

# San Antonio Military Medical Research Leaders Consortium Newsletter

VOLUME III, ISSUE 1

Published by: Chief Scientist's Office, 59 MDW/ST

FEBRUARY 2024

## Table of Contents

Military health and readiness improved through collaboration with small business.....Page 1

AFRL, 59th Medical Wing Launch Space Medical Research Group .....Page 2

DHA Launches 9 Defense Health Networks to Improve Health Care Delivery to Joint Force.....Page 3

Bioscience-Medicine: Texas hub selected for new federal network in science and health innovation .....Page 3

3M receives \$34.2 million award to improve treatment of traumatic wounds from point-of-injury to hospital.....Page 4

Three BAMC staff members honored as Heroes of Military Medicine.....Page 5

"Game Changer": MRDC Helps Shape, Design New Army Metro Ambulance.....Page 6

59th Medical Wing's own honored with Aerospace Medical Association fellowship.....Page 7

Awarded for Innovation in Healthcare and Bioscience: Dr. Sunil K. Ahuja.....Page 7

Part of the Team!: MRDC, ISR Help Train Medical Students in Unique Way.....Page 8

U.S. Army Medical Command welcomes 46th Army Surgeon General.....Page 9

AMSUS recognizes two local 'rising stars' from Defense Health Network Central.....Page 10

BUMED FORCM Mangaran visits Naval Medical Research Unit San Antonio.....Page 11

Defense Health Network Central garners top honors for Ready Reliable Care initiatives.....Page 12

59th MDW: Office of the Chief Scientist, Science and Technology Scores High With Multiple Presenters Accepted at AsMA Annual Scientific Meeting.....Page 13

## Military health and readiness improved through collaboration with small business

JBSA NEWS | Oct. 17, 2023, By Staff Sgt. Kelsey Martinez, 59th Medical Wing Public Affairs

Joint Base San Antonio- Lackland, Texas – In the course of their duties, many military personnel, including Security Forces personnel, parachutists, Air Force Basic Military Trainees (BMTs), and Special Operators, often endure significant physical stress on their lower body joints and soft tissues. These stresses can lead to musculoskeletal injuries (MSKI) that impact their well-being, performance, and overall quality of life. Importantly, such injuries also hamper the Department of Defense's readiness and drive up both operational and healthcare costs. Annually, MSKI affect approximately 800,000 military service members, resulting in 2.2 million medical visits, 25 million lost duty days, and healthcare costs totaling around \$3.7 billion.



MILITARY PERSONNEL FACE SIGNIFICANT MUSCULOSKELETAL INJURIES, PARTICULARLY ANKLE INJURIES, WHICH CAN LEAD TO TRAINING DISRUPTIONS, COSTLY MEDICAL ATTRITION, AND AFFECT MILITARY READINESS. TO ADDRESS THIS, THE AIR FORCE INITIATED THE VERSATILE INJURY PREVENTION AND EMBEDDED RECONDITIONING PROGRAM (VIPER) AND PARTNERED WITH TAYCO BRACE TO DEVELOP THE XAB (EXTERNAL ANKLE BRACE). THIS INNOVATIVE BRACE OFFERS BETTER RANGE OF MOTION AND COMFORT, REDUCES RECOVERY TIME, AND CAN BE WORN OVER COMBAT BOOTS OR ATHLETIC SHOES. IT IS EXPECTED TO SIGNIFICANTLY IMPROVE RETURN-TO-DUTY RATES, REDUCE DISRUPTIONS, AND ENHANCE OVERALL OUTCOMES FOR SERVICE MEMBERS WITH ANKLE INJURIES. (COURTESY PHOTO TAKEN BY MR. JOSE-NOEL ROCHA, TAYCO BRACE INC.)

Ankle injuries are the most prevalent MSKI among military personnel, with service members being five times more likely to suffer ankle injuries compared to the general population. This makes ankle injuries a leading cause of lost training and operational time. Closer to home, medical attrition from BMT costs the Air Force up to \$46 million each year, with MSKI being the primary reason for medical non-deployable status across the Air Force and the leading cause of medical discharges from the military.

To address these challenges, the 559th Medical Group introduced the Versatile Injury Prevention and Embedded Reconditioning program (VIPER) in 2017. This marked the Air Force's pioneering endeavor to have athletic trainers embedded within the unit, providing acute medical and rehabilitation services to basic military trainees and technical students. Recently, Maj. (Dr.) Korey Kasper and Maj. (Dr.) Steven Trigg, sports medicine physicians and clinical researchers heading the VIPER program, identified a commercial company called TayCo Brace that was developing an advanced alternative to the standard walking boot, commonly prescribed to safeguard a patient's foot and ankle following injury or surgery. The adoption of this new technology empowers injured servicemembers to swiftly regain their function and mission effectiveness, benefiting both the member and supporting the training of warfighters and military operations.

Kasper emphasized that their collaboration with TayCo adapted a commercial external ankle brace specifically for military training activities, facilitating quicker recovery and averting costs related to training delays.

This innovative approach enhances the wearer's range of motion and comfort, optimizing the healing, recovery, and restoration of function. To realize the potential for military use, the team partnered with the 59th Medical Wing Chief Scientist's Office Science & Technology (S&T) team and the 559th Trainee Health Squadron, collectively seeking and securing AFWERX Small Business Innovation Research (SBIR) funding.

Continued on page 2

**Continued from page 1**

Over the past few years, Kasper and Trigg have collaborated with TayCo Brace to evaluate designs, provide feedback for improvement, and support its development. This culminated in the completion of the next generation brace this summer, with availability expected in early 2024 or possibly sooner. Named the XAB (eXternal Ankle Brace), this new design employs a range-of-motion-stop hinge, offering healthcare professionals greater control over functional recovery and return to duty. It includes a new strapping system for enhanced comfort and durability, as well as improved independence for service members in donning/doffing uniforms, equipment, and gear. The XAB also features an anti-slip plantar strap to enhance user safety in wet and rugged terrains. Furthermore, the material hardening and ruggedization of the XAB have reduced its weight, enhancing portability and durability in training and combat without sacrificing efficacy.

The military stands to gain significantly from this innovation, with expected return to duty rates up to four times faster, fewer performance disruptions, and improved outcomes after ankle and hindfoot injuries. The XAB is two to three times lighter than a standard walking boot and is the only external ankle-foot orthosis (AFO) that can be worn over a combat boot or athletic shoe. This provides exceptional stability and balance while limiting inversion/eversion movement, reducing downtime and recycled trainees as compared to traditional solutions like the walking boot. In many cases, trainees and service members can return to training, normal work/operations, or even combat almost immediately, enabling them to navigate wet, rough, and rocky terrain safely and effectively.

Kasper expressed the value of partnering with small businesses through AFWERX for developing or adapting products to meet the specific needs of Airmen, emphasizing it as a synergistic force multiplier and hoping for continued support for such relationships throughout the Air Force.

TayCo Brace has made the XAB commercially available for procurement and collaborated with the Defense Logistics Agency (DLA) to add the XAB to their medical Electronic Catalog (ECAT), facilitating easy procurement for the military. TayCo Brace is also involved in multiple SBIR R&D contracts through the AFWERX SBIR program, aimed at further reducing weight and profile while ruggedizing materials and design for military applications.

