

Sunday May 4



Omni Scottsdale Resort & Spa at Montelucia Scottsdale, AZ

## All Sessions are in Alhambra A

V122 4.29.25

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Day 1	Welcome		
3:00 PM	7:00 PM	Registration Open	Alhambra Foyer
4:00 PM	7:00 PM	Exhibit and Poster Setup	Alhambra Ballroom B
5:00 PM	6:30 PM	Speaker Rehersal (Optional)	Alhambra Ballroom A
6:30 PM	8:00 PM	Welcome Reception - (Hors-d'oeurves, dinner on your own)	Oasis Pool Bar
Monday	y May 5		
7:00 AM	6:00 PM	Registration Open	Alhambra Foyer
7:00 AM	9:00 AM	Exhibit and Poster Setup	Alhambra Ballroom B
7:00 AM	8:00 AM	Breakfast will remain open until 8 while session is in progress	Alhambra Terrace

# Day 2 | Innovations in Transfusion Medicine and Cellular Therapeutics: Enhancing Outcomes in Trauma and Critical Care

Talks will focus on the intersection of transfusion medicine and regenerative medicine, highlighting advancements in bloodderived therapeutics, cellular therapies, and innovative regenerative products for treating acute and chronic conditions linked to trauma and critical illness. Attendees will gain valuable insights into how these innovations can significantly improve patient outcomes.

to trauma and critical illness. Attendees will gain valuable insights into how these innovations can significantly improve patient outcomes. 7:35 AM 7:30 AM Welcome & Introductions Shibani Pati MD PhD CTTACC Conference Chair; Vice Chair and Professor Department of Laboratory Medicine, Girish N Vyas Family Endowed Chair and Distinguished Professor, Director Center for Research in Transfusion Med and Cell Therapies, Professor Department of Surgery, UCSF Session 1 | Topics in Trauma and Transfusion Medicine Moderators: Ernest "Gene" Moore MD FACS, Distinguished Professor of Surgery, Ernest E Moore Shock Trauma Center at Denver Health Susan Rowell MD, Professor of Surgery, Trauma and Acute Care Surgery, Director, Surgical Critical Care Fellowship Program, Co-Director, Adult Surgical Intensive Care Unit 7:35 AM 7:55 AM Injury Mechanisms and Characteristics, Implications for Future Clinical **Trial Planning** Jason Sperry MD MPH FACS Section Chief, Trauma Surgery: Professor of Surgery and Critical Care; Director of Acute Care Surgery Fellowship, University of Pittsburgh 7:55 AM 8:15 AM Cold Stored Platelets for Transfusion in Hemorrhagic Shock and TBI Matthew Neal MD FACS Watson Chair and Professor of Surgery, Director of Emergency General Surgery, Co-Director, Pittsburgh Trauma and Transfusion Medicine Research Center, Professor of Clinical and Translational Science and Critical Care Medicine, University of Pittsburgh 8:15 AM 8:40 AM Donor and Recipient Safety and Transfusion Efficacy Research: Past, **Present and Future** Michael Busch MD PhD Director Emeritus & VP, Vitalant; Professor, Department of Laboratory Medicine, UCSF 8:40 AM 9:00 AM Avoiding Iatrogenic Resuscitation Injury after Traumatic Brain Injury: **Repairing the Blood Brain Barrier** John Holcomb MD FACS COL, USA (Ret); Professor of Surgery, Department of Surgery, University of Alabama at Birmingham 9:00 AM 9:20 AM Making your Hemorrhage Control Intervention Trial a Success: Key Areas to Consider Jan Jansen MD Professor, General Surgery Trauma Section, University of Alabama at Birmingham

