





San Antonio Military Innovation

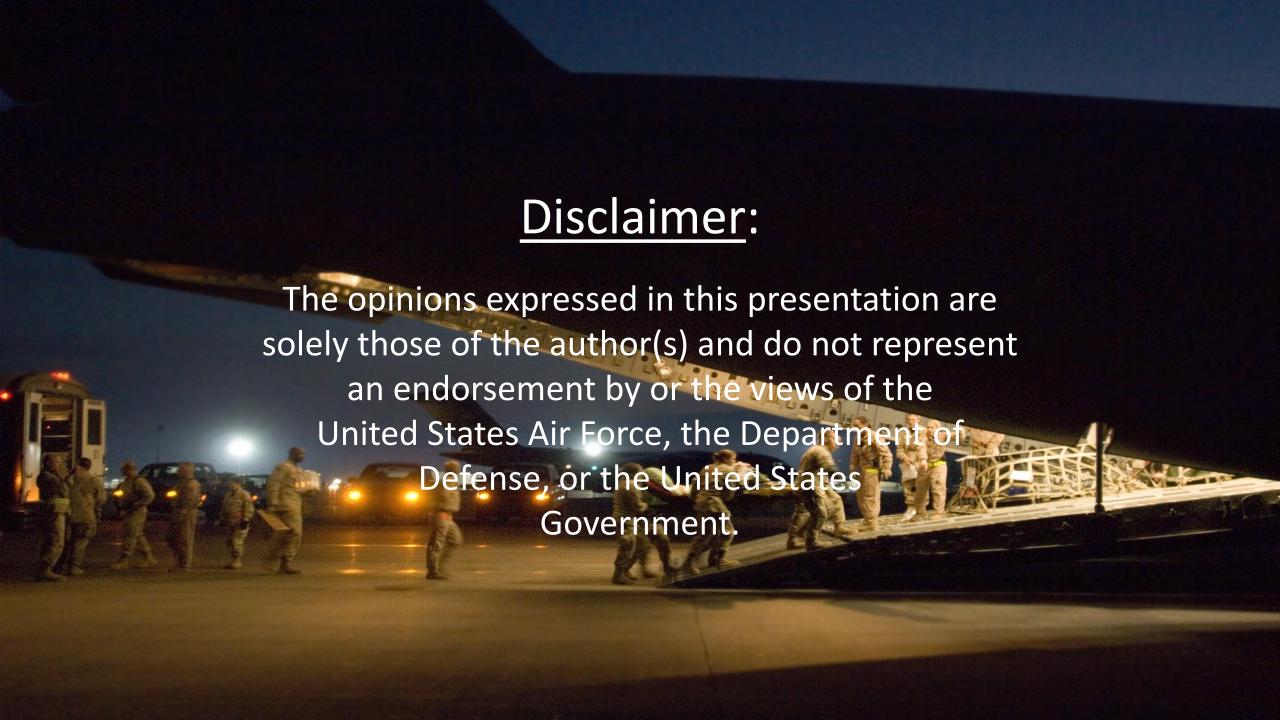




San Antonio Military Medical Research Consortium:

Local Collaboration - Global Impact

Deb Niemeyer PhD DAF Chief Scientist 59th Medical Wing JBSA-Lackland, Texas 210-292-2021





Agenda



Overview

- Partnerships
- Collaboration Highlights
- Member Organizations





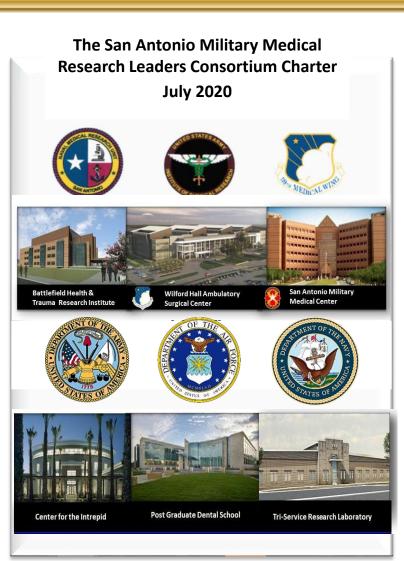


Introduction



Critical Partnerships

- The 59MDW Chief Scientist in collaboration with local DoD research partners, established the San Antonio Military Medical Research Leaders (SAMMRL) Consortium.
- Membership: 59MDW/ST, AF Post-Graduate Dental School & Clinics, Dental Research & Consultative Service (DRCS), BAMC Dept of Clinical Inquiry, SAMHS GME (SAUSHEC) NAMRU-SA, USAISR, 711HPW-AFRL/RHD, METC, USU-South.
- Promotes on-going communication to minimize duplication and enhance collaboration by maximizing use of each other's expertise and capabilities.
- Share information regarding on-going research, new initiatives and related efforts, and coordinate PAO materials, updates, etc.
- Co-located in San Antonio at JBSA-Lackland and -Fort Sam Houston, these organizations are well experienced to address DoD requirements.
- Other members are anticipated to include Southern Regional VA District.