**AFRL, 59th Medical Wing Launch Space Medical Research Group**

JBSA NEWS | Nov. 30, 2023 - By Whitney Wetsig Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio

A newly established collaboration between the 711th Human Performance Wing’s Human Effectiveness Directorate, the Air Force Research Laboratory and the 59th Medical Wing is creating military research working group to address defense space-linked medical research gaps. The Clinical and Operational Space Medicine Innovation Consortium, or COSMIC, will serve as a platform to fuse human health and performance research capabilities and expertise across both organizations.



A graphic depicting Rocket Cargo, one of the Department of Air Force Vanguard programs that focuses on rapid global mobility including delivery of medical supplies. (U.S. Air Force illustration)

“The goal here is to spearhead defense space-linked medical research,” said retired Brig. Gen. (Dr.) James McEachen, a 711th HPW senior aerospace medicine physician-researcher and COSMIC steering committee co-chair. “This is a win for all involved. COSMIC provides an important venue to respond to emerging space-linked medical research requirements while simultaneously promoting collaboration and innovation among our government, academic and industry partners.”

With COSMIC, the 711th HPW is partnering with the 59th Medical Wing, the U.S. Air Force's largest medical wing comprising six medical groups across San Antonio, Texas.

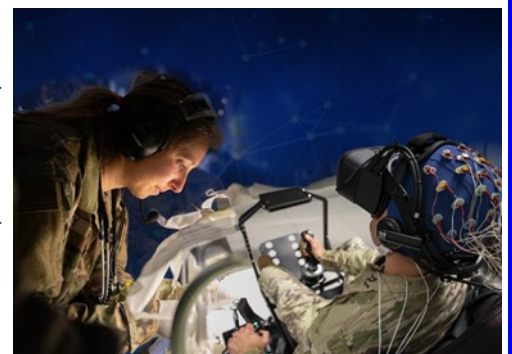
“COSMIC represents a significant milestone in our collective efforts to establish defense space medical research capabilities,” said Maj. (Dr.) Craig Nowadly, an emergency physician and 59th MDW COSMIC steering committee co-chair. “By combining the strengths of both organizations, COSMIC has access to research expertise across a continuum of both clinical medicine and human performance optimization.”

McEachen said COSMIC will deliver tremendous value and knowledge to the military.

“It is important for the DOD to understand how human health and performance are impacted during military space operations and to develop capabilities to sustain human performance and mitigate health risks,” McEachen said. “By establishing this collaborative research working group, COSMIC aims to spearhead more efficient and effective processes for addressing top priority clinical care and human performance research needs for DOD space medicine.”

**About AFRL**

The Air Force Research Laboratory, or AFRL, is the primary scientific research and development center for the Department of the Air Force. AFRL plays an integral role in leading the discovery, development and integration of affordable warfighting technologies for our air, space and cyberspace force. With a workforce of more than 12,500 across nine technology areas and 40 other operations across the globe, AFRL provides a diverse portfolio of science and technology ranging from fundamental to advanced research and technology development. For more information, visit [www.afresearchlab.com](http://www.afresearchlab.com).



A graphic of U.S. Air Force scientists conducting human performance research. (U.S. Air Force graphic / Randy Palmer)

## DHA Launches 9 Defense Health Networks to Improve Health Care Delivery to Joint Force

MHS News, 10/12/2023, By Paul Schultz, MHS Communications

“The Military Health System is changing ... changing how we organize to counter threats that surround us, how we deliver care on the battlefield or at home, and how we leverage the tools and technologies of this digital age to better service our patients,” said Defense Health Agency Director U.S. Army Lt. Gen. Telita Crosland in a recent message to agency employees.

On Oct. 1, the Defense Health Agency opens Health.mil, or DHA, launched phase one of its “Organizational Advancement” plan into motion. This plan carries out a deliberate organizational change to strengthen the management of health care delivery, combat support and support to the military health enterprise worldwide.

“Advancement will make our organization better,” said DHA Deputy Director Dr. Michael Malanoski. “It will streamline how we work with the service medical departments, strengthen the connection between headquarters and our teammates across the organization, and improves our support request response times.”

The first phase realigns the former 20 direct reporting medical markets – each a grouping of military hospitals and clinics with varying leadership rank structures – into nine Defense Health Networks (DHN). Every military hospital and clinic reports to one of these networks, each led by a general or flag officer.

“Moving to the network structure led by general officers, most of whom are dual hatted holding both DHA and military department medical command positions, standardizes leadership to improve health care delivery around the globe,” said Malanoski. “This simultaneously enhances the ability of both DHA and the military departments to meet the requirements of distinctly separate yet mutually reliant medical missions.”

Established on Oct. 1, 2013, by congressional requirements laid out in the National Defense Authorization Act (NDAA), the DHA had an initial headquarters structure that was policy driven under the original TRICARE Management Activity. Because DHA was designated a combat support agency to provide operational support to the military departments and combatant commands to enhance military medical readiness, DHA has changed significantly during its 10-year history. The most notable change came on Oct. 1, 2019, when, following requirements set forth in the 2017 NDAA, military hospitals and clinics around the world transitioned from the three military departments to DHA.

As the medical facilities transitioned, DHA established the original market model to provide operational communication and coordination. Using lessons learned from the market model, this new advancement plan alleviates identified gaps, empowering decision making at echelon, aligning functions, and streamlining processes to improve the workplace and to improve health care provision.

“The talent and expertise of our employees, from the headquarters to the hospitals and clinics, is exceptional; this a truly dedicated and professional workforce,” Crosland said. “Advancing the market model, empowering leaders at echelon, eliminating overlap, and strengthening processes frees our talented workforce to focus on what they do best – making extraordinary experiences normal and exceptional outcomes routine as we improve health and build readiness.”

### The Nine Defense Health Networks and their Leaders

Defense Health Network Atlantic: Director: Rear Adm. Matthew Case, U.S. Navy

Defense Health Network Central: Director: Brig. Gen. Thomas W. Harrell, U.S. Air Force

Defense Health Network Continental: Interim Director: Rear Adm. Tracy Farrill, Commissioned Corps of the U.S. Public Health Service

Defense Health Network East: Director: Brig. Gen. Lance C. Raney, U.S. Army

Defense Health Network West: Director: Brig. Gen. E. Darrin Cox, U.S. Army

Defense Health Network National Capital Region: Director: Brig. Gen. Deydre Teyhen, U.S. Army

Defense Health Network Europe: Director: Brig. Gen. Clinton K. Murray, U.S. Army

Defense Health Network Indo-Pacific: Director: Col. Bill A. Soliz, U.S. Army

Defense Health Network Pacific Rim: Director: Rear Adm. Guido F. Valdes, U.S. Navy

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## Bioscience-Medicine: Texas hub selected for new federal network in science and health innovation

Texas Public Radio | By Elena Rivera, Dan Katz, Published October 2, 2023 at 6:02 PM CDT

The U.S. Department of Health and Human Services has announced that Dallas, San Antonio, Houston and Austin will form a new national health innovation network focused on improving patient experiences.