9:20 AM	9:40 AM	Cell Mediated Fibrinolysis: A Bridge to Organ Regeneration After Ischemia Reperfusion Injury Hunter Moore MD PhD
9:40 AM	9:55 AM	Surgical Director of Kidney Transplant and Living Donor, AdventHealth Transplant Institution at Porter
		Question & Answer Panel   Session 1
9:55 AM	10:15 AM	Break & Exhibits Alhambra Ballroom B
		nerapies in Acute and Chronic Illness
Moderators:		vell MD PhD, Distinguished Professor, Chair of Department of Laboratory Medicine, UCSF
	Lung Injury a	tthay MD, Professor of Pulmonary Critical Care Medicine; Research Lab Director, Acute and ARDS: Research and Clinical Trials; Critical Care Specialist, UCSF
10:15 AM	10:35 AM	Cellular Reprograming in Human Disease
		Deepak Srivastava MD President & Senior Investigator, Gladstone Institutes; Professor, Departments of Pediatrics & Biochemistry & Physics, Gladstone Institute/UCSF
10:35 AM	10:55 AM	Repairing the Infarcted Heart Chuck Murry MD PhD
		Chair and Professor, Department of Stem Cell Biology & Regenerative Medicine; Director, Eli and Edyth Broad Center for Regenerative Medicine & Stem Cell Research, Keck School of Medicine of USC
10:55 AM	11:15 AM	In Utero Stem Cell Therapy Spina Bifida, From the Barn to the Bedside Diana L Farmer MD FACS FRCS
		Chair and Distinguished Professor, Department of Surgery, Chief of Pediatric Surgery, Shriner's Hospitals for Children; Founder and Co-director, Center for Surgical Bioengineering, UC Davis
11:15 AM	11:35 AM	Lessons Learned from Clinical Trials in Cell Therapy for TBI Charles S Cox Jr MD FACS
		The George and Cynthia Mitchell Distinguished Chair in Neurosciences; Director, Children's Program in Regenerative Medicine; Professor, Department of Pediatric Surgery, UTHealth Houston
11:35 AM	11:50 AM	Question & Answer Panel   Session 2
11:50 AM	12:50 PM	Lunch Valencia Lawn
Session 3	Blood Der	ived Therapeutics as a Discovery Platform of Novel Regenerative Factors
Moderators:	Haematology <b>Anirban Se</b>	vaert MD PhD FRCP FRCPath, Professor of Transfusion Medicine, Department of , University of Cambridge n Gupta PhD, Wallace R. Persons Professor of Engineering, Department of Biomedical Case Western University
12:50 PM	1:10 PM	Blood-based Approaches to Rejuvenate the Aging Brain
		Saul Villeda PhD
1.10 DM	1.20 PM	Associate Professor, Department of Anatomy; Associate Director, Bakar Aging Research Institute, UCSF
1:10 PM	1:30 PM	Rescuing Regeneration in Aging Muscle by Manipulating Blood-Borne Factors
		<b>Amy Wagers PhD</b> Chair and Forst Family Professor, Department of Stem Cell and Regenerative Biology; Executive Committee Member, Harvard Stem Cell Institute
1:30 PM	1:50 PM	Translating Platelet Rich Plasma Research to Clinical Use in Orthopedics
		Anthony Luke MD MPH
		Professor, Department of Orthopedic Surgery; Director, Human Performance Center, UCSF
1:50 PM	2:10 PM	Freeze-Dried Platelet Derived Hemostatic Agent in Severe Surgical Bleeding: Results of a Pilot Randomized Clinical Trial
		Jakob Stensballe MD PhD Board Member, The Medical Society of Copenhagen (DMSK); Senior Consultant, Department of Anesthesiology and Centre for Head & Orthopedics, Rigshospitalet, Copenhagen
2:10 PM	2:25 PM	Plasma in Septic Shock; Results of a Randomized Clinical Pilot Trial
		Jakob Stensballe MD PhD
		Board Member, The Medical Society of Copenhagen (DMSK); Senior Consultant, Department of Anesthesiology and Centre for Head & Orthopedics, Rigshospitalet, Copenhagen
2:25 PM	2:40 PM	Question & Answer   Session 3

