

**5th Annual Comprehensive Advanced Restorative Effort  
(C.A.R.E.) Training Summit 2014 Curriculum  
Naval Medical Center San Diego, December 4-6, 2014**

**Day 1: Thursday, December 4, 2014**

0730-0800 **Registration**

0800-0850 **Opening and Welcome Remarks**

**CAPT Craig Salt, MD**, Founder and Head, C.A.R.E.

**CAPT Jose Acosta, MD**, Commander, NMCS D

**RDML Bruce Gillingham, MD**, Commander Navy Medicine  
West

**Gary Sinise**, Gary Sinise Foundation

**Other Distinguished Guests**, TBD

**CDR Peter Shumaker, MD**, Program Director, C.A.R.E.  
Training Summit

0850-0950 ***The Patient and Caregiver Perspective***

Moderator: **CDR Peter Shumaker**, Chairman, Dermatology,  
Naval Medical Center San Diego

0950-1000 **Break / Networking**

**Facial Restoration After Traumatic Injury**

1000-1020 ***Facial Restoration after Trauma***

**COL Robert Hale, MD**, Professor of Oral and  
Maxillofacial Surgery, Uniformed Services University  
of the Health Sciences; Former Commander, U.S. Army  
Dental and Research Detachment; Director, Craniofacial  
Research, U.S. Army Institute for Surgical Research

1020-1040 ***Craniofacial Reconstruction***

**Lt COL Jose Barrera, MD**, Chief, Otolaryngology Service  
and Chief, Plastic and Reconstructive Surgery, San  
Antonio Military Medical Center

1040-1100 ***Face Transplantation***  
**Bohdan Pomahac, MD**, Director, Plastic Surgery  
Transplantation; Medical Director, Burn Center,  
Brigham and Women's Hospital; Associate Professor,  
Harvard Medical School

1100-1115 **Panel Discussion**

**Restoring Function After Extremity Injury, Part I**

1115-1120 **Introduction**

1120-1140 ***Orthoplastic Surgical Principles***  
**L. Scott Levin, MD**, Chair, Department of Orthopaedic  
Surgery; Paul Magnuson Professor of Bone and Joint  
Surgery, Hospital of the University of Pennsylvania

1140-1200 ***Flap Reconstruction after Upper Extremity Injury***  
**Kodi Azari, MD**, Chief, Section of Reconstructive  
Transplantation; Co-Director, Operation Mend Program;  
Professor, Orthopedic Surgery, Plastic Surgery, and  
Transplantation Surgery David Geffen School of  
Medicine at UCLA

1200-1300 **Lunch / Networking**

1300-1320 ***Hand Transplantation***  
**W.P. Andrew Lee, MD**, Professor and Chairman,  
Department of Plastic and Reconstructive Surgery,  
Johns Hopkins School of Medicine

1320-1340 ***Complex Penile Reconstruction Using Conventional  
Microvascular Techniques and Transplantation***  
**Richard Redett, MD**, Associate Professor of Plastic  
Surgery; Residency Program Director, Division of  
Plastic Surgery, Johns Hopkins School of Medicine

1340-1410 ***Targeted Muscle Re-innervation (with Demonstration)***  
**Todd Kuiken, PhD**, Director, Center for Bionic  
Medicine; Professor of PM& R, Biomedical Engineering,  
and Surgery, Northwestern University

1410-1420 **Panel Discussion**

1420-1440 ***Regenerative Medicine: Current Concepts and Changing Trends***

**Anthony Atala, MD**, Director, Armed Forces Institute of Regenerative Medicine II; Director, Wake Forest Institute for Regenerative Medicine; W.H. Boyce Professor and Chair, Department of Urology Wake Forest School of Medicine

1440-1500 **Break / Networking / Research Poster Presentations**

1500-1700 ***Clinical Workshops and Prosections*** (Bioskills Lab)

**Guest Faculty:** **Anthony Atala, MD** (Wake Forest); **Kodi Azari, MD** (UCLA); **Edward J. Caterson, MD, PhD** (Brigham and Women's); **Leo Kroonen, MD** (Kaiser San Diego); **Todd Kuiken, MD, PhD** (Northwestern); **Roberto Lachica, MD** (University of Tennessee); **W.P. Andrew Lee, MD** (Johns Hopkins); **Bohdan Pomahac, MD** (Brigham and Women's); **Richard Redett, MD** (Johns Hopkins); **Jaimie Shores, MD** (Johns Hopkins); **Sami Tuffaha, MD** (Johns Hopkins)