The network, part of the Advanced Research Projects Agency for Health (ARPA-H), will focus on research projects to address health problems like access, equity and prevention.

The collaboration will have a management base in Pegasus Park in West Dallas, located near Parkland Health and UT Southwestern Medical Center.

Lyda Hill Philanthropies CEO of Biotech Initiatives Tom Luce helped lead the bid to bring the project to Dallas. He said the city’s location was a plus for the network.

“The fact we’re in the central part of the country [with] easy access to both coasts, [and] we’ve got a great health care system, we decided to go for it,” Luce said.

Continued from page 3



Jay Brousseau/Culver PR. Pegasus Park in Dallas will serve as the management base for a new national healthcare hub also based in Austin, Houston, and San Antonio — focused on improving patient experiences in the health field.

The new hub also stands to benefit from San Antonio's established \$44 billion health care and bioscience sector.

"San Antonio has long demonstrated how its collaborative approach to research, from the bench to the bedside, has led to timely and effective innovation, particularly during the recent COVID pandemic," said Martin Landon, CEO of BioBridge Global.

San Antonio will serve as the lead facilitator for the hub's creation of a new immersive experience design for patients in Texas.

"The unique partnership with Dallas and Austin, or the I-35 corridor, demonstrates — at a national level — our ability to maximize this unparalleled hub of discovery, innovation, and creating essential solutions for the most complex health challenges for the growing and increasingly diverse population in this region, in Texas and across the U.S.," said William Henrich, the president of the University of Texas Health Science Center San Antonio.

As the ARPA-H site gets ready to hire program managers and decide on grant recipients and focuses, Luce said he hopes researchers there will tackle issues like diabetes, infant mortality, cancer and

heart disease.

"We have such a diversity of population that if you can't solve the problems of Texas, you can't solve the problems of the country," he said.

While the Texas hub will focus on improving patient care, another new hub in Boston will improve investments into emerging biotech advancements.

### 3M receives \$34.2 million award to improve treatment of traumatic wounds from point-of-injury to hospital

ST. PAUL, Minn., Jan. 10, 2024 /PRNewswire/

3M Health Care's Medical Solutions Division, the world leader in advanced wound care, was awarded \$34.2 million from the U.S. Army Medical Research Acquisition Activity to develop a range of new solutions for infection prevention, wound management and wound healing. 3M will lead a program focused on treatment strategies that can be used in austere settings, especially those related to mass casualty and delayed evacuation situations -- a critical objective of the Department of Defense Combat Casualty Care Capability Assessment. In addition, the program will work to assess biofilm control, biomarker monitoring and healing in acute trauma situations such as blasts, burns, and gunshot wounds that occur in civilian and military settings.

3M will collaborate with the University of Minnesota Medical School, the 59th Medical Wing Science & Technology Office of the Chief Scientist (59MDW/ST, lead military partner), Naval Medical Research Unit-San Antonio (NAMRU-SA) and The University of Texas Health Science Center at San Antonio (UT Health San Antonio) in this program. The awarded funding will support four separate product solutions, with studies that range from prototype and formulation development to completion of two clinical studies to be used for product registration.

"Successful treatment of acute, traumatic wounds requires a continuum of care that begins with easy-to-use dressings and effective infection prevention that can be applied at the point of injury, continues with portable solutions for transport, and transitions to more sophisticated solutions in hospital settings suitable for rehabilitation and reintegration of patients," said Raymond Chiu, senior vice president, research & development, 3M Health Care Business Group. "3M is proud to be working with civilian and military partners to bring these solutions to fruition."

The planned work involves at least six principal investigators leading studies at three different sites across the United States. Over 125 support personnel will be involved in the research efforts to be performed over the FY 2023 – FY 2027 award period.

Addressing and stabilizing traumatic injuries in the field requires fast, effective and easy-to-use solutions that provide more capability at the point of injury. The novel solutions developed and demonstrated in this program will also be well suited for use in civilian traumatic, burn and chronic wound care.

The U.S. Army Medical Research Acquisition Activity, 808 Schreider Street, Fort Detrick MD21702-5014 is the awarding and administering acquisition office. In conducting research using animals, the investigator (s) adheres to the laws of the United States and regulations of the Department of Agriculture. This work [is] was supported by the Office of the Assistant Secretary of Defense for Health Affairs, in the amount of \$34,191,124, through the Defense Health Agency Expeditionary Medicine Research and Development Program under Award No.HT94252320059. Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the Department of Defense.

### Three BAMC staff members honored as Heroes of Military Medicine

By Lori Newman Brooke Army Medical Center Public Affairs, Joint Base San Antonio-Fort Sam Houston, Texas –

Three Brooke Army Military Center staff members received the Heroes of Military Medicine San Antonio award from the Henry M. Jackson Foundation for the Advancement of Military Medicine Inc., Oct. 12, 2023.



U.S. Army Col. (Dr.) Michael Wirt (center), Brooke Army Medical Center department of radiology chief, poses for a photo with BAMC Commander Army Col. Mark Stackle and retired Army Maj. Gen. (Dr.) Joseph Carvalho Jr., Henry M. Jackson Foundation president and CEO, after receiving the Heroes of Military Medicine San Antonio award from the Henry M. Jackson Foundation for the Advancement of Military Medicine Inc., during an awards ceremony in San Antonio, Texas, Oct. 12, 2023.

The Heroes of Military Medicine award honors military professionals who demonstrate excellence in medical research or clinical care through compassion and selfless dedication to advancing military medicine and the overall health of the nation’s wounded, ill and injured service members and veterans.

U.S. Army Col. (Dr.) Michael Wirt, department of radiology chief; U.S. Air Force Capt. Sarah Juhasz, extracorporeal membrane oxygenation nurse; and U.S. Navy Lt. Rachel Robeck, emergency medicine physician assistant, accepted the award during a ceremony held at the Red Berry Estate in San Antonio. The event recognized top researchers, practitioners, ambassadors, and champions of military medicine within the San Antonio community.

All three humbly said they didn’t consider themselves “heroes.”

“There are so many highly skilled, deserving medical professionals at BAMC who provide exceptional care each and every day,” Wirt said. “I am deeply honored to have been nominated for the Army Hero of Military Medicine Award and truly humbled to have been selected.

“I certainly do not consider myself a hero, but as an individual who has been extremely fortunate to work as a member of exceptional teams and organizations throughout my career, providing care for our Nation’s most treasured patients: our service members, retirees, and our military families,” Wirt added. “‘Hero’ is a term I reserve for the combat medics who place themselves in harm’s way at the point of injury and for those injured on the battlefield, the brave service members to whom we provide care anytime, anywhere.”

“I appreciate the Henry M. Jackson Foundation for all they do in the realm of military medical research and for taking the time to recognize clinicians from each service, but I feel truly lucky to get to do the job I do every day at BAMC and NAMRU-SA (Naval Medical Research Unit – San Antonio),” Robeck said.



U.S. Air Force Capt. Sarah Juhasz (center), Brooke Army Medical Center extracorporeal membrane oxygenation nurse, receives the Heroes of Military Medicine San Antonio award from retired Army Maj. Gen. (Dr.) Joseph Carvalho Jr., Henry M. Jackson Foundation president and CEO, as Air Force Brig. Gen. Thomas W. Harrell, commander of the 59th Medical Wing and director of the San Antonio Market, looks on during an awards ceremony in San Antonio, Texas, Oct. 12, 2023.



U.S. Navy Lt. Rachel Robeck, Brooke Army Medical Center emergency medicine physician assistant, accepts the Heroes of Military Medicine San Antonio award from the Henry M. Jackson Foundation for the Advancement of Military Medicine Inc., during a ceremony in San Antonio, Texas, Oct. 12, 2023. Robeck is also the research director for the Army-Baylor Emergency Medicine PA Fellowship and a clinical research scientist within the Naval Medical Research Unit - San Antonio.

Robeck is the research director for the Army-Baylor Emergency Medicine PA Fellowship and a clinical research scientist within the NAMRU-SA.

HJF is a global nonprofit that administers more than \$500 million in medical research funds annually. Since 1983, HJF has partnered with researchers and clinicians to provide bench-to-bedside-to-battlefield research support. More than 3,000 HJF teammates provide scientific, administrative and program operations services to researchers in the military, academia and private industry.

“To me the real heroes of Navy medicine are those out there doing the somewhat unglamorous tasks the Navy has asked of them – whether that be seeing sick call (patients), staying late after clinic signing Physical Health Assessments, or spending months away from family and friends while forward deployed,” Robeck said. “Meanwhile I’ve been fortunate enough to challenge my skills, learn every day, mentor other PAs (physician assistants), and participate in cutting edge research with NAMRU-SA. I hope the efforts I’ve put in during my time here in San Antonio lead to future opportunities for more PAs to obtain advanced training and experience in a Level I Trauma Center.”

Juhasz said joining the U.S. Air Force in 2021 changed her life. “The Air Force has given me all that I could have wished for and more,” she said.

Continued from page 5

"I am so honored to receive this recognition; however, I can honestly say that I work with heroes every day, and these heroes cannot go unnoticed," Juhasz said. "At Brooke Army Medical Center we are a team of heroes. This team of heroes works together for one common purpose - healing. Sometimes we are healing wounds, sometimes healing minds, sometimes healing hearts. We all have been blessed with unique gifts so that we can be a blessing to others and be the heroes our patients need."

Dr. Tom Mayes, a retired pediatric intensivist and a lung transplant recipient, received the civilian provider award. Mayes served on active duty as a pediatric and pediatric critical care medicine physician for eight years at Wilford Hall.

The keynote speaker at the event was Benjamin Hall, State Department correspondent for FOX News. Hall received care at BAMC and the U.S. Army Institute of Surgical Research Burn Center after suffering traumatic injuries in Ukraine.

"Since 2010, HJF has celebrated men and women who exemplify commitment to military medicine for those who need it most—whether warfighters, veterans or civilians," said retired Army Maj. Gen. (Dr.) Joseph Carvalho Jr., HJF President and CEO. "We are thrilled to honor these heroes for the second year in San Antonio."

Carvalho is also a former BAMC commanding general.

## "Game Changer": MRDC Helps Shape, Design New Army Metro Ambulance

Ramin A. Khalili, USAMRDC Public Affairs Office, 2/7/24, 10:21 AM

When Maj. Nicholas Studer got the call from his boss back in 2021, he couldn't believe his luck. An Emergency Medical Services physician and combat casualty care researcher at the U.S. Army Medical Research and Development Command's Institute of Surgical Research, Studer had just been tasked with designing the Army's new metropolitan ambulance, the first official redesign of the vehicle since the late 1970s. For a self-admitted "car guy," it was a dream come true.

"Mr. Dean Ross and Dr. Andrew Cap came to me and said, 'Major, you like ambulances, why don't you try working on this?'" says Studer, referencing the colleagues who helped direct the project his way in the first place. In a stroke of serendipity, Studer collects antique ambulances as a hobby. "So, I said sure – we'll do this as an ISR project, it won't take too much effort at all."

The roots of the redesign stretch back to 2019, when the then-Secretary of the Army directed the Office of the Surgeon General to standardize the Army Emergency Medical Service as a means to provide a safety net against preventable deaths on military installations. Studer was named the first-ever medical director of the Army EMS, with his first order of business being to tackle the fleet of ambulances – a group that was considered too clunky and ill-equipped for the modern military.

"We rebuilt these new ambulances from the bottom-up, using best practices from the military and civilian sectors," says Studer, who notes the new models factor in almost every advance in tactical combat casualty care developed in the past 40 years. Among a litany of other updates, the vehicles include blanket warmers to prevent hypothermia in trauma casualties as well as the capacity to support the delivery of chilled wholeblood. "We've made the truck shorter and lighter so it's able to go off-road in the types of austere conditions the Army uses for training. It's better in almost every way."

The chief advantage of the new metropolitan ambulance is that it cuts down on redundancy, which improves response time. Previously, the Army would use a standard field ambulance to respond to injuries in training areas. The injured Service Member would then be driven to a waiting metropolitan ambulance, which would then proceed via surface streets to a medical facility. In response, the new models are designed to be light and durable enough to handle both off-road efforts as well as city driving. In a decidedly high-tech twist, the new version also comes equipped with a remote-activated fogger system that sprays the interior with a mist that kills select viruses – a feature that would be particularly useful in a setting such as the recent COVID-19 pandemic. The ambulance also houses an ultraviolet light that disinfects all equipment and exposed surfaces. More practical updates include standard four-wheel drive and the capacity to carry three casualties as opposed to just one.

"We have really been blessed with these things," says Marc Rogers, chief of EMS at Fort Campbell, Kentucky, who received a new metropolitan ambulance five months ago. "With the high-octane, up-tempo training events that happen on this installation, having the capability to transport multiple patients in one unit is a game changer."

After a relatively quick 18-month development process – one that included more than ten separate revisions– 28 brand new Army metropolitan ambulances will be delivered to military installations across the country this year, with the ultimate goal being to place at least one on every Army post. A total of 15 vehicles are already in use at locations including Fort Meade, Maryland; the U.S. Military Academy at West Point, New York and the aforementioned Fort Campbell. Over the next five years, the Army will procure at least 120 such vehicles. The ambulance is so popular with emergency personnel that, according to Studer, it was adopted as the standard, non-tactical ambulance of both the U.S. Air Force and the Defense Logistics Agency.



Maj. Nicholas Studer poses with the updated version of the Army metropolitan ambulance, which he helped redesign. The use of the red cross emblem on the vehicle – the first time since 1979 that Army EMS vehicles have used the symbol – is intended to connect the current fleet of vehicles with the proud history of American military ambulances. (Photo credit: ISR Public Affairs)

Continued on page 7

**Continued from page 6**

For Studer, the effort has allowed him to combine all the things he truly enjoys: the Army, medicine, patientcare and cars (as for the latter, it bears mentioning that he is a member of the Board of Directors for The Professional Car Society). Even more, he gets to use those talents for the benefit of MRDC, allowing the command to make yet another lasting mark on military medicine.

"It's definitely a major accomplishment for the Army," says Studer. "The old ambulance was just an ambulance – this one is going to help change how the system works. The new ambulance is the symbol of that change."

## 59th Medical Wing's own honored with Aerospace Medical Association fellowship

JBSA News | Oct. 25, 2023, 59th Medical Wing Public Affairs, Joint Base San Antonio-Lackland, TX



Official photo of retired U.S. Air Force Col. Dr. Paul M. Sherman, the Director of Radiological and Aerospace Medical Research at the 59th Medical Wing Chief Scientist's Office, Defense Health Agency, Joint Base San Antonio Lackland, Texas.

Retired U.S. Air Force Col. Dr. Paul M. Sherman, was recently honored with a fellowship for his exceptional contributions to aerospace medicine at the 2023 Aerospace Medical Association's 93rd Annual Scientific Meeting.

Sherman, currently serving as the Director of Radiological and Aerospace Medical Research at the 59th Medical Wing Chief Scientist's

Office, Defense Health Agency, Joint Base San Antonio-Lackland, Texas, has had a distinguished career. He previously served at the USAF School of Aerospace Medicine and the 711th Human Performance Wing, retiring with the rank of colonel after 27 years of service.

His professional achievements include being named a Fellow of the American College of Radiology; an honor reserved for only 10 percent of radiologists nationwide. Dr. Sherman's extensive body of work encompasses 37 peer-reviewed journal articles, three book chapters, and more than 125 national lectures and presentations.

Throughout his career, he has held notable roles, including Program Director of the San Antonio Uniformed Services Health Education Consortium Radiology Residency Program and Assistant Director of Graduate Medical Education for the 59th Medical Wing. Furthermore, his contributions extended to the national medical education arena as a member of the Accreditation Council for Graduate Medical Education Transitional Year Review Committee from 2013 to 2019.

In addition to his academic and leadership accomplishments, Sherman holds the title of Associate Professor of Radiology at the Uniformed Services University, earned recognition as an Academician from the International Academy of Aviation and Space Medicine in 2018, and was appointed as an Associate

Fellow of the Aerospace Medical Association in 2020.

Sherman's research efforts have been instrumental in collaborative neuroimaging projects with the Department of Defense, national, and international partners. These studies have delved into the biomedical effects of flight on aircrew and special operators, as well as the medical impacts of directed energy exposure. Impressively, he has secured over \$15 million in Department of Defense investigator-initiated research grants, underlining his standing as a prolific clinical scientist.

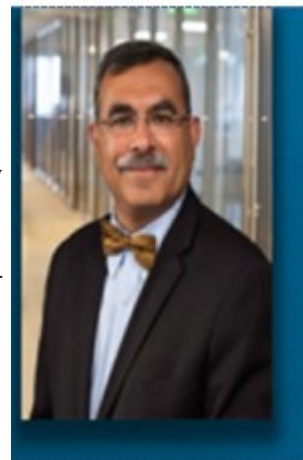
## Awarded for Innovation in Healthcare and Bioscience: Dr. Sunil K. Ahuja

By Keona Raynor, Public Affairs Intern, South Texas Veterans Health Care System., November 14, 2023

Dr. Sunil K. Ahuja has been recognized and awarded the 2023 BioMedSA Award for Innovation in Healthcare and Bioscience. Dr. Ahuja serves as Director of the Center for Personalized Medicine within the South Texas Veterans Health Care System.

BioMedSA was founded in 2005 to accelerate the growth of the healthcare and bioscience sector, create regional economic benefit, and contribute to the health of San Antonio and beyond by establishing San Antonio as a leader in healthcare and bioscience. BioMedSA serves as the hub for the healthcare and bioscience industry in San Antonio and the surrounding region, connecting people, opportunities, and resources, facilitating key collaborations, advocating for industry needs, convening industry leader forums to conquer challenges, and promoting the City of Science and Health.

Recently, Dr. Ahuja pioneered the concept of immune resilience: a process by which some persons resist developing serious infections and live longer lives. During the COVID-19 pandemic, Dr. Ahuja and his team translated the concept of immune resilience to improving outcomes in treating Veterans with COVID-19 infections. During the beginning of the pandemic, researchers were under pressure to quickly identify, manage, and assist with handling outbreaks across the world. In the midst of a global crisis, many healthcare systems relied on their researchers to take control over the current and future outcomes of preventable, safe, and effective medicine for their patients. With motivation and dedication, Dr. Ahuja along with a cadre of an outstanding team of VA staff and colleagues cared for the Veterans of South Texas with COVID-19.



Dr. Sunil K. Ahuja

Dr. Julianne Flynn, Executive Director for the South Texas Veterans Health Care System, introduced Dr. Ahuja and presented the 2023 BioMedSA Innovation Award to him in front of many who were present at the ceremony.

Colleagues of Dr. Ahuja also congratulated Dr. Ahuja on his recent success. Dr. Ahuja was introduced at the award ceremony via video by Dr. Anthony Fauci, the former Director of the National Institute of Allergy and Infectious Diseases at the National Institute of Health (NIH). Dr. Fauci was one of Dr. Ahuja's mentors at the NIH before he joined our VA.

The South Texas Veterans Health Care System would like to congratulate Dr. Ahuja for his research, initiative, and contribution to helping South Texas Veterans.

## Part of the Team': MRDC, ISR Help Train Medical Students in Unique Way

Ramin A. Khalili, USAMRDC Public Affairs Office, 2/7/24



(From left) Silver Martin, Lt. Col. Steven Schauer, and ISR staffers Sarah Johnson and Ryann Lauby pose for a photograph during the Special Operations Medical Association Scientific Assembly event in June 2021. (Photo courtesy: Lt. Col. Steven Schauer)

Silver Martin likes to say she's the non-traditional type. A Texas native who's been interested in helping people since she was a young girl, Martin started working as emergency medical technician almost immediately after graduating college in 2009. But after riding around in an ambulance for a decade – long after most prospective physicians her age had passed their bar exams – Martin decided to apply to medical school. It was a decision that ultimately brought in her into contact with the U.S. Army Medical Research and Development Command's Institute of Surgical Research, and one that further delivered an experience that, according to Martin, completely changed the trajectory of her career.

"I guess you could say I took the scenic route," says Martin, who graduated from the University of the Incarnate Word – located just a few miles from ISR in San Antonio, Texas – with a Doctorate of Osteopathy degree in May. "I worked with EMS for all those years, and I had also done some clinical research, but I really wanted to marry those two things; I liked research – and I like emergency and trauma topics. And then I realized the best place to study trauma is the Army."

So starting in 2020, during her second year of medical school, Martin took a research position at ISR to both satisfy her professional interests and to supplement her resume. It was a move that paid off in spades, as she'll begin her residency at the Detroit Medical Center in Detroit, Michigan next month.

Perhaps the most interesting part of Martin's story, however, is that she is part of the growing trend of non-military medical school students using their work at ISR as a springboard for their professional goals.

"I was asked about my work at ISR in every single one of my interviews," says Martin, referring to the process of applying for residency slots. "It absolutely helped during that process, and it absolutely helped me get my first choice in terms of where I wanted to go."