2:40 PM	2:55 PM	Special Lecture   Combat Casualty Care Research Updates Therese West, PhD Director, DOD, Combat Casualty Care Research Program (CCCRP)	
2 FF DM	2 45 514		
2:55 PM	3:15 PM	Break & Exhibits A Concepts and Innovative Therapeutics in Critical Care	hambra Ballroom B
moderators:		and MD MPH FACS, Clinical Assistant Professor, Surgery, University of Arizona of Surgery Division of Trauma, Surgical Critical Care, Burns and Acute Care Surgery	
	Surgery, Co	<b>Neal MD FACS,</b> Watson Chair and Professor of Surgery, Director of Emergency General p-Director, Pittsburgh Trauma and Transfusion Medicine Research Center, Professor of Translational Science and Critical Care Medicine, University of Pittsburgh	
3:15 PM	3:35 PM	The Immunobiology of ARDS	
		Clifford Lowell MD PhD	
		Distinguished Professor and Chair of Department of Laboratory Medicine, UCSF	
3:35 PM	3:55 PM	Engineering Stem Cell Derived Extracellular Vesicles and Lipid	
		Nanoparticles for Targeted Delivery	
		Aijun Wang MD PhD	
		Professor and Vice Chair, Departments of Surgery and Biomedical Engineering; Co-director, Center for Surgical Bioengineering, UC Davis	
3:55 PM	4:15 PM	MSCs and Bacterial Pneumonia in Mice: Replicating ARDS Pheno Patients	types in
		Michael Matthay MD	
		Professor of Pulmonary Critical Care Medicine; Research Lab Director, Acute Lung Injury and ARDS: Research and Clinical Trials; Critical Care Specialist, UCSF	
4:15 PM	4:35 PM	Single Cell Multi-omics Reveals Outcome Based Circulating Leuk	ocyte
		Cell Populations in Human Trauma	•
		Timothy R Billiar MD	
		Distinguished Professor and Chair, Department of Surgery; Associate Senior Vice Chancellor for Clinical Academics, University of Pittsburgh; Executive Vice President and Chief Scientific Officer, UPMC	
4:35 PM	4:55 PM	Early Alterations in Innate Immunity and Role in Chronic Critica Joseph Cuschieri MD	l Illness
		Professor of Surgery and Lab Medicine, Chief of Surgery at Zuckerberg San Fra General Hospital and Trauma Center; Trauma Medical Director, UCSF	ancisco
4:55 PM	5:15 PM	Preclinical Drug Development for Ischemic States Using Large A Models	nimal
		Emin Maltepe MD PhD	
		Professor, Department of Pediatrics and Neonatology, UCSF	
5:15 PM	5:35 PM	Fibrinolysis in Clinical Translation: New Therapeutic Opportunit Surgical Pleural Space Diseases in Trauma and Beyond	ies in
		Christopher Barrett MD	
		Assistant Professor, UNMC Department of Surgery, Division of Acute Care Surgery; Surgeon, Nebraska Medicine	
5:35 PM	5:50 PM	Question & Answer   Session 4	
5:50 PM	6:35 PM	Poster Session A	hambra Ballroom B
		Coordinator: Elena Nedelcu MD	
		Professor UCSF Dept. of Laboratory Medicine, Assistant Medical Director, Trans Service, UCSF, Director, Herbert Perkins Cellular Therapy and Transfusion Med Fellowship, Director, UCSF Berkeley Outpatient Center Laboratory	
6:35 PM	7:20 PM	Reception	Kasbah Patio
7:20 PM	9:30 PM	Dinner	Cojito Plaza
		2025 Keynote   National Well-being, Cohesion, and the Medical Sciences: A Journey from the Battlefield to the Lab	
		Introduction: Zaid Fadul MD FS FAAFP Lt Col USAF	
		Anthony "Donny" Donahue	
		USAF Pararescueman (PJ), Former Navy SEAL	
		Dessert & Awards Ceremony	Cojito Plaza

Tuesday May 6				
7:00 AM	6:00 PM	Registration Open	Alhambra Foyer	
7:00 AM	7:30 AM	Breakfast will remain open until 8 while session is in progress	Alhambra Terrace	

## Day 3 | Novel Blood Products, Stem Cell Derived Blood, Military Health Session

Talk topics will delve into stem cell-derived blood components and innovative blood products aimed at providing new therapies for trauma and critical care patients. We'll explore recent findings related to plasma-based treatments for conditions such as sepsis, traumatic brain injury, and burns. Additionally, we'll address the regulatory challenges faced in approving these novel products. The day will wrap up with a session on military health, concentrating on optimizing care and identifying gaps in research and the treatment of injured warfighters on the battlefield/pre-Role 2 care. Three main areas of interest will be discussed: 1) management of hemorrhage on the battliefield with novel blood products and therapeutics, 2) management of organ failure on the battlefield, and 3) management of TBI and SCI on the battlefield. A fourth topic on wound management and infection will be covered in a focus group discussion on May 7th.