Overview



- SAMMRL was established in October 2019 to provide opportunity for expanded collaboration among DoD stakeholders to identify military-unique capability gaps and apply science and technology to produce solutions to address identified needs.
- This partnership has its roots in the 1993 Base Realignment and Closure (BRAC) that established the Tri-Service Directed Energy Laboratory at Brooks City-Base, Texas. BRAC 2005 established the Battlefield Health and Trauma Institute at Fort Sam Houston which combined the combat casualty care and dental and biomedical research of the three services.
- The teamwork between the services has only increased to include; trauma critical care, clinical and rehabilitative medicine, diagnostics, therapeutics and medical modeling and simulation training.
- SAMMRL is poised to foster opportunities for local companies and institutions to collaborate with the military on development of new and innovative technologies for the battlefield and commercial sector.
- The consortium is open to all San Antonio regional Federal military medical research laboratories and training organizations.







Representative Collaborative Research



DASoC

- -On 13 Jan 2020, DHA Director's Innovation Group issued a program announcement memo requesting the establishment of a Defense Adaptive System of Care (DASoC), a uniform and coordinated approach to a novel and emerging health threats.
- -At present, there is no dedicated directed energy system of care that is designed to treat and evaluate exposed USG personnel that is integrated into an investigational framework.
- -DHA selected San Antonio Military Health System (SAMHS) as the most capable DoD infrastructure in managing complex directed energy casualties who present with suspected multi-systemic body damage.
- -The strong collaborations and partnerships at Joint Base San Antonio is the ideal location to establish and maintain the DASoC.

<u>DREAMLAND</u> - Defense Readiness Education And Materiel Laboratory for Austere-care Nascent Delivery

- -Partnership initiative between 59MDW Chief Scientist's Office and 59MDW Operational Medicine Chief (SGO).
- -DREAMLAND's vision is to 1) Imprint the ideal of CONOPS; 2) Train for standard and atypical/difficult Scenarios; 3) Train with Self-Contained Team (No Extra Help); 4) Train with Assigned Equipment; 5) Train Staff to Improvise. In order to assess appropriateness of training, scientific inquiry should be conducted to identify types of perishable skills, skill deterioration rate, and tactics for refreshing and retaining perishable skills.
- -Military combat medics are unique learners that benefit from both live tissue training and simulation to build their skillset. By offering pertinent and diverse learning experiences, clinicians have an opportunity to acquire advanced medical and surgical techniques outside his/her current knowledge base that will be used to save lives.





Representative Collaborative Research Education



Clinical Scientist Investigator Opportunity Network (CSION)

- Enhance mid-career clinicians' participation in research to address military relevant needs; 2-year program; oncemonth sessions
- Cultivates requirements-driven research. Graduates are expected to remain engaged with and make recommendations for program improvement and nominate future participants
- 59MDW, USAISR, NAMRU-SA, Other organizations

Military Clinical Research Fundamentals Courses

- 59MDW Fall 2-day workshop at JBSA-Lackland
- BAMC Spring 1-2 day workshop at JBSA-Fort Sam Houston
- Training for GME/GHSE residents/fellows and research staff Includes Submission processes, Regulatory and ethical requirements, Post-approval monitoring and eIRB, Statistics, database research/big data, Requirements-driven research & tech transfer, Funding, resources for assistance

Research Education Academy (REA)

- Provides basic and intermediate level research training to residents, fellows, staff
- Research Grant-writing intensive
- REA Scheduled Courses (Q2 & Q3) pilot launched Sep 2019
- Mobile Refresher Courses (On demand)
- Faculty drawn from 59MDW/ST staff and invited lecturers
- Improved grant-writing, establishment of collaborations and project management; improves quality of submissions to increase awards/funding to address warfighter & beneficiary care needs..



Representative Activities



- Hosted 2-day DARPA Program Review for "Biostasis"
 - Held at JBSA-Lackland Wilford Hall and Gateway Club
 - Performers meeting and tours
 - Federal Government Program Review
- Military Medical Industry Day
 - City Government, Academia, Industry, Military Organizations
 - https://www.eventbrite.com/e/military-medical-industry-days-ii-tickets-64545678863
- Examining SAMMRL Quarterly Newsletter and other Materials
- SAMHS-Universities Research Forum (SURF) 2021







SURF 2021



- Date and Location: June 10, 2021 at UTSA
- Format: In-person and virtual sessions
- Call for Abstracts: January 2021
- **Themes:** Trauma Care, Mental Health, Health Services Research, Pain, Human Performance & Injury Prevention, Infectious Disease

Invited Speakers:

- Col Jason Okulicz, MD (PI, DoD OWS JBSA COVID-19 clinical trial)
- Dr. Tom Travis (Lt Gen, USAF, MC, ret, 21st USAF Surgeon General and USU Senior Vice President)
- Heather Hanson (President, BioMedSA)
- Dr. Larry S. Schlesinger (President and CEO, Texas Biomedical Research Institute)

2020 — The San Antonio Military Health System, consisting of the 59th Medical Wing and Brooke Army Medical Center, along with UT Health San Antonio and UTSA hosted the sixth annual SAMHS and Universities Research Forum (SURF) on June 25, highlighting the latest research and discoveries of trainees, faculty, staff and students working to improve health outcomes and readiness.