During the past several years, more than a handful of medical students have found roles at ISR that have given them the edge required to move up the ladder in the increasingly competitive public sector medical profession. In Martin's case, during her time working alongside Lt. Col. Steven Schauer, who serves as a capability area manager at ISR, she contributed to a research paper on commercially-available prehospital blood transport equipment that was ultimately published in the medical journal *Transfusion*. She also later delivered a presentation at the national conference for the Special Operations Medical Association.

For Abbie Wheeler, a recent medical school graduate who performed similar work at ISR from 2018-2019, the same perspective applies. Wheeler took her own crack at military medical research efforts during a gap between the completion of her undergraduate studies at the University of South Carolina and the start of medical school. While under the tutelage of ISR research physiologist Joseph Wenke, Wheeler aided in a number of research studies, helped author several white papers and even participated in a clinical trial at the University of Texas Health Science Center at San Antonio, which is the same place she'll begin her residency in July.

"My final year of medical school, everyone was asking about my research work at ISR – it's something that's on your resume forever," says Wheeler, who will focus on orthopedic surgery – historically an extremely competitive discipline to enter. "I was really made to feel part of the team. Every week we had meeting and presentations. It was a place where I had a lot of opportunities to go in almost any direction. They really let you take the ball and run with it."

From ISR's perspective, it's a win-win. Not only do they get to use the talents of some of the nation's best and brightest students, they also employ those soon-to-be physicians as walking, talking billboards of sorts; people who can talk about the importance of military medicine and apply key tenets to their own careers and communities.

"When I see younger medical school students getting into the field, you want to be able to help – sometimes you just need someone to throw some gas on that fire," says Schauer, an emergency medicine physician who has been at ISR for eight years. "We can help them get to their destination. That's the power of this laboratory."

That power has certainly had an effect on Martin, who got an up-close view of the demands of the profession – both the physical and mental requirements – as a whole while working alongside Schauer.

"He is a beast," she says of Schauer, only half-kidding. "He cranks out way more research than any normal person should be able to. I didn't think it was possible to do the kind of work that he does, and still work as a physician and see patients, but clearly it is."

That kind of real-world impact is, in many ways, priceless for both ISR and the students it helps push into medical schools, residencies – into the medical profession as a whole. If anything, it's a testament to the depth and power of military medicine, as well as the people who help drive it forward each day.

"If I had to sum it up," says Martin, who ultimately wants to become an emergency room physician, of her ISR experience, "I would say that it instilled in me an appreciation for what the Army is doing with their research, where civilian medicine can catch up to what the Army is doing with their research and the standards I should be looking for in the future when it comes to research in general."



## U.S. Army Medical Command welcomes 46th Army Surgeon General

By Joseph Kumzak U.S. Army Medical Command Public Affairs

NEWS | Jan. 26, 2024, JOINT BASE SAN ANTONIO-FORT SAM HOUSTON, Texas

Lt. Gen. R. Scott Dingle relinquished his position as the U.S. Army Surgeon General and Commanding General, U.S. Army Medical Command to Lt. Gen. Mary K. Izaguirre in a ceremony hosted by Gen. Randy George, Army Chief of Staff, at Joint Base San Antonio-Fort Sam Houston on Jan. 25.

Dingle was sworn in as the 45th Surgeon General in September 2019 and assumed command of the U.S. Army Medical Command in June 2020 during the COVID-19 pandemic. He led the Army's effort to strengthen and modernize Army Medicine.



Lt. Gen. Mary K. Izaguirre was sworn in as the 46th Surgeon General of the U.S. Army during a change of command ceremony hosted by Gen. Randy George, Army Chief of Staff, at Joint Base San Antonio-Fort Sam Houston, Jan. 25.

medical organization,” Dingle said. “The scope and scale of what this command has done, and does on a daily basis, is simply without peer.

“To Mary and Joe: congratulations. You are the right team at the right time with the right temperature to serve as TSG 46. Sonja and I wish you the best of God's blessings to embark on this amazing journey of leading the world's best,” Dingle said.

Izaguirre said she is grateful for friends and family who have stood by her and supported her family and her career.

“The general officers, admirals, senior executive service servants, sergeants major, active and retired, who have been so generous with their time, their wisdom and their candor in helping me understand how I could positively serve,” Izaguirre said. “Your insights have been invaluable to me in plotting this course forward for Army Medicine as we transform to meet the needs of the Army in large-scale combat operations.”

She added, “I am confident that Army Medicine has the talent, ingenuity, and resolve required to support our Army. Our purpose is to provide combat ready care to the American Soldier.”

George said Izaguirre is both a “healer and a warfighter.”

“You are an expert at soldiering and an expert at medicine,” George said. “We know that in the coming years you will help the military health enterprise stay focused on the mission. We know that you will do whatever you can to take care of our warfighters and their families in peace, or if required, in war.

Izaguirre is board certified in family medicine, a Fellow of the American Academy of Family Physicians, and an Army Flight Surgeon. She has earned the Expert Field Medical Badge, the Army Staff Identification Badge, The Surgeon General's 9A Designation, and is a member of the Order of Military Medical Merit.

In a joint effort with Army Futures Command, Dingle signed the Army Medical Modernization Strategy in July 2022. The AMMS optimizes warfighter performance and unit readiness through improved integration and efficiency of medical mission-critical capabilities and enables the Army of 2040 and beyond.

“Scott, over the last four years you have set the Army Medical Command on the right course,” George said. You led the team through a major reorganization, both of MEDCOM and the Military Health System. You oversaw the Army's COVID response, and you served on Operation Warp Speed on the president's COVID-19 task force.”

George added, “You refocused MEDCOM on warfighting by emphasizing Soldier training. You have served through some unprecedented times, and we are grateful for everything you have so expertly done.” Dingle said he was honored to serve as the Army's 45th surgeon general.

“I stand here today as a living example and testimony of what a perfect God can do with an imperfect vessel. I have been blessed beyond imagination to have commanded what I believe is the world's best



Lt. Gen. Mary K. Izaguirre was sworn in as the 46th Surgeon General of the U.S. Army during a change of command ceremony hosted by Gen. Randy George, Army Chief of Staff, at Joint Base San Antonio-Fort Sam Houston, Jan. 25.

## AMSUS recognizes two local ‘rising stars’ from Defense Health Network Central

By Elaine Sanchez / Published Feb. 6, 2024, JOINT BASE SAN ANTONIO, Texas

Four health care professionals from Defense Health Network Central will be recognized for their extensive contributions to military health care during the Annual Meeting of AMSUS, The Society of Federal Health Professionals, on Feb. 12, 2024. Two are from Joint Base San Antonio.

AMSUS awards recognize excellence in leadership, safety, innovation, and patient care across the federal government. This year, AMSUS received 400 completed submissions from federal agencies to include the Army, Air Force, Navy, Defense Health Agency, Veterans Affairs and Uniformed Services University, according to the organization’s website. Of the 400 nominations, only 15 individuals – four from DHN Central – were selected to receive an award. The four DHN Central recipients are:

- Rising Star Award: U.S. Army Lt. Col. Jeanne Krick, Brooke Army Medical Center, Joint Base San Antonio-Fort Sam Houston.
- Dentist Award: U.S. Air Force Lt. Col. Christopher Raimondi, 59th Dental Group, JBASA-Lackland.
- Lewis L. Seaman Enlisted Award for Outstanding Support - Senior Enlisted (E-7-E-9): U.S. Air Force Senior Master Sgt. Ashley Jackson, 375th Medical Group.
- Lewis L. Seaman Enlisted Award for Outstanding Support - Junior Enlisted (E-5-E-6): U.S. Army Sgt. 1st Class Nicholas Palmieri, Bassett Army Community Hospital.