## Session 5 | Stem Cell Derived Blood Components and Novel Blood Products

Moderators:	Jessica Car	denas PhD, Associate Professor, Department of Surgery, CU Anschutz
	•	lith MD FACS, Associate Professor UCSF Department of Surgery and Lab Medicine, esearch ZSFGH
7:30 AM	7:50 AM	Engineered Platelets: Going Beyond Transfusion and Stopping Bleeding
		Cédric Ghevaert MD PhD FRCP FRCPath
		Professor of Transfusion Medicine, Department of Haematology, University of Cambridge
7:50 AM	8:10 AM	Developing a Whole Blood Substitute - The Inner Workings of the On Demand Blood Program
		Vincent B Ho MD MBA
		Chair and Professor, Department of Radiology and Bioengineering, Director, 4D Bio3 Center for Biotechnology, Uniformed Services University+E243
8:10 AM	8:30 AM	Platelet-inspired Synthetic Nanomedicine for Targeted Hemostatic Applications
		Anirban Sen Gupta PhD
		Wallace R. Persons Professor of Engineering, Department of Biomedical Engineering, Case Western University
8:30 AM	8:50 AM	The Hidden Components: Extracellular Vesicles and Mitochondrial DNA
		in Blood Products Philip Norris MD
		Director of Laboratory Science and VP of Research and Scientific Programs, Vitalant; Professor, Department of Laboratory Medicine, UCSF
8:50 AM	9:10 AM	Translational Applications of Platelet Lysates and Extracellular Vesicles: Why, What, and How Thierry Burnouf PhD
		Distinguished Professor and Vice Dean, Graduate Institute of Biomedical Materials and Tissue Engineering, Taipei Medical University
9:10 AM	9:30 AM	Using Human Genetics and Synthetic Biology to Enhance Ex Vivo RBC Production
		Kyle Cromer PhD
		Assistant Professor, UCSF Department of Surgery
9:30 AM	9:45 AM	Question & Answer   Session 5
9:45 AM	10:05 AM	Break & Exhibits Alhambra Ballroom B
Session 6	Plasma Th	erapeutics in Trauma, Burns, Sepsis
Moderators:	Martin A Sc	hreiber MD FACS FCCM, COL, MC, USAR, Adjunct Professor of Surgery, USU+E209
	Joseph Rap	pold MD FACS, CAPT (Ret) US Navy, Medical Director, Cellphire, Inc
10:05 AM	10:25 AM	Plasma Constituents in Regulating Post-injury Coagulopathy,
		Endothelial Homeostasis, and Organ Injury
		Jessica Cardenas PhD
		Associate Professor, Department of Surgery, CU Anschutz
10:25 AM	10:45 AM	Trauma-Induced Endothelial and Epithelial Dysfunction: From
		Mechanistic Insights to Targeted Interventions Shibani Pati MD PhD
		CTTACC Conference Chair; Vice Chair and Professor Department of Laboratory Medicine, Girish N Vyas Family Endowed Chair and Distinguished Professor, Director Center for Research in Transfusion Med and Cell Therapies, Professor Department of Surgery, UCSF

