Registration — 7:00am—8:00am | Ballroom Galleria

Opening Remarks — 8:00am—8:30am | Ballroom (1.104 & 1.106)
- Dr. Bernard Arulanandam, Interim Vice President for Research, Economic Development and Knowledge Enterprise—UT San Antonio
- COL Michael D. Wirt, Deputy Commanding Officer—BAMC
- Col Keith Donaldson, NC, Vice Commander—59th MDW
- Dr. Andrea Giuffrida, Vice President for Research—UT Health San Antonio
- David Rubenstein, FACHE, MG, USA, (Ret) Chairman, AMSUS—Society of Federal Health Professionals

Keynote Address — 8:30am—9:30am | Ballroom (1.104 & 1.106)
**Presentation**
Defense Health Program: Biomedical Research & Development
LTC Eric Midboe, Director, Research and Technology (R&T)—Defense Health Agency's Defense Health Program (DHP)

Break — 9:30am—9:45am

Morning Podium Presentations — 9:45am—10:45am
**Artificial Intelligence (AI) & Machine Learning (ML)—Travis (2.202)**
**Presentation 1**
Shared Decision Making in the Management of Diabetes Mellitus
Jeffrey A. Colburn, MD, FACP, FACE Maj, USAF, MC—USU & SAUSHEC

**Presentation 2**
Dynamic Forecasting and Control of Type II Diabetes Using Mobile-Based Health Lifestyle Data
Syed Hasib Akhter Faruqui, Rajitha Meka, Adel Alaeddini—UT San Antonio;
Yan Du, Chengdong Li, Jing Wang—UT Health San Antonio; Sara Shirinkam—UIW

**Presentation 3**
A KNIME-based Approach for Selection of Optimal Curve-Fitting Parameters for EC50 Determination of Antimalarial Compounds
Daniel Ferguson—UT San Antonio

**Presentation 4**
A comparison of machine learning algorithms to predict patients with a high number of opioid prescriptions in the Military Health System
Emily Stone, PhD; Lee Zarzabal, MS; Jacob Dunham, MS; Emily Workman, PhD; Alex Rittel, MPH; Cliff Rutter, PharmD, PhD;
Bill Kazanis, MS; Alan Sim, PhD—Defense Health Agency

**Evidence Generation & Translation for Patient-Centered Care—Denman (2.01.28)**
**Presentation 1**
Show Me the Money: Institutional Experience with Molecular Testing of Thyroid Nodules
Alexis Beauvais—USAF

**Presentation 2**
Border Health: A Culture-centered Approach to Obesity Prevention among Mexican-Americans in the Rio Grande Valley
Samantha Mendoza, BA; Gabriela Rodriguez, BA; Shamshad Khan, PhD—UT San Antonio
**Presentation 3**
Intravenous Patency Monitoring Device
Daniel Portillo, BS; Bao Vu; Jose Valdes; Sepehr Seifi; Yannis Routsas, BS; Canyon Headrick; Isaac Trevino, BS—UT San Antonio; Daniel DeArmond, MD; John H. Calhoun, MD—UT Health San Antonio; R. Lyle Hood, PhD—UT San Antonio & UT Health San Antonio

**Presentation 4**
Stakeholders External Evaluation of CNTP the BAMC Approach
Dr. John A. Seimetz—BAMC, JBSA

**Oral & Systemic Disease Interactions—Hidalgo (2.214)**

**Presentation 1**
Efficacy of Screening for GERD Based On Dental Erosion
Andrew Ellis, James Francis, Jeffrey Jessup, Aida Solivan-Ortiz, Allan Parke, Kraig Vandewalle—59th Dental Group, Wilford Hall Ambulatory Surgical Center; Amar Kosaraju—11 Medical Group; Charles Miller—US Army Med Com BAMC

**Presentation 2**
Radiographic Distance from the Cemento-enamel Junction to the Alveolar Crest in Periodontal Health
Hillary R. Key, DMD, Periodontics—Air Force Postgraduate Dental School

**Presentation 3**
Increased Osteoblastic Expression of Colony Stimulating Factor 1 (CSF-1) by Advanced Glycation End-products (AGES): A Mechanism of Diabetic Bone Fragility
Derick Mayberry, DDS., Periodontics—Air Force Postgraduate Dental School; Nandini Ghosh-Choudhury, PhD, Pathology—UT Health San Antonio School of Medicine