Ref: http://research.utsa.edu/surf/







Military Medical Industry Day



- The City of San Antonio and the San Antonio Economic Development Corporation (SAEDC) are proud to host the second "Military Medical Industry Day" featuring the Navy Medical Research Unit San Antonio, the Air Force's 59th Medical Wing and the U.S. Army Institute of Surgical Research.
- On Military Medical Industry Day, during the afternoon, attendees will be able to participate with military research and development leaders in roundtable discussions that are focused on specific medical topics related to military operations. The final list of topics is as follows:
 - Burn treatment
 - Bioengineering
 - Hemorrhage Response
 - Wound Infections
 - Precision Medicine
 - TBI/Diagnostics/Intervention
- Date: October 2021
- Location: Henry B. Gonzalez Convention Center, San Antonio, TX
- https://www.eventbrite.com/e/military-medical-industry-days-ii-tickets-64545678863



SAMMRL



BACKUP SLIDES



Members



- 59th Medical Wing (59 MDW)
- Uniformed Services University-Southern Region Campus (USU)
- San Antonio Medical Health System Market (SAMHS)
- Dental Research and Consultation Service (DRCS)
- AF Post-Graduate Dental School & Clinics (AFPDS)
- Air Force Consultant in Dental Research (59 DG)
- San Antonio Uniformed Services Health Education Consortium (SAUSHEC)
- Brooke Army Medical Center-Department of Clinical Investigations BAMC-DCI)
- Naval Medical Research Unit San Antonio (NAMRU-SA)
- U.S. Army Institute of Surgical Research (USAISR)
- 711th Human Performance Wing-Air Force Research Laboratory/Bioeffects Division (711 HPW-AFRL/RHD)
- Medical Education and Training Campus (METC)







59th Medical Wing Chief Scientist's Office





Dr Deb Niemeyer, MS, MA, PhD, DAF (Col, USAF, Ret.) Chief Scientist 59MDW/ST JBSA-Lackland TX 210-292-3355

(BS, Marywood University; MS, University of Minnesota; MA, University of Northern Colorado; PhD, Medical College of Virginia, Virginia Commonwealth University). Dr Niemeyer is the Chief Scientist and Alternate Institutional Official for Human Subjects Research, 59th Medical Wing. She is responsible for high-level collaboration with government agencies, academia and industry, provides specialty consultation to Major Commands and Higher Headquarters, chairs and serves on multiple scientific and programmatic committees. She was commissioned through Air Force ROTC; her last posting was as Deputy Assistant Surgeon General and Senior Scientist, Modernization Directorate, and Commander, Air Force Medical Support Agency, Office of the Air Force Surgeon General. Dr Niemeyer is a recognized leader, as evidenced by her receipt of the Brigadier General Wilma Vaught Visionary Leadership Award, Air Education and Training Command (Civilian Category), 2020.

59MDW: "Warrior Medics – Patient Centered – Mission Focused"

59MDW/ST: "Grow Medical Leaders, Drive Innovations in Patient Care & Readiness"

- 59MDW: Largest of 15 clinical training sites in USAF
- Most productive AF Clinical Investigation Program
- Largest AF DHP Research Platform
- Accredited Programs
 - Animal Care and Use Program (with merit)
 - Human Research Protection Program (with recognition; 1st & only DoD reaccredited program, AAHRPP)
- Major Focus Areas Include:
 - Clinical Investigations
 - Evidence-Based Practice
 - Trauma Clinical Care and Training Research
 - Diagnostics/Therapeutics, `Omics Research
 - Nursing & Dental Research
 - Technology Transfer/Transition
 - Operational /Readiness and Credentials Training
 - Research Education & Training Programs (resident, fellow, staff)







USU-Southern Region





Thomas W. Travis, MD, MPH
Lieutenant General,
USAF, Retired
Senior Vice President,
Southern Region
Uniformed Services
University
Contact: 210-299-8501

Dr. Travis spent more than 38 years on active duty in the U.S. Air Force. Prior to his retirement in August, 2015 at the rank of Lieutenant General, Dr. Travis served as the 21st Surgeon General of the Air Force and functional manager of the U.S. Air Force Medical Service. In that capacity, he advised the Secretary of the Air Force and Air Force Chief of Staff, as well as the Assistant Secretary of Defense for Health Affairs on matters pertaining to the medical aspects of the air expeditionary force and the health of Air Force people, and directed the management of a \$6.6 billion, 44,000-person integrated health care delivery system serving 2.6 million beneficiaries at 75 military treatment facilities worldwide.

Dr. Travis was awarded his pilot wings in 1978 and served as an F-4 pilot and aircraft commander. He graduated from the USU F. Edward Hebert School of Medicine in 1986 as the top Air Force graduate and in 1987 he became a flight surgeon.

- The mission of the Uniformed Services University of the Health Sciences (USUHS) is to educate, train and prepare uniformed services health professionals, officers and leaders to directly support the Military Health System, the National Security and the readiness of our Armed Forces.
- The USUHS Southern Region Campus is located on Joint Base San Antonio, Fort Sam Houston. It houses the College of Allied Health Sciences and the Postgraduate Dental College.







San Antonio Military Health System (SAMHS)





Damon G. Baine Chief Operating Officer for the San Antonio Military Health System Contact: 210-536-6057

Mr. Damon Baine grew up in Beaumont, Texas and was commissioned a Second Lieutenant in the Army upon graduation from Texas A&M University with a degree in Biology. He holds a Master's Degree in Health Administration from Baylor University and served over 29 years on active duty in positions in the Military Health System ranging from leading free standing multispecialty ambulatory care clinics to level 1 trauma centers. He is a recipient of the Legion of Merit Medal and is a Fellow in the American College of Healthcare Executives. Mr. Baine is also responsible for creating and achieving a 3-year market Quadruple Aim Performance Plan focused on increasing the readiness of the force, creating better health of the population served, maximizing quality care, all at a lower cost. He is also responsible for all healthcare appointing and specialty care referral management activities across the market.

- SAMHS is led by Army (USA) and Air Force (USAF) general officers and is responsible for providing management and oversight of business, clinical, and educational functions of all Military Health System (MHS) medical treatment facilities (MTFs) located in the San Antonio metropolitan area. As one of the MHS' first Enhanced Multi-Service Markets (eMSM), the SAMHS is comprised of USAF and USA units that include: The 59th Medical Wing and Brooke Army Medical Center.
- The SAMHS operates with a \$1.2B budget and 12K staff who serve over 240K beneficiaries. As an integrated health system, the SAMHS continues to optimize the Direct Care system while strengthening the collaboration with Department of Veterans Affairs and Private Sector Care partners.
- The SAMHS is dedicated to the highest quality, patient centered care with a clear focus on safety, access to care, and customer service, while providing fist-rate graduate medical and other health education and training programs, conducting state-of-the-art research, and maintaining the critical global readiness of all war fighters.







Dental Researc (Consultation Service (Consultation)





Daniel A. Savett, DMD MS
Colonel Daniel Savett is the
Director of the US Air Force
Dental Evaluation and
Consultation Service (DECS), a
59th Dental Group Staff
Agency located at Joint Base
San Antonio -Fort Sam
Houston, Texas.

Contact: 210-539-8239

Col (Dr) Savett was born in Utica, New York. After receiving a BS in Microbiology from the University of Florida, College of Agriculture, he worked as a Biological Scientist until graduating from the University of Florida, College of Dentistry in 1993. Afterwards, Col Savett attended a Materials Fellowship, also at the University of Florida, and subsequently, entered the Air Force in 1995 as a staff dentist at Mackown Dental Clinic, Lackland AFB. After a variety of clinical positions he graduated from the one-year Advanced Education in General Dentistry "B" residency at Barksdale AFB under the mentorship of Col Sal Flores. He was a former squadron commander and served as Chief, Medical Operations and Requirements Divisions (SGO and SGR) at Headquarters, Pacific Air Forces, Office of the Command Surgeon. Colonel Savett has deployed as both a staff dentist and later, CJSOTF advisor, under Operations Southern Watch, Iraqi Freedom, and New Dawn. Col Savett is a member of the International Association for Dental Research, American Society for Microbiology, and holds a General Class Amateur Radio License and Private Pilot License.

The USAF Dental Research and Consultation Service (DRCS) located on Joint Base San Antonio-Fort Sam Houston, Texas and is charged to provide investigative guidance and assistance for all USAF dental personnel. DRCS today provides clinical, laboratory, and consultative services for dental equipment, dental materials, dental facilities, infection control, occupational health and safety for dental personnel and patient safety.







Air Force Post Graduate Dental School (AFPDS)





Col James F. Knowles, DDS Dean, Air Force Postgraduate Dental School 2133 Pepperrell Street Joint Base San Antonio-Lackland, Texas 78236 Contact: (210) 292-6280

Col (Dr) James Knowles earned a Bachelor's of Arts in Biology from Albion College, Michigan in 1992 and a Doctor of Dental Surgery in 1996 from the University of Michigan. After graduating from the University of Michigan School of Dentistry in 1996, Col Knowles was commissioned in the Air Force and has completed two post-graduate education programs in general dentistry. Colonel Knowles has served in multiple levels teaching residents in general dentistry and is a graduated squadron commander.

The Air Force Post Graduate Dental School (AFPDS) and Clinic is located on Joint Base San Antonio-Lackland, Texas. This new state-of-theart facility is host to graduate dental residency programs which train military dentists in advanced specialties and serves as a worldwide referral center. Advanced dental research is also completed as part of AFPDS residency programs. The AFPDS is a branch campus of the Uniformed Services University of the Health Sciences (USUHS).







AF Consultant in Dental Research





Kraig S. Vandewalle, DDS, MS
Col (ret), USAF, DC
AF Consultant in Dental
Research
JBSA—Lackland, Texas.
Contact: 210-671-9822

Dr. Vandewalle, a Professor at the USU PGS of Dentistry, is currently the AF Consultant in Dental Research and the Director of Dental Research and Dental Materials of the two-year Advanced Education in General Dentistry Residency (AEGD-2) at the AFPDS, JBSA Lackland, San Antonio, TX. Dr. Vandewalle graduated from the UTHSC, San Antonio with a D.D.S. degree in 1984. He completed a two-year General Dentistry Residency at Lackland AFB in 1993 and a fellowship in Dental Materials in 2002 at OHSU, Portland, OR. Dr. Vandewalle has over 25 years of teaching experience, a Master in the Academy of General Dentistry, has served as the President of the AF Constituent of the Academy of General Dentistry (AGD), Region 17 and as the president of the American Board of General Dentistry. He has authored or co-authored over 200 scientific articles and abstracts and lectures extensively on dental materials to numerous military and civilian dental groups. Dr. Vandewalle was the winner of the prestigious AMSUS "Dentist Award" as the federal service dentist of the year for 2012, selected as the Outstanding Senior Educator at WHASC for 2014, and honored with the AGD Thaddeus V. Weclew Award for outstanding contributions to the art and science of dentistry in 2015. Col (ret) Vandewalle retired from the US Air Force after 30 years of service.

- The 59 Dental Training Squadron (DTS) is the flagship for dental education in the AFMS; Dental research in 59 DTS is primarily conducted by residents and their teaching staff as part of the educational training process.
- Five dental residency programs (Orthodontics, Prosthodontics, Advanced Education in General Dentistry, Periodontics, and Endodontics) require the completion of a research project as partial fulfilment of a M.Sc. Degree through USUHS or UTHSC.
- Oral Surgery residency requires research scholarly activity.







BAMC DCI





Jane Shen-Gunther, MD, PhD, COL, MC Gynecologic Oncologist & Chief, Dept. of Clinical Investigation, BAMC JBSA Fort Sam Houston, TX Contact: 210-292-7068

COL (Dr) Jane Shen-Gunther is a medical doctor and researcher for the US Army, specializing in gynecologic oncology and obstetrics. Her professional interest focuses on developing simple, self-sampled cancer screening tests for early cancer detection & prevention. Her research works includes Recall of Human Papillomavirus (HPV) Vaccination History among Adolescents. She recently started using Mathematica and the Wolfram Language to advance her team's research in HPV detection, automating the analysis of several gigabytes of image and instrument data and generating interactive visual reports for both patients and physicians. Dr. Shen-Gunther has also deployed her predictive model in the Wolfram Cloud to share access with other physicians. Her work has led to improved patient interactions, as well as better prediction of PAP outcomes that impact underdeveloped countries.

- The mission of Brooke Army Medical Center (BAMC),
 Department of Clinical Investigation (DCI) Research
 Service is to promote, coordinate, support and oversee
 organized scientific inquiry in basic laboratory research,
 clinical research, and pre-clinical research using human
 and animal subjects at BAMC and the Southern Regional
 Medical Command (SRMC). The DCI Research Service also
 supports graduate medical education (GME) by
 encouraging and supporting research that includes
 residents at BAMC.
- Part of the DCI's mission is to support GME. Specifically, the DCI desires to get residents involved in research.
 Intramural funding up to \$7500 per year may be available for research projects that involve resident participation.







SAUSHEC





Dr. Mark W. True
Dean, Designated Institutional
Official (DIO) and Chief
Executive Officer (CEO) of the
San Antonio Uniformed
Services Health Education
Consortium (SAUSHEC)
Contact: 210-916-5756

Dr. True is a retired Air Force Colonel. He was commissioned through the United States Air Force Academy (1991). He served as a line officer for five years as an electrical engineer in support of Air Force Space Command's space launch and missile testing program. Dr. True received his medical education through the Uniformed Services University (2000), completed a residency in Internal Medicine (2003) and fellowship training in Endocrinology, Diabetes and Metabolism (2005). In 2006, he deployed to Sather Air Base, Baghdad International Airport, Iraq, in support of Operation Iraqi Freedom. He has served as a staff endocrinologist, teaching faculty, flight commander, founding director of the Air Force Diabetes Center of Excellence, president of the Society of Uniformed Endocrinologists, consultant to the Air Force Surgeon General for endocrinology, program director for the Air Force Endocrinology Fellowship, Director of Graduate Medical Education for the 59th Medical Wing, and Associate Dean for Air Force Graduate Medical Education at SAUSHEC. He entered federal civilian service as the SAUSHEC Dean after his active duty retirement in 2019.