10:45 AM	11:05 AM	Endotheliopathy, Fibrinolysis, and Plasma Resuscitation in Burn Shock Jeff Shupp MD Professor of Surgery, Plastic Surgery, Biochemistry, Cellular & Molecular
11:05 AM	11:20 AM	Biology, Georgetown University Question & Answer   Session 6
11:20 AM	11:45 AM	Special Lecture   Acellular Tissue Engineered Vessels: Civilian and Military Experience Introduction: Martin A Schreiber MD FACS FCCM
		Ernest "Gene" Moore MD FACS Distinguished Professor of Surgery, Ernest E Moore Shock Trauma Center at Denver Health
11:45 AM	12:00 PM	Special Lecture   AFIRM: Advancing Healthcare for our Wounded Warriors Anthony Atala MD Professor and Chair of Urology, Wake Forrest
12:00 PM	1:00 PM	Lunch Valencia Lawn
12:00 PM	1:00 PM	Stakeholder Question & Answer Table (DOD and ARPA-H) Alhambra Terrace
Session 7	Military He	ealth Session Focused on Battlefield Strategies for Care
Moderators:	Jeremy Ca	nnon MD FACS, Col USAF (Ret), Professor of Surgery, University of Pennsylvania
1.00 PM		urney MD FACS, Chief, Joint Trauma System, COL MC USA; US Army Institute of earch, Fort Sam Houston
1:00 PM	1:15 PM	Special Lecture   Tactical Combat Casualty Care (TCCC) in Anti- Access/Area Denial: Considering New Paradigms For Return to Battle
		Michael Koeris PhD
4 45 514	4 20 54	Director, Biological Tecnologies, DARPA
1:15 PM	1:30 PM	Distinguished Presentation   Medical Readiness Reimagined: Meeting the Demands of 21st Century Conflict
		Stephen Ferrara MD
		CAPT USN (Ret), Acting Assistant Secretary of Defense for Health Affairs
1:30 PM	1:50 PM	Preparations for Large Scale Combat Operations: Joint Trauma System Standpoint
		<b>Jennifer Gurney MD FACS</b> Chief, Joint Trauma System, COL MC USA; US Army Institute of Surgical Research, Fort Sam Houston
1:50 PM	2:10 PM	The Combat Casualty Care Peacetime Effect at a Cross Roads: Are we Preparing to Fail or Win? (Civilian Perspective)
		Jeremy Cannon MD FACS Col USAF (Ret), Professor of Surgery, University of Pennsylvania
2:10 PM	2:25 PM	Management of Combat Casualties in WWII Andre Cap MD PhD
		COL USA (Ret); Board Director and Chief Scientific Officer, Velico
2:25 PM	2:40 PM	Question & Answer
Topic 1   Ma	anagement	t of Hemostasis and Hemorrhagic Shock on the Battlefield/pre-Role 2
<b>Moderators:</b>	Andre Cap	MD PhD, Travis M Polk MD FACS
2:40 PM	2:55 PM	The Future of Battlefield Hemmorhage Control Travis M Polk MD FACS
		CAPT USN; Chair, Joint Program Committee-6; Former Director, Combat Casualty Care Research Program (CCCRP); US Army Medical Research and Development Command (USAMRDC), Defense Health Agency
2:55 PM	3:15 PM	Blood Replacement Strategies in Future Large-Scale Operations Novel Blood Products
		Martin A Schreiber MD FACS FCCM COL, MC, USAR, Adjunct Professor of Surgery, Uniformed Services University
3:15 PM	3:40 PM	Panel Discussion 1). Novel/alternate blood products regulatory approval (dried plasma, dried platelets, dried cryo, blood derived products, whole blood, avvicen carriers, blood cubstitutes) 2). Logistics and
		blood derived products, whole blood, oxygen carriers, blood substitutes) 2). Logistics and Transport of product/patient (containers) 3). Battlefield Regulatory approval
		Bethany Brown PhD, Mike Fitzpatrick PhD, Jennifer Gurney MD, Martin Schreiber MD, Beth Shaz MD, Ralph Vassallo MD FACP, Therese West PhD

3:40 PM	4:00 PM	Break Alha	ambra Foyer
4:00 PM	6:00 PM	Exhibitor and Poster Takedown Alhambra	a Ballroom B
Topic 2   M Battlefield/	-	nt of Traumatic Brain Injury and Spinal Cord Injury on the 2	
	Geoffrey L	Ling MD PhD	
4:00 PM	4:15 PM	Military TBI Management: How Did We Get Here	
		Geoffrey Ling MD PhD	
		COL USA (Ret) Professor of Neurolgy USU+E226, Professor of Neurology, Johns Hopkins	
4:15 PM	4:30 PM	TBI Care in Prehospital, Combat and Austere Environments: New Brai	in
		Trauma Foundation Guidelines	
		GJ Hawryluk MD, PhD	
		Neurosurgeon, Cleveland Clinic; Adjunct Associate Professor of Neurosurgery, Uniformed Services University; Medical Director and Scientific	
		Advisory Board Chair, Uniformed Services University; Medical Director and Scientific	
4:30 PM	4:55 PM	Panel Discussion	
		1). Novel blood products and resuscitation (plasma for TBI, dried platelets ) 2). Point of	
		Care Devices- Biomarkers for TBI and SCI evaluation, ICP monitoring, MOBI? 3). Cell Therapies/Regenerative interventions 4). Logistics and Transport for TBI and SCI	
		Charles S Cox Jr MD FACS, James Guest MD PhD, Dallas Hack MD, GJ Hawryluk MD PhD, Jan Jansen MD, Susan Rowell MD, Jason Sperry MD	
• •	anagemer Kevin Chu	nt of Organ Failure and Sepsis ang MD	
4:55 PM	5:10 PM	Long Term Organ Support in a Wartime Setting	
		Kevin Chung MD	
5:10 PM	5:25 PM	COL USA (Ret), CMO Seastar Medical	
5:10 PM	5:25 PM	Renal Replacement Therapy in Large Scale Combat Operations Ian Stewart MD	
		Col, USAF, MC, Vice chair for Clinical Research, Professor of Medicine,	
		Uniformed Services University	
5:25 PM	5:40 PM	Autologous vs Allogeneic Mesenchymal Stromal Cells for ARDS and Multiorgan Failure Managment: Present and Future Applications	
		Andriy Batchinsky MD Professor of Surgery & Medicine, USU, Geneva Foundation, AREVA	
5:40 PM	6:05 PM	Panel Discussion	
		1). Novel blood products and resuscitation- dried plasma/platelets. 2). Cellular Therapies 3).	
		Devices for organ failure support: mobile dialysis, ECMO. 4). Logistics Transport Andriy Batchinsky MD, Kenton Gregory MD, Ernest "Gene" Moore MD	
		FACS, Jakob Stenseballe MD PhD, Ian Stewart MD	
Summary o	f Thought	ts and Military Health Session- Future Research Directions of DOD	
6:05 PM	6:20 PM	Thoughts on Future Directions	
		Lester Martinez-Lopez MD MG USA (Ret)	
		Former Assistant Secretary of Defense for Health Affairs (ASDHA)	
6:20 PM	6:30 PM	Wrap Up	
		Jennifer Gurney MD FACS	
		Chief, Joint Trauma System, COL MC USA; US Army Institute of Surgical Research, Fort Sam Houston	
		Jeremy Cannon MD FACS	
		Col USAF (Ret), Professor of Surgery, University of Pennsylvania	
6:30 PM	7:15 PM	Reception Va	lencia Lawn
7:15 PM	7:35 PM	2025 Keynote   Transforming Battlefield Trauma Care	
		Introduction: Joseph Rappold MD FACS Capt (USN Ret)	
		Frank Butler MD FAAO FUHM	
		CAPT Medical Corps USN (Ret) Consultant in Tactical Combat Casualty Care Joint Trauma System, Adjunct Professor of Military and Emergency Medicine Uniformed Services University, Presidential Citizens Medal Recipient 2024	
7:35 PM	9:30 PM		lencia Lawn
7.55 FM	9.30 PM	Viller & Foster Awarus Va	

Wednesday May 7				
7:00 AM	3:00 PM	Registration Open	Alhambra Foyer	
7:00 AM	8:00 AM	Exhibitor and Poster Takedown	Alhambra Ballroom B	
7:00 AM	7:30 AM	Breakfast will remain open until 8 while session is in progress	Alhambra Terrace	

# Day 4 | Cell and Gene Editing of Stem Cell and Blood Products, Wound Healing and Dried Plasma Focus Group

Talks will focus on exciting advancements in cell and gene editing, as well as the potential for scaling up the production of enhanced, personalized blood and cell therapies for trauma and critical care patients outside of oncological applications. We will also discuss novel topics in blood and blood products. We will host a special lecture on integrative practices in chronic critical illness followed by a session on innovative solutions in wound healing and infection control. The day will conclude with a focus group on the state of the science and challenges in the production of a dried plasma product.