**Presentation 4**
The Smell of Diabetes
Jana Wardian, PhD, MSW—USU, Wilford Hall Medical Center

**Substance Abuse & Mental Health—Bexar (1.102)**

**Presentation 1**
Therapeutic Applications on Electronic Tablets to Decrease Anxiety on Inpatient Unit
1Lt Lauren MacCoy, BSN; Capt Alicia Dalley, BSN—USAF; Ann Marie Lazarus—CNS

**Presentation 2**
Reviewing the State of Implicit Cognition as a Behavioral Marker for the Identification of Behavioral Health Disorders
Brian A. Moore, MA—UT San Antonio; Willie J. Hale, PhD; John Moring, PhD; Edward Golob, PhD; Alan L. Peterson, PhD

**Presentation 3**
Preliminary Outcomes of a 5-Session Narrative Writing Treatment for Student Veterans with PTSD
Sandra B. Morissette, PhD; Clark Ryan-Gonzalez, MA; Alexis Blessing, MS; Jason Judkins, ScD; Melissa Hernandez, DSW—UT San Antonio; Meghan Crabtree, PhD—Colorado State University; Denise Sloan, PhD—National Center for PTSD, VA Boston Healthcare System & Boston University School of Medicine

**Presentation 4**
Combating Opioid Abuse in the United States with Social Media: A Systematic Review
David Perez, BA; Shamshad Khan, PhD—UT San Antonio

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**CDMRP Overview—Programs, Program Cycle & Process—9:45am—10:45am | Mesquite (2.01.24)**
COL Stephen J. Dalal, Director—Congressionally Directed Medical Research Programs

**Break—10:45am—11:00am**
Podium Presentations—11:00am - 12:00pm

Brain Health—Hidalgo (2.214)

Presentation 1
Diffusion Tensor Imaging of White Matter Integrity in Military Personnel Exposed to Chronic Hypobaria
Bianca Cerqueira, PhD—KBRwyle & USAF School of Aerospace Medicine; Col John Sladky, MD; Paul Sherman, MD—USAF School of Aerospace Medicine & 59th MDW; Meghann Ryan, MS; Andrea Witjenburg, PhD; Laura Rowland, PhD; Peter Kochunov, PhD—University of Maryland School of Medicine

Presentation 2
Increase in Cerebral Blood Flow After a Single Hypoxic Hypobaric Exposure
Bianca Cerqueira, PhD—KBRwyle & USAF School of Aerospace Medicine; Col John Sladky, MD; Paul Sherman, MD—USAF School of Aerospace Medicine & 59th MDW; Meghann Ryan, MS; S. Andrea Witjenburg, PhD; Laura Rowland, PhD; Peter Kochunov, PhD—University of Maryland School of Medicine

Presentation 3
Strategies to Improve Knowledge Gaps of Traumatic Brain Injury (TBI) Patients on a Surgical Trauma Unit
1LT Christianna Garcia; RN; 1LT Emily Turner, RN—Brooke Army Medical Center

Presentation 4
A Nonrandomized Trial of Prolonged Exposure and Cognitive Processing Therapy for the Treatment of Combat-Related Posttraumatic Stress Disorder in Deployed Settings
Alan L. Peterson, Edna B. Foa, Patricia A. Resick, Tim V. Hoyt, Casey L. Straud, Brian A. Moore, James V. Favret, Willie J. Hale, PhD, Brett T. Litz, Tim Rogers, Jay M. Stone, Robert Villarreal, Christopher S. Woodson, Stacey Young-McCaughan, Jim Mintz—STRONG STAR Consortium

Patient Engagement & Continuity of Care—Travis (2.202)

Presentation 1
Enhancing Access to Psychiatric Care for Posttraumatic Stress Disorder in Veterans with Mild Traumatic Brain Injury Through Integrated Services
Muhammad R. Baig, MD; Rebecca N. Tapia, MD; Adeel Meraj, MD; Jacqueline A. Pugh, MD; Erin P. Finley, PhD, MPH—South Texas Veterans Healthcare System; John D. Roache, PhD—UT Health San Antonio

Presentation 2
Scenarios for Success in Patient Communication: The Price is High without Health Literacy game show
Bella Cruz, MA—Bella Cruz Consulting and Training; David Correa, MBA, BSN, RN—University Health System