- San Antonio Uniformed Services Health Education Consortium (SAUSHEC) mission is to advance military health and readiness through education of physicians and allied health specialists to lead our nation's Military Health System (MHS) into the future.
- The SAUSHEC is a renowned graduate medical education program with 37 GME programs and military residents in training. Residents are among the top rated in the nation in board certification.
- The Graduate Allied Health Education Programs (GAHE) also fall under SAUSHEC. The GAHE contains 22 programs, supported by a variance of sponsorships and multiple accrediting agencies.







NAMRU-SA





CAPT Andrew F. Vaughn
Commanding Officer
Medical Corps
United States Navy
Naval Medical Research Unit –
San Antonio
JBSA Fort Sam Houston, TX
Contact: 210-539-5963

CAPT (Dr) Vaughn was first commissioned in the U.S. Navy in May, 1985 from The Citadel in Charleston, South Carolina. He reported as the Damage Control Assistant aboard the USS PLEDGE (MSO-492). He left active duty in 1990 and graduated from Drexel University School of Medicine in Philadelphia, PA in 1996. He completed an internship in Basic Surgery at Naval Medical Center San Diego. In June 2003 he completed his General Preventive Medicine Residency at the Uniform Services University of the Health Sciences in Bethesda, MD. He was stationed at Navy Environmental and Preventive Medicine Unit FIVE, deployed to Al Asad, Iraq with Forward Deployed Preventive Medicine Unit – West as the OIC. He became Group Surgeon for RIVGRU 1, Little Creek, VA, Health Promotions Division Officer, Navy and Marine Corps Public Health Center and later as Deputy Director of the Expeditionary Preventive Medicine Directorate. He deployed to Kabul, Afghanistan as the International Security Assistance Force Preventive Medicine Officer. He returned to become the OIC of Navy Environmental and Preventive Medicine Unit TWO in Norfolk, Virginia. He became Director, Naval Medical Research Unit TWO Det Phnom Penh, Cambodia under the aegis of the Naval Medical Research Center - Asia. He assumed the duties of Executive Office, U.S. NAMRU-3 in Cairo, Arab Republic of Egypt. Assumed command of NAMRU-3 in Sept 2016. During his tenure, NAMRU-3 initiated and maintained research projects in nine countries across the Middle East and Africa and began the transition to its new home in Sicily.

- The Naval Medical Research Unit San Antonio
 (NAMRU-SA) is located on the San Antonio Military
 Medical Center campus, Joint Base San Antonio-Fort
 Sam Houston, TX. NAMRU-SA serves as one of the
 leading research and development laboratories of the
 U.S. Navy under the DoD and is one of eight
 subordinate research commands in the global network
 of laboratories operating under the Naval Medical
 Research Center (NMRC), Silver Spring, MD.
- NAMRU-SA conducts gap driven combat casualty care, craniofacial, and directed energy research, to improve survival, operational readiness, and safety of Department of Defense personnel engaged in routine and expeditionary operations.







USAISR





Colonel (Dr.) Mark Stackle Commander, U.S. Army Institute of Surgical Research (USAISR), JBSA Fort Sam Houston, TX Contact: 210-539-3219

COL (Dr) Stackle graduated from Gonzaga University in 1997 where he also served as the student body president. He received his Doctor of Medicine degree in 2001 from Georgetown University School of Medicine and went on to complete his Family Medicine residency at Tripler Army Medical Center, Hawaii, where he served as Chief Resident. Colonel Stackle commanded the U.S. Army Health Clinic Babenhausen, Germany, and served as the Medical Director for the Army Medical Department's Armed Force Health Longitudinal Technology Application (AHLTA) Program Office in Washington, D.C. part of which he served with the 526th Brigade Support Battalion, 2nd Brigade Combat Team, 101st Airborne Division, during Operation Iraqi Freedom. In 2011, Colonel Stackle completed the Madigan Faculty Development Fellowship during which he earned his Master's in Business Administration from Pacific Lutheran University. He served as a faculty physician with the Eisenhower Army Medical Center Family Medicine Residency Program at Fort Gordon, Georgia, and then as Family Medicine Residency Program Director at Womack Army Medical Center at Fort Bragg, NC. He was assigned as the Deputy Commander for Clinical Services at US Army Medical Activity Japan and then as the Command Surgeon for the 4th Infantry Division at Fort Carson, CO. He deployed as the U.S. Forces Afghanistan Command Surgeon in support of Operation Freedom's Sentinel and Resolute Support. Colonel Stackle attended the U.S. Army War College in Carlisle Barracks, PA where he earned his Master's in Strategic Studies degree.