#### Session 8 | Advancing the Field of Cell and Gene Editing Moderators: Fabio Triolo, DdR, MPhil, PhD, The Clare A. Glassell Distinguished Chair, Director, Cellular Therapy Core, Professor, Program in Regenerative Medicine Beth Shaz MD, Professor and Deputy Director of Marcus Center for Cellular Cures, Duke University 7:30 AM 7:50 AM Manufacturing Cell and Gene Therapies in the Academic Setting Brian Shy MD PhD Assistant Professor, Department of Laboratory Medicine, Director, Human Islet and Cellular Transplantation GMP Facility, UCSF 7:50 AM 8:10 AM Improving on Nature: Interface Re-engineering of Ligand-based CAR T Cells for Enhanced Efficacy Arun Wiita MD PhD Professor, Department of Laboratory Medicine; Assistant Director, Clinical Cytogenics Laboratory, UCSF 8:10 AM 8:30 AM Non-Genetic Modification of Blood and Somatic Cells Scale **Brett Janis PhD** CEO/CSO, Treasurer and Co-founder, DesiCorp Inc. 8:30 AM 8:50 AM Leveraging the Platelet Transcriptome to Decipher Platelet Function and **Dysfunction: In Circulation and In Storage** Lucy Kornblith MD FACS Associate Professor UCSF Department of Surgery and Lab Medicine, Director of Research ZSFGH 8:50 AM 9:10 AM **Regulatory Science and Navigating the FDA Regulatory Landscape** Steven R Bauer PhD Chief Regulatory Science Affairs Program, Wake Forest Institute for Regenerative Medicine (WFIRM), Former FDA Chief of Cellular and Tissue Therapy Branch, Division of Cellular and Gene Therapies CBER Advancing Blood Therapeutics | Insights into Potency and Informative Assays 9:10 AM 9:30 AM Extracellular Mitochondria and TBI-induced Endotheliopathy Jing Fei Dong MD PhD Bloodworks Northwest, Professor of Medicine University of Washington 9:30 AM 9:50 AM Defining Oxygen Transport Potency for RBCs and Bio-synthetic Alternatives Allan Doctor MD Professor University of Maryland Department of Pediatrics 9:50 AM 10:10 AM Informative Assays to Guide Clinical Development of Novel Blood Products Larry Corash MD Senior Vice President and Chief Scientific Officer, Cerus Corporation 10:10 AM 10:25 AM Question & Answer Panel | Session 8 10:25 AM 10:40 AM Special Lecture | ARPA-H Research Updates **Amy Jenkins PhD** Acting Deputy Director, ARPA-H 10:40 AM 10:55 AM Alhambra Foyer Break 10:55 AM 11:15 AM Special Lecture | Integrative Medicine: Fundamental Practices to **Enhance Outcomes in Chronic Critical Illness** Sangeeta Pati MD FACOG ABOIM

Founder Take My Power Back Initiative, Founder & Medical Director, SaJune Institute for Restorative and Regenerative Medicine, Medical Director GlowSpring Health, Founder and CEO MDPrescriptives

Session 9   Regeneratio		eration Solutions for Wound Healing, Infection Control, and Tissue
Moderators:	Biomedical	Gurtner MD FACS, Chair Department of Surgery; Professor Surgery; Professor Engineering, University of Arizona College of Medicine Ner MD, COL USA (Ret)
11:15 AM	11:30 AM	MTEC: A Model for Transforming Military Medicine through Military- Civilian Partnerships
		Stuart Tyner MD, COL USA (Ret)
11:30 AM	11:50 AM	Emerging Technologies for Burns and Traumatic Wounds Geoffrey Gurtner MD FACS
		Chair Department of Surgery; Professor Surgery; Professor Biomedical Engineering, University of Arizona College of Medicine
11:50 AM	12:10 PM	A Systems Approach to Austere Total Wound Management Stuart Tyner MD, COL USA (Ret)
12:10 PM	12:45 PM	Industry Quick Shot Talks
		Beyond Bandages: Nitric Oxide, A Paradigm Shift in Infection Control, Tissue Regeneration, and Pain Management
		Alan Willey, CEO Noxsano Inc
		Achieving Wound Homeostasis; Nitric Oxide Combined with Tranexamic Acid
		Ronald J Shebuski PhD, President & CEO, Nytricx Inc
		A Multi-purpose, Broad-spectrum, Dual-antibiotic, Foaming Hydrogel for Large and Deep Wounds
		Ross Donaldson MD MPH CTropMed FACEP, President & CEO, Critical Innovations LLC
		Endotype Immunotitrator of Rx For Sepsis (ENDO-IT-Rx-S)
		Imanuel Lerman MD MS, Professor (UCSD Electrical and Computer Engineering/Anesthesiology) and CEO InflammaSense
		Development of Lyo-XoGlo® Pro: A Lyophilized FDA approved MSC cell line-Derived Exosome Therapeutic for Advanced Wound Healing in Austere Environments
		Duncan Ross PhD, Founder/CEO Kimera Labs Inc, Ultimaxx Health Research & Development Advisor
12:45 PM	1:00 PM	Question & Answer Quick Shot Talks
1:00 PM	1:30 PM	Lunch Alhambra Foyer
	-	roup: From Battlefield to Bedside: Overcoming Challenges in Developing Ict for Military and Civilian Use
	The goal of	this focus group is to facilitate collaborative discussions and achieve consensus on key issues.

including: 1) Identifying challenges and barriers in the development, licensing, production, distribution, and implementation of dried plasma products; 2) Clarifying the medical need and potential applications of dried plasma beyond pre-hospital and trauma settings; 3) Proposing solutions or strategies to address these challenges and barriers; and 4) Developing consensus statements/publication(s) addressing these topics. The panel will be primarily responsible for addressing discussion topics and will prepare potential consensus publications.

