

<b>7:30-16:00</b>	<p><b>Congress registration</b></p> <p><b>Found in Translation: Pathomechanisms of Critical Care Illness</b>  <a href="#">Main Session (AudiMax)</a>                      Chairs: <u>Stefanie Flohe, Germany / Timothy Billiar, USA</u></p> <p>09:00-09:20 Pheno-and endo-typing in the ICU: reality or hype? <i>Matthijs Kox, Netherlands</i></p> <p>09:20-09:40 Polytrauma: are immunomodulatory therapies feasible? <i>Markus Huber-Lang, Germany</i></p> <p>09:40-10:00 It is in the blood: Characterization of the Human Injury Response by Single Cell Omics. <i>Timothy Billiar, USA</i></p> <p>10:00-10:15 Procizumab: a new treatment at the crossroad of circulatory failure? <i>Antoine Herpain, Belgium</i></p> <p>10:15-10:30 Methane revisited: mechanisms &amp; its utility in critical ischemic conditions. <i>Mihaly Boros, Hungary</i></p> <p>10:30-10:45 A smelly choice: protecting revascularized organs with hydrogen sulfide. <i>Alex Dyson, UK</i></p>
<b>10:45-11:15</b>	<p><b>Coffee Break</b></p> <p><b>An Impactful Encounter: Sepsis meets COVID-19</b>  <a href="#">Main Session (AudiMax)</a>                      Chairs: <u>Evangelos J. Giamarellos-Bourboulis, Greece / Jesus Bermejo-Martin, Spain</u></p> <p>11:15-11:20 <i>Opening of ESS (Marcin Osuchowski, ESS/Roland Frank, AUVA)</i></p> <p>11:20-11:40 NK cells under stress: functional reprogramming in sepsis and COVID-19. <i>Stefanie Flohe, Germany</i></p> <p>11:40-12:00 Sepsis-COVID-19: precision medicine crossroads. <i>Evangelos J. Giamarellos-Bourboulis, Greece</i></p> <p>12:00-12:20 Severe COVID-19: a cytokine of viral storm? <i>Jesus Bermejo-Martin, Spain</i></p> <p>12:20-12:40 ECMO as last resort: differences/similarities in COVID-19 and non-C-19 ARDS. <i>Waldemar Gozdzik, Poland</i></p> <p>12:40-13:00 My COVID-19 teacher: what sepsis researchers can learn? <i>Joost Wiersinga, Netherlands</i></p>
<b>13:00-14:00</b>	<p><b>Lunch</b></p>
<b>13:30-14:45</b>	<p><b>Poster Session (Courtyard Poster Area)</b>                      (Organization: <i>Mihaly Boros, Hungary / Jean-Marc Cavillon, France</i>)</p> <p><b>SOMAREALITY – Company Lecture</b>  <a href="#">Main Session (AudiMax)</a>                      Chairs: <u>Johannes Zipperle, Austria / Martin Helan, Czech Republic</u></p> <p>14:45-15:05 The potential of eye-tracking based digital biomarkers for neurological monitoring. <i>Julia Kern, Austria</i></p> <p>15:05-15:15 Q/A (10min)</p>
	<p><b>The End is Only the Beginning: Chronic Consequences of Acute Illness</b>  <a href="#">Parallel Session 1 (AudiMax)</a>                      Chairs: <u>Andreas Barratt-Due, Norway / Marc Jeschke, Canada</u></p> <p>15:15-15:30 Long COVID-19: what we know and what we fear. <i>Andreas Barratt-Due, Norway</i></p> <p>15:30-15:45 Longitudinal PBMC proteomics to understand COVID-19 progression. <i>Reinaldo Salomao, Brazil</i></p> <p>15:45-16:00 A burning need: novel technologies for wound healing. <i>Marc Jeschke, Canada</i></p> <p>16:00-16:15 Long-term sepsis consequences: the immunity in the driver's seat. <i>Charles de Roquetaillade, France</i></p> <p>16:15-16:30 Post-sepsis chronic muscle weakness: mitochondria damage as key culprit. <i>Hiroshi Saito, USA</i></p> <p>16:30-16:45 No way back- the tradeoff of surviving sepsis. <i>Sebastian Weis, Germany</i></p> <p>16:45-16:55 Detailed immunophenotyping of pediatric septic patients - mapping the features of long-lasting immunosuppression. <i>Marcela Hortova-Kohoutkova, Czech Republic (abstract 166)</i></p> <p>16:55-17:05 Role of different biomarkers predicting 90-day mortality in COVID-19 patients according to time since disease onset prior to hospitalization. <i>Tamara Postigo Casado, Spain (abstract 131)</i></p> <p>17:05-17:15 Interleukin-2: A Key Player in Age-related Disparities of Performative Physical Outcomes among Polytraumatized Patients. <i>Lena Reichardt, Germany (abstract 146)</i></p> <p>17:15-17:25 Insufficient heme degradation in macrophages - a factor aggravating post-sepsis complications in diabetes? <i>Catharina Duvigneau, Austria (abstract 156)</i></p>
	<p><b>All Models are Wrong but Some are Useful</b>  <a href="#">Parallel Session 2 (Lecture Hall)</a>                      Chairs: <u>Tomasz Skirecki, Poland / Anna Herminghaus, Germany</u></p> <p>15:15-15:30 Pneumonia 1: Bacterial. <i>Tomasz Skirecki, Poland</i></p> <p>15:30-15:45 Pneumonia 2: COVID-19. <i>Sylvia Knapp, Austria</i></p> <p>15:45-16:00 Abdominal sepsis 1: CLP. <i>Irshad Chaudry, USA</i></p> <p>16:00-16:15 Abdominal sepsis 2: CASP. <i>Anna Herminghaus, Germany</i></p> <p>16:15-16:30 Polytrauma: small and large animals. <i>Borna Relja, Germany</i></p> <p>16:30-16:45 Organs-on-the-Chip: in vitro veritas? <i>Mario Rothbauer, Austria</i></p> <p>16:45-16:55 Enhancing Sepsis and Shock Research: Unravelling Early Dysfunction and Molecular Targets Non-Invasively Through Ultrasound and Photoacoustic Technology. <i>Caroline O'Riordan, UK (abstract 120)</i></p> <p>16:55-17:05 Bruton's tyrosine kinase inhibition attenuates disease progression by reducing renal immune cell invasion in mice with hemolytic-uremic syndrome. <i>Sarah Kröller, Germany (abstract 128)</i></p> <p>17:05-17:15 A porcine model of severe compartment syndrome in the lower extremity. <i>Philipp Thaler, Austria (abstract 171)</i></p> <p>17:15-17:25 Impact of "Early Life Stress" on anesthesia-related systemic alterations. <i>Franziska Muenz, Germany (abstract 111)</i></p>
<b>17:30-18:30</b>	<p><b>Get-together (Uni Wien Courtyard)</b></p>
<b>19:00-22:00</b>	<p><b>Speakers Dinner (12 Apostles Cellar; Sonnenfelsgasse 3, 1010 Vienna; 1.4km, 20min walk)</b></p>

	<p><b>A Light in the Critical Care Tunnel: Improvements in Diagnosis &amp; Therapy</b>  <b>Main Session (AudiMax)</b>  Chairs: <u>Christoph Thiernemann, UK / Andrea Szabo, Hungary</u></p> <p>08:30-08:45 Next Generation Sequencing: sensitive and rapid diagnostics for sepsis. <i>Kai Sohn, Germany</i></p> <p>08:45-09:00 Modern use of old therapies: Activated carbon in sepsis prevention and treatment. <i>Elisaveta Snezhkova, Ukraine</i></p> <p>09:00-09:15 The hepatic PI3K-PKC axis in critically ill: A drugable target to restore liver function. <i>Adrian Press, Germany</i></p> <p>09:15-09:30 Plasma exchange in septic shock: removal or replacement? <i>Sascha David, Switzerland</i></p> <p>09:30-09:45 Endothelial dysfunction: a therapeutic target in sepsis? <i>Steve Kerrigan, Ireland</i></p> <p>09:45-10:00 A real-time action: rapid diagnostics of coagulopathy in polytrauma. <i>Herbert Schöchl, Austria</i></p> <p>10:00-10:15 Freeze-dried plasma in the ER: OctaplasLG® as a new pharmaceutically-licensed resuscitation product. <i>Andrea Heger, Austria</i></p>
<b>10:15-10:45</b>	<p><b>Coffee Break</b></p> <p><b>Keynote lecture</b>  <b>Main Session (AudiMax)</b>  Chairs: <u>Marcin Osuchowski, Austria / Marc Maegele, Germany</u></p> <p>10:45-10:50 Introduction (Marcin Osuchowski)</p> <p>10:50-11:30 From Cancer to Intensive Care Medicine: Must-Learn Lessons (<i>Alberto Mantovani, Italy</i>)</p> <p>11:30-11:45 Q/A</p>
<b>5 min Break</b>	
	<p><b>40 Years of ESS: Reminiscences</b>  <b>Main Session (AudiMax)</b>  Moderators: <u>Marcin Osuchowski, Austria / Borna Relja, Germany</u></p> <p>11:50-12:00 Down-the-Memory-Line. <i>Andrea Szabo, Hungary</i></p> <p>12:00-12:45 Round Table with Past ESS Presidents – Q/A  (Aasen, Bahrami, Brückner, Cavaillon, Goris, Giamarellos-Bourboulis, Neugebauer, Huber-Lang, Thiernemann, Redl)</p>
<b>12:45-13:45</b>	<p><b>Lunch</b></p> <p><b>Rising Stars: European New Investigator Award Competition</b>  <b>Main Session (AudiMax)</b>  (Organization: Sina Coldewey, Germany)  Chairs: <u>Sina Coldewey, Germany / Jan Goris, Belgium</u>  Judges (tentative): J-M. Cavaillon (F), C. Thiernemann (UK), B. Zingarelli (USA), F. Aletti, (IT), I. Marzi (D)</p> <p>13:45-14:00 suPAR combined with qSOFA as a prediction tool at the emergency department to guide early antibiotic treatment: a randomized trial.  <b>Maria Adami, Greece</b> (abstract 142)</p> <p>14:00-14:15 Modelling trauma-related acute kidney injury (TRAKI) reveals a highly complex temporo-spatial pathophysiological response.  <b>Rebecca Halbgebauer, Germany</b> (abstract 150)</p> <p>14:15-14:30 Dexamethasone benefits are partly due to a reduction of thrombogenic risk in critically ill COVID-19 patients.  <b>Naimeh Hashemi, Austria</b> (abstract 165)</p> <p>14:30-14:45 Methane inhalation improves microcirculatory-mitochondrial distress in a large animal model of sepsis.  <b>Atilla Rutai, Hungary</b> (abstract 149)</p> <p>14:45-15:00 An imbalance of the master regulators of metabolism promotes the dysfunction of natural killer cells during human sepsis.  <b>Andre van der Wurff, Germany</b> (abstract 136)</p>
<b>15:00-15:30</b>	<p><b>Coffee Break</b></p> <p><b>Harnessing Coagulopathy in Critical Illness</b>  <b>Parallel Session 1 (AudiMax)</b>  Chairs: <u>Christoph Schlimp, Austria / Athanasios Chalkias, Greece</u></p> <p>15:30-15:45 REBOA: Visceral Ischemia and Reperfusion Coagulopathy. <i>Ernest Moore, USA</i></p> <p>15:45-16:00 Shear stress and endothelial mechanotransduction: hidden pro-coagulopathy pathways in massive trauma. <i>Athanasios Chalkias, Greece</i></p> <p>16:00-16:15 Coagulopathy in the critically ill: lessons learnt from COVID-19. <i>Johannes Gratz, Austria</i></p> <p>16:15-16:30 Cellular modulation and dysregulation of hemostasis in the critically ill. <i>Johannes Zipperle, Austria</i></p> <p>16:30-16:40 Implementation of a point-of-care ROTEM® algorithm for perioperative bleeding in a tertiary academic hospital.  <i>Giacomo Iapichino, Italy</i> (abstract 119)</p> <p>16:40-16:50 Prehospital Pooled Frozen Solvent Detergent Plasma in a Nonhuman Primate Polytrauma Hemorrhage Model.  <i>Alejandra Lorenzen, USA</i> (abstract 124)</p> <p>16:50-17:00 Enhanced platelet activation in patients with COVID-19 pneumonia. <i>Nicky Solomonidi, Greece</i> (abstract 208)</p> <p>17:00-17:10 Multimodal platelet function testing during cardiopulmonary bypass - a pilot study. <i>Roman Hajek, Czech Republic</i> (abstract 123)</p>
