellular vesicles in inflammation (A. Spittler, Vienna, Austria)
02:40 DAMP signaling in trauma and sepsis
(C. Hauser, Boston, USA)
03:00 Purinergic signaling and immune modulation in trauma and sepsis
(W. Junger, Boston, USA)
03:20 T:3: Reciprocal activation of platelets and CD4+ tregs following trauma
(M. Bock, Munich, Germany)
03:30 T:6: Heart fatty acid binding protein (H-FABP) is a biomarker of trauma-induced secondary cardiac injury in a pre-clinical model of trauma-hemorrhage
03:40 T:9: Leukocytes mediate the crosstalk between the complement and coagulation system in polytrauma patients
(R. Wiegner, Ulm, Germany)
03:50 T:10: CD56hi NK cells as novel players in immuno-suppression after polytrauma: Impaired responsiveness to IL-12 causes deficits in the response to Staphylococcus aureus
(S.B. Flohé, Essen, Germany)

ICCAI Session IV:
Applications of Mechanistic Modeling Approaches
Chair: J. Day (Knoxville, USA)
G. Clermont (Pittsburgh, USA)
04:30 The Intelligent Ventilator Project: The role of mathematical models in translating physiological knowledge into clinical practice
(S. Rees, Aalborg, Denmark)
05:00 Understanding sepsis with systems thinking - a problem with biological security?
(G. Smith, Newport, UK)
05:30 Towards quantitative identification of non-observable properties of the heart from standard monitoring data
(S. Zenker, Bonn, Germany)
06:00 Improved handling of insulin resistance using mechanistic modeling: From type 2 diabetes to the ICU
(G. Cedersund, Linköping, Sweden)

ESS Session VII:
Animal Model to Patient Translation
Chair: M. Osuchowski (Vienna, Austria)
P. Rademacher (Ulm, Germany)
04:30 Navigating the post-PNAS matrix with the mouse research ship: A suicide or viable mission?
(M. Osuchowski, Vienna, Austria)
05:00 50 shades of mouse inflammation: Usefulness and caveats of the existing model systems
(R. Vandenbroucke, Gent, Belgium)
05:30 Trauma-sepsis models in rats: Bad, mad, ahead?
(M. Keilbitz, Ulm, Germany)
06:00 Pros and cons of man’s closest non-primate relative: The pig
(P. Rademacher, Ulm, Germany)

Saturday, Sept. 26, 2015

04:00pm -04:30pm Coffee break

07:30pm
„Kölsch“-Evening in a local historic brewhouse
Travel Award & Poster Award Ceremony
ICCAI Session V:
Selected best poster presentation
Chair: S. Zenker (Bonn, Germany)
08:00 Use of the Cardiohelp ECLS System yields high provider satisfaction (B. M. Beely, San Antonio, USA)
08:10 Attractor reconstruction of blood pressure waveforms: A non-biased approach to the early diagnosis of shock
(M. Nandi, London, U.K.)
08:20 Data Integration in a Critical Care Environment (DICE): Tracking a patient in $1/f$ physiologic space
(B. Vandendriessche, Cleveland, USA)
08:30 Mortality prediction model of septic shock patients based on routinely recorded data (M. Carrara, Milan, Italy)
08:40 Data-Driven modeling for precision medicine in pediatric acute liver failure (R. Zamora, Pittsburgh, USA)
08:50 Cardiac arrest induced changes of the heme degradation pathway enzymes in distinct brain regions after two weeks following
insult (J. C. Duvigneau, Vienna, Austria)
09:00 Detection of infection in the intensive care setting based on heart rate time series (J. M. Aerts, Leuven, Belgium)
09:10 Ischemia/reperfusion injury in allotransplantation: Insights from mathematical modeling (J. Day, Knoxville, USA)
09:20 Non-invasive pain assessment using analgesia/nociception index and cardiovascular depth of analgesia in burn ICU patients
(V. Papaioannou, Alexandroupolis, Greece)
09:30 Correlation and cluster analysis of clinical and metabolomics data in combat-related trauma (E. Lusczek, Minneapolis, USA)
09:40 The impact of a unilateral femur fracture on systemic neutrophil activation in pigs (M. Teuben, Utrecht, The Netherlands)
09:50 Discussion, questions, answers

Room Hannover

10:15am - 10:45am Coffee break

ICCAI Session VI:
Open Discussion and Consensus Recommendations:
„Precision Medicine: Just big data, or do models have a role?“
Point - Counter Point:
10:45 G. Clermont (Pittsburgh, USA): Keynote
11:05 M. Cohen (San Francisco, USA): What does “big data” mean for a patient and clinician?
11:25 Y. Vodovotz (Pittsburgh, USA) and S. Zenker (Bonn, Germany): Role of models in patient care
11:45 Open microphone discussion by all participants

12:30pm - 01:30pm Lunch
Award Competitions

1. Poster Awards

Three Poster Awards (first, second and third place certificates) will be given to top presentations. The Poster Award Committee will judge all posters on Thursday, September 24, 2015 and Saturday, September 26, 2015 during the Poster Session. The attendance of presenting authors is necessary during the Poster Sessions. The awardees will be announced at the “Kölsch Evening” on Saturday, September 26, 2015.

2. New Investigator Award in European Shock Research*

Out of all qualifying abstracts submitted by junior scientists*, five top submissions will be selected to the final European New Investigator Award Competition (ENIAC) round at the 2015 ESS Congress in Cologne (September 24-26, 2015). All qualifying abstracts will be scored on merit in a blinded manner by five international expert judges (members of European and/or American Shock Society). The judges will be selected only after abstract submission process has been closed to avoid any conflict of interest. Five finalists will present their work in a ten-minute presentation followed by a short Q&A session with a panel of five judges on Thursday, September 24, 2015. Only the top three places will be ranked according to the total score received. Winner will be recognized with a plaque and a cash award of EUR 600,00. Second place will receive cash award of EUR 400,00 and third place of EUR 200,00. All finalists will receive ENIAC participation certificates and awards at the “Trip to Wine-Growers” on Friday, September 25.