“We are incredibly proud of our DHN Central teammates and the hard work, dedication to mission, and spirit of innovation that led to this well-deserved recognition,” said Air Force Maj. Gen. Thomas Harrell, director, DHN Central. “These recipients not only have distinguished themselves within the federal government, but also have left a mark on their respective career fields.”

Lt. Col. Jeanne Krick, program director for the neonatology-perinatology fellowship at BAMC, will receive the Rising Star Award for her leadership skills and positive impact on the military health care system. Krick oversees the education and development of Army and Air Force fellows within the largest military fellowship of its kind and is also one of the military’s top subject matter experts on ethics, according to the award nomination.



Krick is a “triple threat physician with strong research, clinical and teaching abilities,” the nomination letter said. “She will be a force of positive change in the military medical complex for years to come.”

“I have been so very honored to be a part of so many great teams at both my current and past assignments, I feel like this is truly more of a reflection of all of them than anything else,” she said. “Both my leadership and my colleagues have allowed me to continue to love serving our unique patient population, as well as supported me in some of my own more personal career goals. I am incredibly humbled to accept the award on behalf of all of them.”

Lt. Col. Christopher Raimondi, assistant director for clinical research, Dental Research and Consultation Service, 59th Dental Group, Joint Base San Antonio, will receive the AMSUS Dentist Award for his contributions as the Air Force’s sole dual dental materials and clinical research scientist. According to his nomination, Raimondi and his team successfully integrated diverse clinical assets, culminating

in 155 new findings disseminated to personnel across 340 clinics, while also providing 600 hours of graduate-level instruction to 87 residents. In August 2023, he became the military consultant to the Air Force surgeon general for dental biomaterials.

Per the nomination, Raimondi’s “pioneering research, mentorship, and leadership have led to transformative advancements in the field of dental science.”

“I am honored to be selected for this award, and I am incredibly grateful that I made the choice to be a US Air Force dental officer,” Raimondi said. “I consider myself blessed to have been given so many unique opportunities for personal and professional growth.”

Senior Master Sgt. Ashley Jackson and Sgt. 1st Class Nicholas Palmieri will receive the Lewis L. Seaman Enlisted Award for Outstanding Support, which recognizes a junior and senior enlisted medical healthcare professional who has “exhibited excellence in advancing the healthcare mission of their service through demonstrated compassionate and quality patient care and service, clinical support, or healthcare management,” according to AMSUS. The award was named after the late Maj. Lewis Livingston Seaman, a military surgeon during multiple conflicts, including the Spanish-American War, Balkan Wars, and World War I.

Senior Master Sgt. Ashley Jackson, former program manager, Air Force Emergency Medical Service, and currently the senior enlisted leader, 375th Healthcare Operations Squadron, Scott Air Force Base, Ill., will be recognized for her achievements with Air Force EMS, where she served as a subject matter expert on the management of national prehospitalization certifications and execution of emergency medical services for the Air Force Surgeon General, 12 major commands, 76 medical treatment facilities, and 297 agencies.

Jackson also drafted and published a prehospital response policy for over 28,000 medics and firefighters, while helping to develop the Defense Department’s first joint EMS protocols, standardizing point of injury/illness treatment for all TRICARE beneficiaries.

Continued on page 11

Continued from page 10

Jackson's demonstration of "service before self and eye for continuous process improvement has enhanced prehospital response and prepared medics for near-peer conflict," her nomination letter said.

"We work with a phenomenally talented group of individuals across the federal healthcare system, so I am beyond humbled to be selected for this award," Jackson said. "The fact that it is being bestowed from an organization filled with leaders and peers who have dedicated their lives to advancing healthcare, and ultimately serving others, makes it that much more meaningful."

Sgt. 1st Class Nicholas Palmieri, noncommissioned officer in charge, Bassett Army Community Hospital Emergency Department, Fort Wainwright, Alaska, will be recognized for his excellence in leading the Basic Life Support Program, combat medic skills sustainment, two mass casualty training events, and the creation of a dedicated simulation lab in Bassett ACH.

Palmieri answers "each task with gumption," while "enthusiastically" sharing his knowledge, skills, and experience," his nomination letter said.

"I'm extremely honored by this recognition," Palmieri said. "Above-and-beyond care is the standard, and it's important to always do it selflessly without expecting anything in return."

Palmieri said he's passionate about putting people first. "I not only can share my experience and expertise with other service members, but also see the fruits of my labor by watching my Soldiers' growth and accomplishments."

Harrell expressed his admiration of medical personnel across DHN Central. "I continue to be incredibly impressed by the exceptional health care professionals within our network and across the Defense Health Agency," Harrell said. "The AMSUS awards are yet another testament to the team's talent, expertise, and dedication to safe, quality care."

"We are extremely fortunate to have these dedicated professionals working for the Defense Health Agency," added Dr. Brian Lein, assistant director of health care administration. "We can see their unwavering commitment to our beneficiaries through their daily focus on quality, safety, research, leadership and innovation in their given areas of expertise."

For more information on the award program and a full list of award recipients, visit <https://www.amsus.org/professional-development/amsus-awards-program/>.

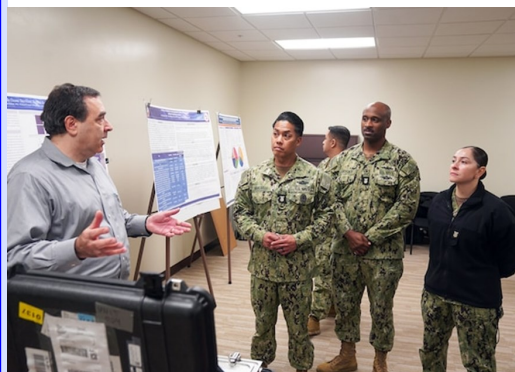
## BUMED FORCM Mangaran visits Naval Medical Research Unit San Antonio

JOINT BASE SAN ANTONIO-FORT SAM HOUSTON – (Jan. 24, 2024) – Burrell Parmer

Force Master Chief PatrickPaul Mangaran, director, Hospital Corps, U.S. Navy Bureau of Medicine and Surgery (BUMED), joined by Master Chiefs Hospital Corpsman Hansen LaFoucade, deputy director, Hospital Corps and Leslie Giuy, lead hospital corpsman planner, visited with leadership and staff of Naval Medical Research Unit (NAMRU) San Antonio at the Tri-Service Research Laboratory.

NAMRU San Antonio's mission is to conduct gap driven combat casualty care, craniofacial, and directed energy research to improve survival, operational readiness, and safety of Department of Defense (DoD) personnel engaged in routine and expeditionary operations.

It is one of the leading research and development laboratories for 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 Command in Silver Spring, Md.