- The U.S. Army Institute of Surgical Research (USAISR) is one of six research laboratories within the U.S. Army Medical Research and Materiel Command of the U.S. Army Medicine Command. The Institute is the Army's lead research laboratory for improving the care of combat casualties. The mission of the Institute is to "Optimize Combat Casualty Care".
- The USAISR does this through three unique missions:
- (1) To provide requirements driven innovations in combat casualty care to advance medical care for injured service members.
- (2) As the only Burn Center in the DoD provide state of the art burn, trauma and critical care to injured war fighters and DoD beneficiaries around the world.
- (3) Through the Joint Trauma System provide a performance improvement system dedicated to ensuring that medical care is organized according to the needs of the patient.
- The Institute has grown from a 12 person staff in 1943 to more than 700 military and civilian personnel focused on "Optimizing Combat Casualty Care"







711HPW-AFRL/RHD





Ms. Stephanie Miller, MS
Chief of the Bioeffects
Division, 711HPWAFRL/RHD
JBSA Fort Sam Houston, TX
Contact: 210-539-7325
*Acting RH Director

Ms. Stephanie Miller is Chief of the Bioeffects Division, leads, and manages the AF bioeffects research portfolio. Ms. Miller has worked in the Directed Energy (DE) community for 30 years and is best known for her expertise in radio frequency (RF) bioeffects and nonlethal weapons (NLWs). Ms. Miller has blazed many trails throughout her career building and leading an internationally recognized team with incomparable research capabilities for defining the fundamental biological effects in response to DE exposures. Their efforts have resulted in modifications to overly restrictive international safety standards, maximizing the DoD's ability to fully exploit the electromagnetic spectrum for operational use. As the Bioeffects Program Manager for the Active Denial System (ADS) Joint Advanced Concept Technology Demonstration (ACTD), she was charged with characterizing the biological effects of ADS and optimizing system parameters for maximal safety and effectiveness. Ms. Miller presented the biological effects of ADS to numerous DoD leaders including the Vice Chairman of the Joint Chiefs of Staff, the Deputy Director, J8, Assistant Secretaries of Defense for Health Affairs and Public Affairs, and Directors, Defense Research and Engineering and Operational Test and Evaluation.

- The 711HPW Air Force Research Laboratory, Bioeffects
 Division (711HPW-AFRL/RHD) mission is to provide
 increased military capabilities for studying directed energy
 weapons effectiveness, and ways to protect service
 members by improving health and safety standards for safe
 exposures to directed energy devices
- The 711 HPW-AFRL/RHD captures and quantifies the biological effects of directed energy weapons, so researchers can develop non-lethal weapons and the defensive means to protect our own service men and women from this type of weapon.
- The 711 HPW-AFRL/RHD is located in the Tri-Service Research Laboratory (TSRL) along with the Navy's Directed Energy program and the Army Veterinary Science staff on Joint Base San Antonio-Fort Sam Houston, Texas.







METC





Thomas C. Herzig, PhD, PMP CAPT, MSC, USN Commandant, Medical Education & Training Campus JBSA Fort Sam Houston, TX Contact: 210-808-1227

CAPT (Dr) Herzig received his Bachelor of Science in biology from Southwestern University, Georgetown, TX in 1984. He received his Doctor of Philosophy in pharmacology in 1992 from the UTHSC San Antonio. Before entering the Navy, Captain Herzig completed three postdoctoral fellowships from 1992-1996. Captain Herzig was commissioned a Lieutenant in 1996, and reported as a research physiologist to the AFRRI in Bethesda, MD, assistant professor USUHS; executive officer at the NSMRL in Groton, CT; and NHRC, San Diego, CA as head of warfighter performance. Staff tours include BUMED Future Plans and Strategies (M5), US Navy representative to the NATO Biological Medical Advisory Council and CBRN Medical Working Group; and as deputy force surgeon and chief medical planner for the Commander, Naval Surface Forces, U.S. Pac Fleet. His operational assignments include deployment for one year to Baghdad, Iraq, as the chief medical planner for Multi-National Force Iraq, support OPERATION TOMODACHI, a disaster relief mission following the 2011 Tōhoku earthquake and tsunami and his last assignment as commanding officer, NAMRU-San Antonio. Captain Herzig received a Master of Science degree in project management from GW University School of Business, and received his project management professional certification.

- The Medical Education and Training Campus (METC) is an extensive state-of-the-art enlisted medical training educational institution for Army, Navy, Air Force and Coast Guard medics, corpsmen, and technicians. METC was created to meet the 2005 Base Realignment and Closure Commission decision to co-locate training at Joint Base San Antonio-Fort Sam Houston, Texas. METC is the first stop for nearly all entry-level, enlisted medical training and a point of return for most of the advanced enlisted medical training.
- As the world's largest enlisted medical education campus and largest consolidation of military training in Department of Defense history, medical enlisted personnel will no longer have to wonder what it will be like to work in a joint environment. With this consolidation, METC enjoys the collective experience of all services to train our students to be the world's finest medics, corpsman, and technicians.