**NMCSD Faculty:** **CDR Michelle Arnold, MD** (Facial Plastics); **Robin Caballa, PA-C**; **CAPT Trent Douglas, MD** (Plastic Surgery); **CDR Curtis Gaball, MD** (Facial Plastics); **CDR Katerina Gallus, MD** (Plastic Surgery); **LCDR Kathryn Hanna, MD** (Orthopedic Hand Surgery); **CDR Robert Laughlin, MD** (Oromaxillofacial Surgery); **LCDR Eamon O'Reilly, MD** (Plastic Surgery); **CAPT Craig Salt, MD** (Plastic Surgery); **CDR Sean Stroup, MD** (Urology)

Hand Transplantation  
Face Transplantation  
Extremity Trauma  
Flap Reconstruction  
Genitourinary Trauma  
Hair Transplantation

**Day 2: Friday, December 5, 2014**

0730-0755 **Morning Refreshments**

0750-0755 **Welcome Remarks / Objectives**

**Rethinking Traumatic Brain Injury**

0755-0800 **Introduction**

0800-0820 ***Neurobiology of TBI***

**David Hovda, PhD**, Department of Neurosurgery, UCLA;  
Professor and Vice Chairman of Research Affairs;  
Director, UCLA Brain Injury Research Center

0820-0840 ***Heterogeneity of TBI***

**M. Ross Bullock, MD, PhD**, Professor, Department of  
Neurological Surgery; Director, Clinical Neurotrauma,  
University of Miami School of Medicine

0840-0900 ***A Perspective on TBI in the Military***

**COL (USA, Ret) Geoffrey Ling, MD**, Director, Biological  
Technologies Office, Defense Advanced Research  
Projects Agency (DARPA); Professor of Neurology,  
Anesthesiology, and Neuroscience, Uniformed Services  
University of the Health Sciences

0900-0920 ***Auditory/Vestibular Issues in TBI***

**CAPT (USN, Ret) Michael Hoffer, MD**, Professor,  
Department of Otolaryngology, University of Miami  
School of Medicine

0920-0940 ***The Future of TBI Treatment and Research***

**David Cifu, MD**, Professor and Chairman, Virginia  
Commonwealth University Department of PM&R; National  
Director of PM&R Program Office, Veterans Health  
Administration

0940-1000 **Panel Discussion**

1000-1020 **Break / Networking / Research Poster Presentations**

**Regenerative Therapies and Emerging Technologies**

1020-1040 ***Application of Adult Stem Cells and Biomimetic  
Scaffolds for Skeletal Tissue Engineering and  
Regeneration***

**Rocky S. Tuan, PhD**, Co-Director, Armed Forces  
Institute of Regenerative Medicine II; Director,  
Center for Cellular and Molecular Engineering; Arthur  
J. Rooney Professor and Executive Vice Chair,  
Department of Orthopedic Surgery; Associate Director,  
McGowan Institute for Regenerative Medicine; Director,  
Center for Military Medicine Research, University of  
Pittsburgh

- 1040-1100 ***Dermatology in Trauma Rehabilitation: Military Experience***  
**CDR Peter R. Shumaker, MD**, Chairman, Dermatology, Naval Medical Center San Diego; Clinical Associate Professor of Dermatology, Uniformed Services University of the Health Sciences
- 1100-1120 ***Dermatology in Trauma Rehabilitation: Civilian Experience***  
**Jill Waibel, MD**, Dermatology and Dermatologic Surgery, University of Miami Miller School of Medicine
- 1120-1140 ***A Peek Behind the Curtain: Emerging Technologies***  
**R. Rox Anderson, MD**, Director, Wellman Center for Photomedicine; Professor of Dermatology, Harvard Medical School
- 1140-1200 **Panel Discussion**
- 1200-1300 **Lunch / Networking**
- 1300-1320 ***Regenerative Therapies for Soft Tissue Reconstruction***  
**J. Peter Rubin, MD**, University of Pittsburgh Medical Center Endowed Professor and Chair of Plastic Surgery; Professor of Bioengineering
- 1320-1340 ***Stem Cell Transplantation***  
**Spencer Brown, PhD**, Executive Director, Center for Innovation in Restorative Medicine; Professor of Plastic Surgery, University of Pittsburgh Medical Center
- 1340-1400 ***Wound Progenitor Cells and the Biology of Heterotopic Ossification***  
**Lt COL Leon Nesti, MD**, Department of Orthopedics, Walter Reed National Military Medical Center, Bethesda, MD
- 1400-1420 ***Leveraging Autologous Therapies for Cutaneous Wounds and Scars***  
**Lt COL John Meyerle, MD**, Dermatology Program Director; Chief, Immunodermatology, Walter Reed National Military Medical Center; Assistant Professor, Department of Dermatology, Uniformed Services University of the Health Sciences
- 1420-1440 **Panel Discussion**

1440-1500 **Break / Networking / Research Poster Presentations**

1500-1700 **Clinical Workshops and Prosections** (Bioskills Lab)

**Guest Faculty:** Kodi Azari, MD (UCLA); Alphonso Barrera, MD (Baylor); Edward J. Caterson, MD, PhD (Brigham and Women's); Leo Kroonen, MD; Todd Kuiken, MD, PhD (Northwestern); Roberto Lachica, MD (University of Tennessee); W.P. Andrew Lee, MD (Johns Hopkins); Bohdan Pomahac, MD (Brigham and Women's); Richard Redett, MD (Johns Hopkins); Jaimie Shores, MD (Johns Hopkins); Sami Tuffaha, MD (Johns Hopkins)

**NMCSD Faculty:** CDR Michelle Arnold, MD (Facial Plastics); Robin Caballa, PA-C; CAPT Trent Douglas, MD (Plastic Surgery); CDR Curtis Gaball, MD (Facial Plastics); CDR Katerina Gallus, MD (Plastic Surgery); LCDR Kathryn Hanna, MD (Orthopedic Hand Surgery); CDR Robert Laughlin, MD (Oromaxillofacial Surgery); LCDR Eamon O'Reilly, MD (Plastic Surgery); CAPT Craig Salt, MD (Plastic Surgery); CDR Sean Stroup, MD (Urology)

Hand Transplantation  
Face Transplantation  
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### **Day 3: Saturday, December 6, 2014, Training Summit**

0730-0755 **Morning Refreshments**

0755-0800 **Welcome Remarks / Objectives**

#### **Restoring Function After Extremity Injury, Part II**

0800-0820 ***Advances in Limb Salvage***

LCDR Robert Sheu, MD, Head, Physical Medicine and Rehabilitation; Medical Director C-5, Naval Medical Center San Diego

0820-0840 ***Amputation Issues in the Military***

COL (USA, Ret) John Shero, Director, DoD-VA Extremity Trauma & Amputation Center of Excellence (EACE)

- 0840-0900 ***Long-Term Medical Complications of Limb Loss***  
COL (USA, Ret) Paul Pasquina, Walter Reed National  
Military Medical Center Professor and Chair,  
Department of Rehabilitation Medicine, Uniformed  
Services University of the Health Sciences
- 0900-0920 ***Wartime Advances in Prosthetics: Experience at NMCS D***  
Brian Zalewski, Lead Prosthetist, C5, Naval Medical  
Center San Diego
- 0920-0940 ***Computer Assisted Rehabilitation Environment (CAREN)  
in TBI and Amputee Populations***  
LCDR Jose Dominguez, PT, OCS, Warfighter Performance,  
Naval Health Research Center, San Diego, CA
- 0940-1000 ***Revolutionizing Prosthetics***  
COL (USA, Ret) Geoffrey Ling, MD, Director, Biological  
Technologies Office, Defense Advanced Research  
Projects Agency (DARPA); Professor of Neurology,  
Anesthesiology, and Neuroscience, Uniformed Services  
University of the Health Sciences
- 1000-1020 **Break / Networking / Research Poster Presentations**
- 1020-1040 ***Wheelchairs and Assistive Robotics***  
Rory Cooper, PhD, Director, Human Engineering Research  
Laboratory, University of Pittsburgh
- 1040-1100 ***Rehabilitation of Multiple Limb Combat Amputees***  
Jay Pyo, DO, Polytrauma Amputation Network Site  
Medical Director, Physical Medicine and  
Rehabilitation, VA San Diego Healthcare System
- 1100-1120 **Panel Discussion**