Presentation 3
Post-Hospital Discharge Phone Calls: Perceptions of Department of Veterans Affairs Primary Care Staff
Musarrat Nahid, MSc—UT Health San Antonio

Presentation 4
Innovation, Implementation and Beyond: The Path Forward for Remote Health Monitoring (RHM) in the Military Health System (MHS)
Jennifer Stowe, OD, MBA, MHA, FAAO, LSSBB, FACHE MS, LTC—Virtual MEDCEN; Jana Wardian, PhD, MSW—USU Wilford Hall Medical Center

Pre-Hospital Trauma & Critical Care—Denman (2.01.28)

Presentation 1
Incidence of Deep Vein Thrombosis and/or Pulmonary Embolism in CCATT - Evacuated Casualties Transported from Combat Operations to Landstuhl Regional Medical Center
Julie Cutright, BSN, RN—59th MDW/ST; Capt Matthew T. Koroscil, MD; Alejandro G. Mora, MS; Lt Col Aaron B. Holley, MD—SAMMC; Maj Joseph K. Maddray, MD—59th MDW/ST & SAMMC; Col Vikhyat Bebarta, MD—University of Colorado School of Medicine

Presentation 2
Prehospital Use of Ketamine in the Combat Setting: A Sub-Analysis of Patients with Head Injuries Evaluated in the prospective Life Saving Intervention (LSI) Study
Xandria Gutierrez; Col Vikhyat S. Bebarta, MD; Alejandra Mora, MS; Maj Joseph Maddray, MD; MAJ Steven Schauer, DO, MS—59th MDW; Emma Bebarta—Cherry Creek High School; Col Julio Laiet, DO—Emory University School of Medicine
Presentation 3
A Retrospective Review of the Respiratory Effects of Analgesic/Anxiolytic Agents Administered to Traumatically Injured Civilians in the Prehospital Setting
Tasia Long, MHS; Randall Schaefer, MSN, RN; Rena Summers, BA; Lawrence Roakes, MBS, EMT-B—STRAC;
David Wampler, PhD, LP, FAEMS; COL Brian Eastridge, MD, FACS—UT Health San Antonio

Presentation 4
Bridging the Gap in EnRoute Critical Care: Enroute Critical Care Nurses Training with Critical Care Flight Paramedics
S. Salgado, MBA-HCM, RN; L. Hockersmith, AS, NRP, FP-C; G. M. Garza, BS, NRP, CCEMT-P; C. Cunningham, MD, MPH, FACEP;
M. Rivera, MAEd, RN; A. Marchi, AS, NRP, FP-C; M. Torrishedlund, PhD®, RN CEN; K. Cline, MSN, RN; K. Biever, MSN, ACNP-BC;
R. Sippel, MAEd, MAS, NRP, FP-C

Precision Medicine—Bexar (1.102)
Presentation 1
A pre-clinical study of using drag reducing polymers for prolonged field care to stabilize traumatic intracerebral aneurysm
Melissa Cook, MD; Adam M. Willis, MD, PhD—SAMMC; Nikhil Mehta, MD—IVC Northwest;
Ricardo Mejia-Alvarez, PhD—Michigan State University; David Chason, MD—UT Southwestern

Presentation 2
Developing a Biodegradable 3D-Printed Polymeric Implant for Controlled, Localized Drug Delivery
Priya Jain, BS—UT San Antonio

Presentation 3
Visualizing and quantifying the kinematics of blast traumatic brain injury pathology in an advanced preclinical model
Adam M. Willis—SAMMC; Faezeh Massoni, Suhas Vidhate, Joseph Kerwin, Ricardo Mejia-Alvarez—Michigan State University;
Anna Wermer, Kelsea Welsh, Hannah Romberger, Michaelann Tartis—New Mexico Tech; Candice Cooper, Scott T. Miller—Sandia National Laboratories

Presentation 4
A novel device for modeling blast traumatic brain injury pressures in laboratory
Adam M. Willis—SAMMC; Ricardo Mejia-Alvarez, Suhas Vidhate—Michigan State University; Michael March, Patrick Sleiman,
Hakon Kakonarson—Children's Hospital of Philadelphia

CDMRP Funding Opportunities & Application Process—Strategies for Success—11:00am - 12:00pm | Mesquite (2.01.24)
Dr. Rebecca Fisher, Program Management Lead—Congressionally Directed Medical Research Programs