Additional Information



• Websites:

- https://www.59mdw.af.mil
- https://www.59mdw.af.mil/Units/Chief-Scientist-ST/
- https://www.59mdw.af.mil/Units/Chief-Scientist-ST/Human-Research-Protection-Program/
- https://www.59mdw.af.mil/Units/Chief-Scientist-ST/Office-of-Research-and-Technology-Applications/
- https://biomedsa.org/
- https://sabioscienceresearch.org/
- https://www.swri.org/content/client-services
- https://www.txbiomed.org.
- https://www.health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Access-to-Healthcare/Multi-Service-Markets/San-Antonio-Military-Health-System
- https://www.bamc.health.mil/staff/research/dci/
- https://www.bamc.health.mil/saushec/
- https://go.usa.gov/xRQHc (NAMRU-SA)
- https://usaisr.amedd.army.mil
- https://www.metc.mil/
- https://www.uthscsa.edu/
- https://research.utsa.edu/surf/
- http://www.sanantonioedf.com/
- https://www.samedfoundation.org/
- https://sabioscience.org/
- https://www.sanantonio.gov/EDD/SAEDC







59MDW Chief Scientist's Office





59MDW/SAMHS/70+ sites supported Worldwide

STRATEGY (Leads Science)

OPERATIONS (Leads Execution)

TECH BASE - SAMHS (Lead Technical Programs)

MAIN OFFICE EXEC ASST / MNGR Mr. Daniel Barrera



SCIENITST Col Vikhyat Bebarta

59MDW/CC (and Human Research Protection Institutional Official) Maj Gen John DeGoes



59MDW/ST CHIEF SCIENTIST (and HRP AIO) Dr Debra Niemeyer



DEPUTY CHIEF SCIENTIST (Acting) (dual-hatted/STN) Col Antoinette Shinn Quality Improvement/
Patient Safety Support (QIPS) Cell



ESEARCH BUDGET & ACQUSITIONS ST Administrator Mr Michael Dinkins

Budget, Contracts, Financial, Logistics, Medical Administration Support Committees

- Scientific Advisory Cmte
- Research ACQ & Advisory Cmte
- HRPP Steering Committee
- Scientific Ethics SubCmte
- New Technologies SubCmte
- Other SubCmtes as Needed
- SAMHS-Universities Research Forum
- BioMedSA Board of Directors



SR RESEARCH PROGRAM ANALYST & CELL MNGR (acting)

Mr Edward Chagoy

-Tasks Lead; PAO Interface, -Technical Program Mngmnt & Project Analysis - Research Cell – Strategic Plans/Programs, Scientific and Technical Support

-<u>Dental Liaisons</u>: AF-Post Graduate Dental School & Clinics; GDE (Dr Kraig Vandewalle) and Dental Research & Consultative Support (DRCS) (Col Daniel Savert)

-San Antonio Uniform Services Health Education Consortium, GME/GHSE (Col Mark True)
-Centers (DHA HCE; Diabetes CoE; Sleep Ctr; Bone Marrow Trnsplnt; Burn Ctr, etc.)



TECHNICAL DIRECTOR, Dr Scott Walter

Product Transfer, Transition, Partnerships & Commercialization

-Technology Transfer Focal Point -FDA Consultation/Support -Extramural Outreach/Partnerships -Military Medical Industry Days Lead -Knowledge & Material Transition -Advanced Development Lead -Product Commercialization

Office of Research and Technology Applications
(ORTA)

DIRECTOR, TRAUMA & CLINICAL CARE RESEARCH
Dr Amber Mallory

AF EM Research Thrust Area Joint Austere Medicine Research

- Surgical and Technological Advancements for Traumatic Injuries in Combat (STATIC)

(STATIC)

-Forward Applications for Circulatory Trauma and Stabilization (FACTS)
-Restorative Endeavor for Service Members Thru Optimization of

Reconstruction (RESTOR-FM)

- Provider Scientist-Investigator Opportunity Network (PSION)

Director, ECRC
En Route Care Research Center

DIRECTOR, CLINICAL INVESTIGATIONS & RESEARCH SPT, Col Carol Walters

Clinical Investigations Program Lead & DHP RDT&E Support

-Clinical Research Laboratory -Clinical Research Operations -Clinical Research Support

Research & Regulatory Compliance (IRB/IACUC)

Clinical Investigations Facility (CIF)

DIRECTOR, DIAGNOSTICS, THERAPEUTICS AND 'OMICS Dr Carl Brinkley

AF ICM Research Thrust Area

Joint Integrative/Clinical Medicine Research

Joint integrative/Clinical Medicine Research

-Military and Family Health & Resilience
-Restorative Endeavor for Service Members Thru Optimization of
Reconstruction (RESTOR-ICM)
-Disease Injury & Pain Management
-Emerging Knowledge & Research Technology
-Trainee Heal

-Sustainment / Proficiency Training -Research Education Academy ("Grant Camp")

Precision Medicine & Patient Centered Care

Director, CAMD
Center for Molecular Detection

DIR, NURSING RESEARCH & CTR FOR CLINICAL INQUIRY, Col Antoinette Shinn

Clinical Research-QI/PI-EBP

-Nursing Research
-Quality Improvement (QI)
-Process Improvement (PI)
-Evidence Based Practice (EBP)
-Consultation

Center for Clinical Inquiry (C2I)