In order to be considered for the European New Investigator Award Competition (ENIAC), applicants must specifically indicate their access to the ENIAC competition at abstract submission. I.e., a letter (pdf) signed by the applicant’s mentor confirming his/her junior status and leading role (must be the first author) in the project must be sent to the scientific secretariat (science@ess-cologne2015.de) TOGETHER with the submitted abstract. We stress that only one original and previously unpublished research should be submitted to ENIAC. All ENIAC applications will be automatically considered for Travel Award (do not submit a separate letter to be considered for Travel Award). Only one abstract per applicant will be accepted. All five ENIAC finalists will automatically receive Travel Award.

3. Travel Awards*

To facilitate high participation of young/new scientists, a total of 10 travel grants of EUR 500,00 will be provided by the European Shock Society to junior* investigators based on scientific merit of the submitted abstract. Travel Award certificates will be awarded at the “Kölsch Evening” on Saturday, September 26, 2015.

In order to be considered for a Travel Award, applicants must specifically indicate their access to the Travel Award evaluation process at abstract submission. I.e., a brief letter from the mentor confirming the participant’s junior status and/or financial need must be sent to the scientific secretariat (science@ess-cologne2015.de) TOGETHER with the submitted abstract. To be considered for Travel Award, the applicant must be the first author on the submitted abstract. Only one abstract per applicant will be accepted.

4. Günther Schlag Award

This award is funded by the Ludwig Boltzmann Institute for Experimental and Critical Traumatology (LBI) in Vienna, Austria in commemoration of the institute’s founder and its first director, Dr. G. Schlag. The Award (EUR 500,00 cash and certificate) is given to an outstanding European junior to mid-level researcher (no higher than Assistant Professor rank) in the field of critical care and shock research. The selection is made by the LBI executive committee based on the merit of the submitted abstract and the candidate’s overall professional development. No separate application is required. The awardee will be announced at the “Trip to Wine-Growers” on Friday, September 25.

* Every person, irrespective of age, with maximum of 5 years of post-doc experience (or equivalent e.g. intern/resident ect.) qualifies as a junior scientist. You do not qualify if you currently hold any type of a Professorship appointment (e.g. Assistant P., University P. ect). Applications received after the deadline will not be considered for awards.
Travel & Accommodation

To Cologne by plane

Within Europe there are numerous non-stop flights directly to Cologne/Bonn Airport (CGN). The most convenient transportation into Cologne City is via train S13 to Cologne Central Station (Köln Hbf.).

Intercontinental flights arrive at Frankfurt Airport (FRA) or at Duesseldorf Airport (DUS). From Duesseldorf Airport take the Regional Railway (RB) or the Intercity Train (IC) to Cologne Central Station (Köln Hbf.) which takes approximately 45 minutes. From Frankfurt Airport take the Intercity Express (ICE) to Cologne Central Station (Köln Hbf.) which takes approximately 1:00 hour.

An alternative route is via London or via Amsterdam to Cologne Airport.

To Cologne by train

German Railways (DB) provide a well developed railway network and modern trains. Cologne Central Station (Köln Hbf.) can be reached easily. German Railways offer a variety of cheap tickets and savings fares via www.bahn.de mostly a few weeks before the journey.

To the congress venue

Leonardo Royal Hotel Cologne
Dürer Str. 287
D-50935 Cologne
Homepage: www.leonardo-hotels.com

The Leonardo Royal Hotel Cologne can be easily reached with either public or privat transport. There are car parking spaces available (with costs) at the hotel. The address is Dürer Str. 287, D-50935 Cologne.

The 7 and 13 tram lines stop at „Dürer Str. / Gürtel“ - Station which is within walking distance to the hotel (350m). The 136 bus line stops at „Kitschburger Straße“ - Station (200m).

Information about fares within Cologne

Cologne Central Station (Köln Hbf.) to the congress venue by taxi is approximately 15,- Euro.
Cologne Airport to venue by taxi is approximately 45,- Euro or go by train from Cologne airport to Cologne Central Station (Köln Hbf.) which is approximately 3,- Euro followed by either tram or taxi.

Accommodation

A block of rooms is reserved for ESS and ICCAI participants at the congress venue Leonardo Royal Hotel Cologne. Please book your room using the keyword “ESS2015/ jottkaa”.

Alternative booking sites at the internet offer hotel rooms with favorable prices.
Registration & Registration Fees

For Online-Registration use the joined Registration of ESS 2015 & ICCAI 2015 at http://ess-cologne2015.de

Early Bird until August 14, 2015 (System changes automatically at Central European Time!)

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* ESS-Members will get a EUR 100,00 price reduction.
** ESS-Members will get a EUR 50,00 price reduction.
*** Registration fee for complete ESS-Congress includes ESS-Membership fee for 2 years. More detailed information about ESS-Membership at http://europeanshocksociety.org/ . If you choose not to become an ESS-Member you are able to refuse during registration.

Student = Every Person with not completed degree. No post-graduates.

Young Investigator = Every person, irrespective of age, with maximum of 5 years of post-doc experience (or equivalent e.g. intern/resident ect.) qualifies as a Young Investigator. You do not qualify if you currently hold any type of a Professorship appointment (e.g. Assistant P., University P. ect).

Accompanying Person: Lunch- and Coffee-Breaks

Organization

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Exhibition, Sponsoring, Registration, Abstracthandling, General Organization
The European Shock Society would like to take this opportunity to thank its official sponsors: