

International Conference: **Innovation in Translational Science and Surgical and Intensive Care Research**

Special Symposium:
**Research and Medical Care in Ukraine and Around the World in
Times of War and Peace**
31 March 2025 – 03 April 2025
Cliff Lodge



This conference is proudly sponsored by the Autonomous Reanimation and Evacuation Research Institute, a program of record of The Geneva Foundation, a 501(c)3 non-profit research support organization.

The program will cover a wide array of topics in surgical intensive care, including management of severe combined trauma, tourniquet use and management, reconstructive surgery after polytrauma, limb loss, vascular trauma, infection, traumatic brain injury, point of injury- and prehospital life-saving interventions, development of portable, wearable critical care capabilities for out-of-hospital medicine, extracorporeal life support, eCPR, anticoagulation, and all aspects of evacuation and trauma management in combat and civilian settings.

A special focus will be given at the conference to the current medical care in Ukraine and war zones around the world with invited speakers representing each country's military and civilian medical services.

We aim to foster innovative discussions to improve point of injury mortality, reduce mortality, improve care for single and multiorgan failure, and improve point of need medical devices and capabilities.

The conference is also focused on improving warfighter outcomes with innovation in research applied at the bench, in translational studies and at the bedside.

We welcome all in their various roles as clinicians, researchers and innovators to discuss equipment, methods, and care to the most severely injured. We especially welcome those with paradigm-shifting disruptive solutions.



Monday, March 31, 2025

Welcome to Snowbird! We are glad you are here!

All sessions will take place in Room Primrose B with audience participation, no parallel sessions

All meals and breaks will take place in Room Primrose A

Vendor exhibits in Room Primrose A

07:00	08:00	Breakfast / Registration in front of Primrose B
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8:00	10:00	War-Related Injuries in Ukraine: TBI management	
		<i>Moderators: Konstjantyn Gumeniuk, MD and Andriy Batchinsky, MD</i>	
8:00	8:20	Conference opening, introductions, goals of the special symposium and round table meeting of international experts “What keeps me up at night...”	<i>Andriy Batchinsky, MD; San Antonio, TX Conference Chair</i>
8:20	8:40	Lessons Learned from 11 Years of Experience Managing of Severe Combat Neurotrauma at the Metchnikov Hospital in Dnipro, Ukraine.	<i>Andrii Sirkebo, MD; Dnipro, Ukraine (virtual)</i>
8:40	9:00	TBI Management the US Neurosurgeons Perspective: Do we need a doctrinal Change for TBI management in LSCO?	<i>Rocco Armonda, MD; Washington, DC</i>
9:00	9:20	Data that Changes Medical Practice: A Trauma Surgeons Perspective on TBI Management?	<i>John Holcomb, MD; Birmingham, AL</i>
9:20	9:55	Round Table Discussion: 1) Priorities for TBI management during LSCO 2) Priorities for research in TBI management	<i>All faculty and audience discussion</i>

9:55	10:00	Coffee Break
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10:00	12:00	War-related injuries: Data Collection in the DoD Trauma Registry and in Ukraine	
		<i>Moderators: Konstjantyn Gumeniuk, MD and John Holcomb, MD</i>	
10:00	10:20	OEF/OIF: How the DoDTR Changed Practice	<i>Jennifer Gurney, MD; San Antonio, TX</i>
10:20	10:40	Time to Transfusion and Trauma System Performance	<i>Stacy Shackelford, MD; Bethesda, MD</i>
10:40	11:00	Minimum Essential Data Set for a Database	<i>Ian Stewart, MD; Bethesda, MD</i>
11:00	11:20	Nuts and Bolts of a New AREVA Database on War Related Injuries in Ukraine: Progress Report from an Ongoing MTEC Grant	<i>Oleksandr Topachevskyi, PDGip; Kyiv, Ukraine Andriy Batchinsky, MD; San Antonio, TX</i>
11:20	11:40	Next Generation Trauma Registry Improvements	<i>Jonathan Stallings, PhD; San Antonio, TX (virtual)</i>
11:20	11:55	Round Table Discussion: 1) Doctrinal change in Ukraine on creation of military medical database in MOD and MOH 2) Data collection challenges and successes	<i>All faculty and audience discussion</i>

12:00	16:00	Networking Break
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15:00	16:00	Après Ski: Vendor Exhibit Area (refreshments beginning at 15:15)
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16:00	19:00	Innovation in Translational Research and Science	
		<i>Moderators: Lawrence Renna, PhD and Monica Embers, PhD</i>	
16:00	16:20	Biosensors for Combat Injury Management	<i>Conor Evans, PhD; Boston, MA</i>

16:20	16:40	Insight into Translational and Clinical Studies in Wound Healing	<i>Anders Carlsson, PhD; San Antonio, TX</i>
16:40	17:00	Autologous Heterogeneous Skin Construct for the Treatment of Complex and Non-Healing Wounds	<i>Nick Sopko, MD, PhD; Salt Lake City, UT</i>
17:00	17:20	Blood Testing for Multiple Infections: State of Science in the Era of Immuno-dysfunction	<i>Leona Gilbert, PhD; Jyväskylä, Finland</i>
17:20	17:40	Limb Compartment Syndrome and Limb Ischemia: What's in the Diagnostic Pipeline?	<i>Olivier Bataille; Montreal, Quebec</i>
17:40	18:00	Conformational Ligand-Directed Targeting of Calcium-Dependent Receptors in Acute Trauma	<i>Christopher Markosian, PhD; Newark, NJ</i>
18:00	19:00	The Unanswered Global Infection Disaster of Our Time: Lyme Disease and Tick-Borne Infections. History, Diagnosis, Research, Innovation	<i>Monica Embers, PhD; Covington, LA</i>

Tuesday, April 1, 2025

07:00	08:00	Breakfast
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8:00	10:00	Lessons Learned from the War in Ukraine: Unified Medical Space	
		<i>Moderators: Borys Todurov, MD and Andriy Batchinsky, MD</i>	
8:00	8:20	The Unified Medical Space: A New Paradigm in Large Scale Combat Operations. Perspective from the Ukraine Ministries of Defense and Health	<i>Serhii Dubrov, MD; Kyiv, Ukraine (virtual)</i>
8:20	8:40	Cardiac Trauma and Transplantation During the War in Ukraine	<i>Borys Todurov, MD; Kyiv, Ukraine</i>
8:40	9:00	Patient Movement Between Military and Civilian Hospitals in Ukraine	<i>Oleh Tymchuk, Dnipro; Ukraine</i>
9:00	9:20	Manned and Unmanned Evacuation of Injured in Ukraine	<i>Konstjantyn Gumeniuk; MD, Kyiv, Ukraine</i>
9:20	9:55	Bilingual Round Table Discussion with synchronous translation (when needed): 1) Priorities for patient movement in UMS 2) What should we prepare for in LSCO evacuations?	<i>All faculty and audience discussion</i>

9:55	10:00	Coffee Break
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10:00	12:00	War-related injuries: Tourniquets and Tourniquet Management	
		<i>Moderators: Andriy Rusnak, MD and Roman Hayda, MD</i>	
10:00	10:20	How I Manage Tourniquet Syndrome at Level I-II Facilities in Ukraine	<i>Andriy Rusnak, MD; Ukraine</i>
10:20	10:40	How I Manage Consequences of Tourniquet Syndrome at a Level IV-V Facility in Ukraine	<i>Andriy Buchok, MD; Uzhhorod, Ukraine (virtual)</i>
10:40	11:00	Extremity Trauma in Ukraine: A US Orthopedic Surgeon's Perspective	<i>Roman Hayda, MD; Providence, RI</i>
11:00	11:20	Potassium Removal <i>in-vivo</i> : How Would I do it on the Battlefield?	<i>Ian Stewart, MD; Bethesda, MD</i>
11:20	12:00	Round Table Discussion with synchronous translation (when needed): 1) Priorities for tourniquet management during LSCO 2) Priorities for research in tourniquets	<i>All faculty and audience discussion</i>

12:00	16:00	Networking Break
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15:00	16:00	Après Ski: Vendor Exhibit Area (refreshments beginning at 15:15)	
15:00	15:50	Quick Shot Abstract Presentations (Room Primrose B)	
		Chemiluminescent Detection of Coagulation Parameters in Minute Volumes of Plasma	<i>Waander van Heerde, PhD; Nijmegen, The Netherlands</i>
		Arterial Blood Gas Desynchronization as an Indicator of Multisystem Complexity Loss in Critical States	<i>Lawrence Renna, PhD; San Antonio, TX</i>
		Design of the SAFETY Study in Ukraine	<i>David Clarke; Nashua, NH</i>
		Mitigation of Hyperkalemia Using the K+ontrol Sorbent in a Circulation System	<i>George Harea; San Antonio, TX</i>
		Wearable aPDT for MDR Wound Infections in Battlefield Settings	<i>Yanfeng Feng, PhD; Boston, MA</i>
		Impact of Injury and Veno-Venous Extracorporeal Life Support Use on AT3 Dynamics in 72-hour Swine Models	<i>Grant Haden; San Antonio, TX</i>
15:15	16:00	Refreshments (Room Primrose A)	

16:00	19:00	Coagulation Insights Amidst Post-Trauma Coagulopathy and Advanced Management Interventions	
		<i>Moderators: Teryn Roberts, PhD and Shibani Pati, MD, PhD</i>	
16:00	16:20	Extracorporeal Organ Support for Trauma: Coagulation Implications and Management	<i>Elizabeth K. Powell, MD; Baltimore, MD</i>
16:20	16:40	Plasma Exchange for Trauma Induced Coagulopathy	<i>Jay S. Raval, MD; Burlington, VT</i>
16:40	17:00	Post-Traumatic Endotheliopathy: Advice for Combat Care Providers Today and 10 Years From Now	<i>Shibani Pati, MD, PhD; San Francisco, CA</i>
17:00	17:20	Anticoagulation Management During All Forms of ECLS at the Central Heart Institute of the Ministry of Health of Ukraine	<i>Serhii Sudakevych, MD, PhD; Kyiv, Ukraine</i>
17:20	17:40	How We Anticoagulate Under the Nordic Lights	<i>Lars Mikael Broman, MD; Stockholm, Sweden</i>
17:40	18:00	Coffee Break: Vendor Exhibit Area	<i>Break</i>
18:00	19:00	Dr. Robert deLemos Memorial Lecture <i>History of Bob deLemos and How to Make your ICU better</i>	<i>Don Null, MD; Sacramento, CA</i>

Wednesday, April 2, 2025

07:00	08:00	Breakfast
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8:00	9:55	Military and Civilian Extracorporeal Life Support Around the World	
		<i>Moderators: Ihor Kuzmych, MD, John Marinaro, MD</i>	
8:00	8:20	Adult ECLS in the Enroute Care Environment: Overview and Practical Considerations of Managing ECMO Patients During Transport	<i>Valerie Sams, MD; Cincinnati, OH</i>
8:20	8:40	ECPR in New Mexico	<i>John Marinaro, MD; Albuquerque, NM</i>
8:40	9:00	ECMO Transports in Sweden: a Comprehensive Review of Experience	<i>Lars Mikael Broman, MD; Stockholm, Sweden</i>
9:00	9:20	ECMO: A Bellwether for Battlefield Medical Supremacy	<i>Jeremy Cannon, MD; Philadelphia, PA</i>
9:20	9:55	Round Table Discussion with synchronous translation (when needed): 1) Use of portable ECLS for ECPR, ECMO and dialysis outside of hospitals during “stay and play” 2) Use of portable ECLS for ECPR, ECMO and dialysis outside of hospitals during “scoop and run”	<i>All faculty and audience discussion</i>

9:55	10:00	Coffee Break: Vendor Exhibit Area
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10:00	12:00	Innovation in Extracorporeal Life Support	
		<i>Moderators: Serhii Sudakevych, MD, PhD and Lars Mikael Broman, MD</i>	
10:00	10:20	Portable Battery-Operated Heparin Free Multimodal Extracorporeal Life Support for Point of Need Life Preservation During Large Scale Combat Operations	<i>Andriy Batchinsky, MD; San Antonio, TX</i>
10:20	10:40	Microfluidic Oxygenators: A New Generation ECLS Technology	<i>Jeffrey Borenstein, PhD; Cambridge, MA</i>
10:40	11:00	Thrombolysis in Injured on ECLS at the Central Heart Institute of the Ministry of Health of Ukraine	<i>Ihor Kuzmich, MD; Kyiv, Ukraine</i>
11:00	11:20	Advancing Battlefield ECMO for Life and Limb Rescue: Translational Research Perspectives	<i>Patrick Walker, MD; Bethesda, MD</i>
11:20	11:40	The Medical Javelin: Use of the MOVES SLC in Ukraine	<i>Derek Watt; Toronto, Ontario</i>
11:40	12:00	Round Table Discussion with synchronous translation (when needed): 1) What innovation is needed in ECLS for war and peace time pandemics? 2) Integration of multifunctional technology: is there a solution today and how does it look?	<i>All faculty and audience discussion</i>