Break—12:00pm—12:15pm

Networking Luncheon—12:15pm - 1:30pm | Ballroom (1.104 & 1.106)

Break—1:30pm—1:45pm

Podium Presentations—1:45pm-2:45pm
Immunology & Infectious Disease—Bexar (1.102)
Presentation 1
Comparison of Immune Tumor Microenvironments in Endoscopic Biopsy VS Resection Specimen in Colorectal Cancer Subjects
Jessica Cindass, MD; Annelies Hickerson, MD; Jamie Lombardo, MD; Lynn Messersmith, DO; Grant Williams, MD; Diane Hale, MD; Tommy Brown, MD; John Myers, MD; Robert Brady, MD; Ryan Collins, MD; Guy Clifton, MD—SAMMC; Timothy Vreeland, MD—MD Anderson Cancer Center; George Peoples, MD—Cancer Vaccine Development Program
Presentation 2
Vibrio cholerae Interaction with the Commensal Fungus Candida albicans
Mylea A. Echazarreta; Daniel Montelongo-Jauregui; Jose Lopez-Ribot; Karl E. Klose—UT San Antonio

Presentation 3
Modulation of Anti-Chlamydial Immunity is Dependent on Cross-Talk between Immune Effector Cells
Rishein Gupta, Katherine Schenkel; Jessica Alonso; Chaitrali Atre; Patrick Halloran; Aravind Kancharla; Bernard P. Arulanandam—UT San Antonio

Presentation 4
The Association of PD-L1 Expression with Infiltrating Lymphocyte Densities in the Colon Adenocarcinoma Tumor Microenvironment on Endoscopic Biopsy and Final Pathology
Annelies T. Hickerson, MD; Jessica L. Cindass, MD; Jamie L. Lombardo, MD; Lynn M. Messersmith, MD; Grant M. Williams, DO; Diane E. Halse, MD; John W. Myers III, MD; Tommy A. Brown II, MD; Ryan A Collins, MD; Robert O. Brady, MD; G. Travis Clifton, MD—BAMC; Timothy J. Vreeland, MD—UT MD Anderson Cancer Center; George E. Peoples, MD—Cancer Vaccine Development Program

Public Health & Wellness—Denman (2.01.28)
Presentation 1
Preliminary Evaluation of the Utility of an Activity-based Approach to Training Resiliency
Jason L. Judkins, MAJ, DSc., OTR/L, CHT—U.S. Army

Presentation 2
Longitudinal Evaluation of Spirometric Function in Air Force Firefighters
Dr. John Kim, DO PGY-2, USAF Capt. Internal Medicine Resident—SAUSHEC

Presentation 3
Applying Predictors of Aggression from the Civilian Workplace to Military Workplace Samples
Linda Morissette, BA, USN (Ret.); Michael Baumann, PhD—UT San Antonio

Presentation 4
Surgery Program Director (PD) Turnover Correlates with Residency Graduate Failure on American Board of Surgery (ABS) Examinations in Civilian Residency Programs
Davis H. Payne, MS2—UT Health San Antonio

Regenerative & Molecular Medicine—Travis (2.202)
Presentation 1
Stimulus-responsive drug delivery from PEGylated Polyvinylidene Fluoride- Polypyrrole Core-Shell Fibers for muscle tissue engineering
Solaleh Miar—UT San Antonio & UT Health San Antonio

Presentation 2
A Strategic Approach to Cord Blood Banking for Treatment of Patients with Hematological Disorders
Rogelio Zamilpa, PhD; Jessica Raley, PhD; Pamela Brown-Baer; Rachel-Louise Beddard, MD; Naomi Herrera, LVN—BioBridge Global

Presentation 3
Retrospective analysis of ocular involvement and outcomes following a novel approach to application of amniotic membrane graft in the management of Stevens - Johnson syndrome and Toxic Epidermal Necrolysis at a level one burn center
Donovan Reed, MD; Aditya Mehta, MD; Bryant Giles, DO; Joseph Santamaria, MD; Sheri DeMarteleare, MD; Andrew Lewis, MD; Brett Davies, MD; Anthony Johnson, MD—SAMMC