**Fostering Excellence in Lifelong Warrior Care**

- 1120-1140 ***The Joint Trauma System***  
COL Kirby Gross, MD, Director, Joint Trauma System,  
Joint Base San Antonio, TX
- 1140-1200 ***The Future of DoD Trauma Research***  
COL Todd Rasmussen, MD, Director, US Combat Casualty  
Care Research Program, Fort Detrick, MD; Professor of  
Surgery, Uniformed Services University
- 1200-1300 **Lunch / Networking**

- 1300-1320 ***Advancing DoD Research Panel***  
Moderator: CAPT (Ret) John D. Malone, MD, Head,  
Clinical Investigations Department, Naval Medical  
Center San Diego
- 1320-1340 ***Comprehensive Advanced Restorative Effort***  
**CAPT Craig Salt, MD**, Department of Plastic Surgery,  
Naval Medical Center San Diego
- 1340-1400 ***Transitions: Military Centers of Excellence and  
Lifelong Care***  
**CAPT (Ret) Jennifer Town**, Head, Comprehensive Combat  
and Complex Casualty Care (C5), Naval Medical Center  
San Diego
- 1400-1420 ***Mental Health Support in Trauma Rehabilitation***  
**Nancy Kim, PhD, ABPP**, Staff Psychologist C5, Naval  
Medical Center San Diego
- 1420-1440 **Break / Networking**
- 1440-1500 ***Case Management in Wounded Warrior Care***  
**CDR (Ret) Laura Ledyard**, Lead Case Manager, C5, Naval  
Medical Center San Diego
- 1500-1520 ***Fostering Excellence in Community Support for Veterans  
and Their Families***  
**Anthony M. Hassan, EdD**, LCSW, Clinical Professor and  
Director, Center for Innovation and Research on  
Veterans and Military Families, University of Southern  
California School of Social Work
- 1520-1540 ***Panel Discussion. The Best of Both Worlds: Combining  
the Strengths of our Military, VA, and Civilian  
Institutions***
- 1540 **CLOSING REMARKS**

**Scar Primer Course**  
**5th Annual Comprehensive Advanced Restorative Effort**  
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**Naval Medical Center San Diego, December 3, 2014**

Wednesday, December 3, 2014

- 1300-1320 ***Wound Management and Scar Physiology***  
**Mayer Tenenhaus, MD**, Clinical Professor of Surgery,  
Division of Plastic Surgery, UCSD Burn Center
- 1320-1400 ***Introduction to Laser Tissue Interactions and Laser Video Demonstration***  
**Nathan Uebelhoer, DO**, Dermatologist San Diego, CA;  
Program Director Emeritus, CARE Summit
- 1400-1420 ***Pediatric Laser Scar Revision***  
**Andrew Krakowski, MD**, Founder and Director; Kids Scar Treatment and Revision Program (S.T.A.R.); Rady Children's Hospital, San Diego; Assistant Professor of Clinical Pediatrics and Medicine (Dermatology); University of California, San Diego School of Medicine
- 1420-1440 ***Combining Cutaneous Procedural Techniques***  
**Chad Hivnor, MD, (Lt COL, USAFR)** San Antonio, TX
- 1440-1500 **Break / Networking**
- 1500-1520 ***Principles of Surgical Traumatic Scar Revision***  
**Matthias Donelan, MD**, Chief of Plastic Surgery, Shriners' Hospital for Children, Boston, MA; Associate Visiting Surgeon, Massachusetts General Hospital; Associate Clinical Professor of Surgery, Harvard Medical School
- 1520-1700 ***Surgical Scar Revision Workshop (For Selected Attendees Only)***  
**Faculty:** **CDR Curtis Gaball, MD**, Chairman, Otolaryngology, Naval Medical Center San Diego;  
**Matthias Donelan, MD; Michelle Arnold, MD**, Chief Facial Plastics, Naval Medical Center San Diego;  
**Kathryn Hanna, MD**, Department of Orthopedics, Division of Hand Surgery, Naval Medical Center San Diego