12:00	16:00	Networking break	
13:00	16:00	Giant Slalom fun run (group pictures on the slopes) Weather permitting	Sign up at registration desk at conference

15:00	16:00	Après Ski: Vendor Exhibit Area (refreshments beginning at 15:15)	
15:00	15:50	Quick Shot Abstract Presentations (Room Primrose B)	
		The Use of Ozone in War-Related Injuries: From Bench to Bedside	<i>Emma Borrelli, MD, PhD; Siena, Italy</i>
		Systemic Coagulation and Blunt-Traumatic Brain Injury: Is There a Link?	<i>Angela Mitchell; San Antonio, TX</i>
		Toward Open-Loop ECLS Control: Ascertaining Independent Determinants of Systemic Arterial Blood Gas Parameters	<i>Lawrence Renna, PhD; San Antonio, TX</i>
		Feasibility of Extracorporeal Prevention and Treatment of Bacteremia Using Continuous Administration of 100% O ₂ or Ozone	<i>Marina Batchinsky; San Antonio, TX</i>
		Circulating Exosomal Cargo Telegraphs Neuroinflammation During Acute Phase Traumatic Brain Injury	<i>Yanyi Zang, PhD; San Antonio, TX</i>
15:00	16:00	Après Ski: Vendor Exhibit Area (refreshments beginning at 15:15)	

16:00	19:00	Lessons Learned from Wars Around the World	
		<i>Moderators: Roman Hayda, MD and Arthur Shapiro, MD</i>	
16:00	16:20	Combat Casualty Database Implications: Evidence-Based Medical Leadership in the IDF	<i>Arthur Shapiro, MD; Israel</i>
16:20	16:40	After the Shooting Stops: Long Term outcomes after GWOT	<i>Jeffrey Howard, PhD; San Antonio, TX</i>
16:40	17:00	How I manage Drone-Based Injuries at a Level III-IV Civilian Hospital in Kyiv, Ukraine	<i>Ivan Shychko, MD; Kyiv, Ukraine</i>
17:00	17:20	Infection and Antibiotic Resistance	<i>Paige Waterman, MD; Bethesda, MD (virtual)</i>
17:20	17:55	Round Table Discussion with synchronous translation (when needed):	<i>All faculty and audience discussion</i>

		1) Infection challenge in Ukraine and Israel 2) What is the way forward with infection management?	
18:00	21:00	Gala Dinner The Aerie Restaurant (10th Floor Cliff Lodge)	

Thursday, April 3, 2025

07:00	08:00	Breakfast (Room Primrose A)
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8:00	9:55	Severe Combined Trauma Management	
		<i>Moderators: Hnat Herych, MD and Jeremy Cannon, MD</i>	
8:00	8:20	Lower Extremity Trauma and Orthoplastic Approach for Reconstruction	<i>Serhii Slesarenko, MD; Dnipro, Ukraine</i>
8:20	8:40	Buying Time: From Tourniquets to Whole Blood Under Fire	<i>Shabar Peled, MD; Israel</i>
8:40	9:00	Management and Long-Term Outcomes in Complicated Military Burns	<i>Leopoldo Cancio, MD; San Antonio, TX (virtual)</i>
9:00	9:20	Current & Future Strategies for ECLS at Royal Children's Hospital	<i>Steve Horton, MD; Melbourne, Australia (virtual)</i>
9:20	9:40	Management of Severe Combined Trauma in War-Injured in Ukraine	<i>Hnat Herych, MD; L'viv, Ukraine</i>
9:40	09:55	Round Table Discussion with synchronous translation (when needed): 1) What innovation is needed in combined trauma management protocols in war and peace time 2) Does DCR need a doctrinal revisitation?	<i>All faculty and audience discussion</i>

9:55	10:00	Coffee Break
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		International Experts Roundtable	
10:00	12:00	<i>Discussion of bullet points for position paper to be published following conference</i> <i>All faculty and attendee discussion</i> <i>Meeting Recommendations</i> <i>All faculty and audience discussion</i>	

Closing words from Conference Chair

Meeting adjourns

Thank you for attending!

See you in 2026!

The views and conclusions expressed during this conference are those of the author(s) and should not be interpreted as representing the official policies or endorsements, either expressed or implied, of the participating speakers and/or the countries they represent.

AUTONOMOUS REANIMATION AND



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