Session Chair/Moderator: Co-Chair/Moderator:		<ul> <li>Anthony Pusateri PhD</li> <li>Chief Scientist, Leidos and Naval Medical Research Unit</li> <li>Isabel Lauren Jackson PhD</li> <li>Founding Principal, True North BioPharma, LLC</li> </ul>	
1:45 PM	2:00 PM	Prehospital Transfusion Experience and How Could Dried Plasma Be Beneficial?	
		Jason Sperry MD MPH FACS	
		Section Chief, Trauma Surgery: Professor of Surgery and Critical Care; Director of Acute Care Surgery Fellowship, University of Pittsburgh	
2:00 PM	2:15 PM	Pharmacy and Billing Alternatives for Dried Plasma	
		Michael Ganio PharmD MS	
		Senior Director, Pharmacy Practice and Quality, ASHP	

2:15 PM 2:30 PM

## Topic: Potential Non-trauma and In-hospital Uses for Dried Plasma – An Anesthesiologist's Perspective

### Roman Dudaryk MD

Ryder Trauma Center/University of Miami Professor of Anesthesiology, Director of Quality

2:30 PM

# Panel Discussion

Panelists

Bethany Brown PhD, American Red Cross; Lisa Buckley MPH, Velico Medical, Andre P. Cap MD PhD, Velico Medical; Laurence M. Corash MD, Cerus Corporation; Roman Dudaryk MD, University of Miami; G. Michael Fitzpatrick PhD, Cellphire Therapeutics; Michael Ganio PharmD MS, American Society of Hospital Pharmacists; Adam Gerber MD PhD, Octapharma; Richard Gonzales MS, US Army Medical Materiel Development Activity; Jennifer M. Gurney MD, Department of Defense; Isabel L. Jackson PhD, True North Biopharma; Lester Martinez-Lopez MD MPH, Department of Defense; Ernest "Gene" Moore MD, University of Colorado; Hunter B Moore MD, Advent Health; Vijay Nair PhD, Octapharma; Shibani Pati MD PhD, University of California San Francisco; Michael Policastro MD FACEP, FACMT, Col USAF, 445th Aeromedical Staging Squadron Commander; Travis Polk MD, Department of Defense; Anthony E. Pusateri PhD, 59th Medical Wing; Joseph F. Rappold MD, Cellphire Therapeutics; Jeffrey W. Shupp MD, Medstar Washington Hospital Center; Toby Silverman MD, Biomedical Advanced Research and Development Authority; Jason L. Sperry MD MPH, University of Pittsburgh; Ralph Vassallo MD, Vitalant

### **Discussion Points**

The primary focus of this discussion will be on civilian applications, with some crossover into military and disaster-related contexts. While the military necessity for dried plasma is well established, it will not be a central topic of discussion. Our goal is to foster dialogue primarily on topics that have not yet been thoroughly explored and on challenges that remain controversial or unresolved.

1. Address barriers to dried plasma implementation for pre-hospital use of dried plasma, such as: a) Reimbursement, b) Scope of practice for EMS care providers, and 3) Others

2. Are US blood centers and donor centers prepared to supply plasma for dried plasma production to support US EMS agencies and potential in-hospital use?

3. What is the regulatory outlook for dried plasma, for either in-hospital or out-ofhospital use? How is this different from the regulatory landscape for other (conventional) forms of plasma, such as FFP. Why?

4. What data are needed: 1) To support FDA approval (pre-hospital and in-hospital use)?; 2) For post-approval hemovigilance/monitoring (pre-hospital and in-hospital)?

5. What are the experience and lessons-learned from the clinical development of dried plasma products for FDA approval?

6. What are the opportunities for distribution of dried plasma products via pharmacy channels as compared to blood bank channels?

7. Does the growing use of whole blood and other transfusion approaches detract from the need for dried plasma?

8. Are additional authorizations for emergency use needed to enable organizations who need dried plasma? The US DoD can be supplied under an Emergency Use Authorization. Is there a way to enable civilian disaster preparedness/response at the national, state, and local levels?

9. What are potential in-hospital applications for dried plasma products?

4:00 PM 5:00 PM Farewell Reception

Alhambra Terrace

4:00 PM