	<p><b>Technological Palantir: In silico modeling</b>  <b>Parallel Session 2 (Lecture Hall)</b>  Chairs: <u>Federico Aletti, Italy / Brendon Scicluna, Malta</u></p> <p>15:30-15:45 Deus ex machine - clinical need and remaining challenges. <i>Florian Uhle, Germany</i></p> <p>15:45-16:00 Integrated Analysis of SIRS-Sepsis, Organ Dysfunction, and Mortality: Protein Biomarkers and their Biological Process Importance.  Vicent Ribas-Ripoll, Spain</p> <p>16:00-16:15 Autonomic control in shock: decoupling of heart rate and blood pressure regulation. <i>Federico Aletti, Italy</i></p> <p>16:15-16:30 The Consensus Molecular Endotypes of Sepsis and Septic Shock. <i>Brendon Scicluna, Malta</i></p> <p>16:30-16:40 Blood-based risk assessment for infectious outcomes in polytrauma via machine learning. <i>Tobias Jooss, Germany</i> (abstract 170)</p> <p>16:40-16:50 Pathogenesis-related common gene polymorphism and complementary molecular biomarker concept: a step toward precision medicine of sepsis. <i>Vladimir Pisarev, Russia</i> (abstract 176)</p> <p>16:50-17:00 The combination of CRP and PCT improves the identification and severity stratification of infection in surgical patients.  <i>Amanda de la Fuente, Spain</i> (abstract 147)</p> <p>17:00-17:10 Metabolomic profile in sepsis according to the state of immune activation. <i>Eleftheria Kranidioti, Greece</i> (abstract 202)</p>
<b>18:00-19:00</b>	<p><b>Shock(ing) Organ Concert – Jesuit Church</b> (1.6km/20min walking distance from the congress venue)</p>



	<p><b>Animal-based Research in Critical Care: Reality, Challenges and Solutions</b>  <b>Main Session (AudiMax)</b>  <u>Chairs: Marcin Osuchowski, Austria / Daniel Remick, USA</u>                  08:30-08:45 Animal Research: time to talk! Kirk Leech, UK                  08:45-09:00 The legal reality: regulatory aspects of animal use. <i>Susanne Drechsler, Austria</i>                  09:00-09:15 Hurdles in running a pre-clinical lab: Germany vs the US Perspective. <i>Markus Bosmann, Germany</i>                  09:15-09:30 Preregistration in animal research – Animal welfare and scientific progress. Celine Heintl, Germany                  09:30-09:45 Veterinary research: another solution for clinical translation. <i>Kris Gommeren, Belgium</i>                  09:45-10:00 Mortality as translational endpoint: a must-do or useless redundancy? <i>Christian Braun, Germany</i></p>
<b>10:00-10:30</b>	<p><b>Coffee Break</b></p> <p><b>The Lethal Trauma/ Shock /Sepsis Triad: Where We Are &amp; Where We Go</b>  <b>Main Session (AudiMax)</b>  <u>Chairs: Thomas Hausner, Austria / Roland Frank, Austria</u>                  10:30-10:45 Trauma hemorrhage and shock: novel insights and clinical relevance. <i>Marc Maegele, Germany</i>                  10:45-11:00 Translational Research: Polytrauma-Serum Database Consortium. <i>Ingo Marzi, Germany</i>                  11:00-11:15 The Renin-Angiotensin System in acute lung injury – friend or foe? <i>Roman Ullrich, Austria</i>                  11:15-11:30 The master key: immune system in control of sepsis pathophysiology. <i>Jan Frič, Czech Republic</i>                  11:30-11:45 Cardiovascular dysfunction in sepsis: a clinical perspective. <i>Sina Coldewey, Germany</i>                  11:45-12:00 Vasoplegic shock: time to forget about septic shock? <i>Zsolt Molnar, Hungary</i></p>
<b>5 min Break</b>	
<b>12:05-12:10</b>	<b>Introduction (Herbert Schöchl / Thomas Hausner)</b>
<b>12:10-12:20</b>	<b>Sepsis Patient testimonial: Mr. Dennis Kredler, Belgium</b>
<b>12:20-12:25</b>	<b>Introduction (Herbert Schöchl / Thomas Hausner)</b>
<b>12:25-12:35</b>	<b>Polytrauma Patient testimonial: Mr. Paul Föll, Germany</b>
<b>12:45-13:45</b>	<b>Lunch</b>