Presentation 4
Restorative Endeavor for Service Members Through Optimization of Reconstruction (RESTOR) Research Portfolio
Michael Sippel MD—UT Health Department of Surgery & 59th MDW/ST
CDMRP Presentation: DoD-Funded Research & Collaborations
—Planning for Success—1:45pm-2:45pm | Mesquite (2.01.24)
Dr. Dwayne Taliaferro, Program Manager—Congressionally Directed Medical Research Programs

Break—2:45pm—3:00pm

Poster Session & Networking—3:00pm—5:00pm | Convocation Center
Registration— 7:30am—8:00am  |  Ballroom Galleria

**Keynote Address**— 8:00am—8:45am  |  Ballroom (1.104 & 1.106)

*Presentation*
Balancing academic and entrepreneurial roles in the development of high-performance polymers for biomedical applications
Jeffrey W. Stansbury, PhD, Professor of Chemical and Biological Engineering, Professor of Restorative Dentistry—University of Colorado Boulder; Director—Biomaterials Research Center UCHSC/UCB

**Poster Award Announcements**— 8:45am—9:00am  |  Ballroom (1.104 & 1.106)

**Plenary Panel Discussion: Innovation & Entrepreneurship**— 9:00am—9:20am  |  Ballroom (1.104 & 1.106)
Christine Burke, Ph.D., MBA, Director, Commercialization & Technology Transfer—UT San Antonio;
John A. Fritz, M.S, MBA, MHA, Technology Licensing Associate—UT Health San Antonio;
Scott F. Walter, PhD, PE - Director of Technology—59th Medical Wing

Break— 9:20am—9:35am

**Breakout Sessions**— 9:35am—11:15am

*Biomedical Innovation Showcase*—  Ballroom (1.104 & 1.106)
Amir Jafari, Ph.D., Assistant Professor, Mechanical Engineering—UT San Antonio;
Alex Papanastassiou, MD, Associate Professor, Department of Neurosurgery—UT Health San Antonio;
Scott F. Walter, PhD, PE, Director of Technology—59th Medical Wing

*Symposia: Precision Medicine*—  Travis (2.202)
*Precision Medicine Research: Leveraging Partnerships to Meet Military Medical Needs*
C. Brinkley, V. Sylvia, D. Niemeyer—59th Medical Wing Chief Scientist’s Office, 59MDW/ST; J. Okulicz—Infectious Disease Service, San Antonio Military Medical Center; A. Willis, Department of Neurology, San Antonio Military Medical Center; T. Gibbons—59th Medical Wing Clinical Investigations and Research Support; R. Green—Brigham and Women's Hospital, Harvard Medical School

*Symposia: STRONG STAR*—  Denman (2.01.28)
*STRONG STAR Research Update*
Alan Peterson, PhD, ABPP—UT Health San Antonio, South Texas Veterans Health Care System, and UT San Antonio;
Casey Straud, PsyD; Elisa Medellin, MA; Mariya Zaturenskaya, PhD; Katy Dondanville, PsyD, ABPP—UT Health San Antonio;
Felipe Salinas, PhD—UT Health San Antonio and South Texas Veterans Health Care System

CDMRP Open House—  Harris (2.212)

Break— 11:15am—11:30am
Breakout Sessions—11:30am—1:00pm
Symposia: RESTOR—Denman (2.01.28)
Regenerative Medicine Concepts Applied to the Battlefield and Prolonged Field Care
Col Erik K. Weitzel, MD, Deputy Commander—US Army Institute of Surgical Research; Director—RESTOR™ Research Program, 59MDW ST; Margaux M. Salas, PhD, Research Scientist—RESTOR™ Research Program, 59MDW ST; Michael R. Sippel, MD, Chief Research Fellow; Jaclyn L. Yracheta, MD, Research Fellow; Claire D. Gerall, MD, Research Fellow; Mallory R. Wampler, MD, Research Fellow—RESTOR™ Research Program, 59MDW ST; General Surgery Resident, UT Health San Antonio

Symposia: Caring for the Caregivers—Travis (2.202)
Caring for the Caregivers
Carole L. White, PhD, RN—Caring for the Caregiver Program; Stephanie D. Rowan, Lt Col, USAF (TXANG), NC, MSN, RN—Effects of Sleep Deprivation on Clinical Performance and Critical Thinking; Angela Simmons, COL, USA, PhD, RN—Improving the Professional Quality of Life of Nurses; Jacqueline Killian, Col, USAF, PhD, RN—Laughter Yoga for Caregivers

CDMRP Open House—Harris (2.212)