<b>13:45-14:45</b>	<p><b>General Assembly ESS (AudiMax)</b></p> <p><b>Exosomes in Critical Illness: Diagnostics, Treatment or both?</b>  <b>Parallel Session 1 (AudiMax)</b>  <u>Chairs: Wolfgang Holnthoner, Austria / Viktoria Weber, Austria</u>                  14:45-15:00 Omnipresent EV species: characteristics &amp; enrichment approaches. <i>Wolfgang Holnthoner, Austria</i>                  15:00-15:15 How extracellular vesicles in body fluids interfere with virus infection and transmission. Janis Müller, Germany                  15:15-15:30 A new frontier: clinical importance of exosomes in sepsis. <i>Barbara Adamik, Poland</i>                  15:30-15:45 Exosomes: an emerging tool for liquid biopsy in sepsis. <i>Basilija Zingarelli, USA</i>                  15:45-16:00 EVs as mediators of immunothrombosis in sepsis &amp; COVID-19. <i>Victoria Weber, Austria</i>                  16:00-16:10 <b>Characterization of circulating tissue factor-bearing extracellular vesicles in COVID-19 provides evidence for platelet-leukocyte aggregate formation. <i>Tanja Eichhorn, Austria (Abstract 109)</i></b>                  16:10-16:20 <b>Unraveling the pathogenic and pro-inflammatory potential of extracellular vesicles secreted by <i>Bacillus cereus</i>. <i>Astrid Laimer-Digruber, Austria (Abstract 110)</i></b>                  16:20-16:30 <b>Red blood cell transfusion-related dynamics of extracellular vesicles in intensive care patients – a prospective subanalysis. <i>Pierre Raeven, Austria (Abstract 117)</i></b>                  16:30-16:40 <b>Functional thromboelastometry: an effective monitoring tool in small rodent models of acute critical care illnesses. <i>Fatemeh Azizian-Farsani, Austria (Abstract 154)</i></b></p> <p><b>It's a No-Brainer: Neuro-Signaling &amp; Pathophysiology</b>  <b>Parallel Session 2 (Lecture Hall)</b>  <u>Chairs: Andrey Kozlov, Austria / Gerhard Fritsch, Austria</u>                  14:45-15:00 Mitochondria: key players of excitotoxicity in brain injury? <i>Andrey Kozlov, Austria</i>                  15:00-15:15 Testing reanimation frontiers: preserving brain/neuronal functionality in prolonged cardiac arrest. <i>Wolfgang Weihs, Austria</i>                  15:15-15:30 The Glasgow Coma Scale: well established, often used but adequate? <i>Martin Winkler, Germany</i>                  15:30-15:45 Septic encephalopathy: a dynamic trajectory from inflammation to neurodegeneration? <i>Antigone Kotsaki, Greece</i>                  15:45-16:00 Rare genetic neurodevelopmental syndromes: all (many) roads lead to neuroinflammation? <i>Ignacio Rubio, Germany</i>                  16:00-16:10 <b>Critical illness polyneuropathy: insights into pathogenesis of a neglected disease. <i>Radoslaw Kanarkowski, Poland (Abstract 218)</i></b>                  16:10-16:20 <b>Is lactate a good or a bad guy for rescuing neurons from glutamate-mediated death? A study in primary cortical cells. <i>Anette Vaglio Garro, Austria (Abstract 158)</i></b>                  16:20-16:30 <b>New TBI-specific blood-based EV biomarker candidates in polytrauma patients. <i>Cora Schindler, Germany (Abstract 154)</i></b>                  16:30-16:40 <b>Do current trauma scores require critical adjustments due to the dynamics of traumatic brain injury? <i>Jason-Alexander Hoerauf, Germany (Abstract 143)</i></b></p>
<b>18:30-24:00</b>	<p><b>sit-in Gala Dinner, Festsaal, City Hall, Vienna</b>                  18:30-19:00 Aperitifs                  19:00-21:00 Dinner                  20:30-21:00 Awards                  21:00-24:00 Party time with live music by Al Capone Band (<a href="https://alcaponeband.at">https://alcaponeband.at</a>)</p>