JOINT BASE SAN ANTONIO-FORT SAM HOUSTON – (Jan. 24, 2024) – Dr. William D'Angelo, a biomedical engineer assigned to the Biomedical Systems Engineering and Evaluation Department, Naval Medical Research Unit (NAMRU) San Antonio, briefs Force Master Chief PatrickPaul Mangaran, director, Hospital Corps, U.S. Navy Bureau of Medicine and Surgery (BUMED) and Master Chiefs Hospital Corpsman Hansen LaFoucade, deputy director, Hospital Corps, and Leslie Giuy, lead hospital corpsman planner on a prototype portable ozone steriliz-



JOINT BASE SAN ANTONIO-FORT SAM HOUSTON – (Jan. 24, 2024) – Navy veteran Peter Sprenger, assigned to the Directed Energy Directorate, Naval Medical Research Unit (NAMRU) San Antonio, speaks with Force Master Chief PatrickPaul Mangaran, director, Hospital Corps, U.S. Navy Bureau of Medicine and Surgery (BUMED), Master Chiefs Hospital Corpsman Hansen LaFoucade, deputy director, Hospital Corps, and Leslie Giuy, lead hospital corpsman planner, during Mangaran's visit to the Tri-Service Research Laboratory. (U.S.



JOINT BASE SAN ANTONIO-FORT SAM HOUSTON – (Jan. 24, 2024) – Cmdr. Rachel Werner, acting chief science director, Naval Medical Research Unit (NAMRU) San Antonio, briefs Force Master Chief PatrickPaul Mangaran, director, Hospital Corps, U.S. Navy Bureau of Medicine and Surgery (BUMED), and staff, on the unit's mission and capabilities during Mangaran's visit to the Tri-Service Research Laboratory. (U.S. Navy photo by Burrell Parmer, NMFS Public Affairs/Released)

## Defense Health Network Central garners top honors for Ready Reliable Care initiatives

By Elaine Sanchez, NEWS | Feb. 16, 2024, SAN ANTONIO, Texas

Four teams from Defense Health Network Central will be celebrated for their exceptional efforts to improve the Military Health System during a ceremony, Feb. 15, 2024.

Dr. Lester Martinez-Lopez, assistant secretary of defense for health affairs, and Defense Health Agency Director Lt. Gen. Telita Crosland will present the Ready Reliable Care High Reliability Organization Awards to the winning teams, which include Brooke Army Medical Center, Joint Base San Antonio-Fort Sam Houston; DHN Central's 673rd Medical Group, Joint Base Elmendorf-Richardson; and the 377th Medical Group, Kirtland Air Force Base.

Each year, the Department of Defense recognizes innovations and initiatives across the enterprise that improve health, build readiness and resilience, and demonstrate excellence, according to the program's website. Ready Reliable Care is DHA's approach to fostering a high reliability culture, which is one that strives for zero patient harm, embraces feedback and open communication, and consistently delivers safe, high-quality care.

In 2023, the DoD received 52 nominations and selected 13 winning abstracts, comprising over 100 team members, for the following award categories: Continuous Process Improvement, Culture of Safety, Leadership Commitment, and Patient Centeredness. Of the 13 awards, DHN Central teams took home four – two Patient Centeredness Awards, a Continuous Process Improvement Award, and a Leadership Commitment Award.

The following are the DHN Central winning teams and abstracts:

**Leadership Commitment Award: Winning Abstract:** "Behavioral Health Data Platform Adoption and Utilization," Brooke Army Medical Center, Joint Base San Antonio-Fort Sam Houston. **Team:** Dr. Nicholas Katko, Richard Hollins, Tammy Williams, Air Force Col. Vanessa Lyons, Army Lt. Col. Matthew Garrido and Air Force Capt. Daniel Kozora.

The BAMC team focused on improving the adoption and use of the Behavioral Health Data Portal, a tool that standardizes the assessment and monitoring of individual readiness requirements and clinical outcome measures to ensure fitness sustainability enterprise-wide, according to the abstract.

"It has been satisfying to play a small, yet key role in shaping the acceptance and implementation of Behavioral Health Data Platform across the San Antonio Market," said Nicholas Katko, BAMC psychologist and market BHDP champion. "It has the potential to enhance clinical care among several other features. DHA established the directive of making the BHDP mainstream, and the team delivered."

**Continuous Process Improvement Award: Winning Abstract:** "Using Rapid Response EEG Technology in Simulated Austere Environments" by the 673rd Medical Group, Joint Base Elmendorf-Richardson, Alaska. **Team:** Air Force Lt. Col. Adam Willis, Air Force Maj. Morgan Jordan, Air Force Maj. Kelsey Cacic, Air Force Maj. Jess Anderson, Air Force Maj. Jacob Van Orman, Air Force Capt. Joshua Luster, Air Force Capt. William Hoffman, Air Force Capt. Zachari Tchopov, Dr. Tony Yuan and Elijah Miranda.



Airmen from the 59th Medical Wing practice detecting seizures during a national disaster response exercise at Camp Bramble at Joint Base San Antonio-Lackland, Texas, on March 3, 2023. Texas A&M University has been conducting emergency response training for 15 years and, for the first time, collaborated with the 59th MDW. Being able to train in-flight and utilize Disaster City by collaborating with Texas A&M gives medics a way to

This abstract focuses on the need for electroencephalogram (EEG) capabilities in austere locations or while in flight to bridge the gap between initial brain injury diagnosis, when patients are vulnerable to non-convulsive seizures, and arrival at a receiving hospital. Their study involved training medics on the use of a Rapid Response EEG headset to better diagnose seizures during medical transport. This device provides real-time monitoring and automated analysis in a pocket-sized device without the need for an EEG technician or a large machine.

"The CCATT team was able to positively differentiate non-convulsive seizures from normal activity on the rr-EEG headset and make clinical decisions while in flight, something that has never been done before," according to the abstract.

Richardson. "With this technology, we can improve care for non-convulsive seizures, a common secondary, or indirect, result of a traumatic brain injury. We hope to continue to innovate and improve care for our service members downrange."

**Patient Centeredness Award: Winning Abstract:** "Advanced Nutrition Assessments," by the 673rd Medical Group, Joint Base Elmendorf-Richardson, Alaska. **Team:** Air Force Maj. Lindsey Colgan, Air Force Capt. Chelsea Baker, Air Force Capt. Kati Wise, Air Force Tech. Sgt. Brittany Council, Air Force Tech. Sgt. William Council III, Air Force Senior Airman Jonathan McBrien and Air Force Senior Airman Roman Andersen.

This abstract focuses on the acute nutrition screening process conducted during hospital admission, and the need to ensure an efficient, effective nutrition screening process that benefits both patients and staff.

"Winning the RRC HRO award is an amazing honor and validates our efforts in optimizing healthcare delivery and patient safety and satisfaction," said Air Force Capt. Kati Wise, chief, clinical nutrition, 673rd Medical Support Squadron. "This award helps us drive positive changes in the military health care system, ultimately benefiting both patients and healthcare professionals."

Continued from page 12

Winning Abstract: “Patient Experience” by the 377th Medical Group, Kirtland Air Force Base, New Mexico. Team: Barbara Kashinski, Jennifer Rice, Air Force Lt. Krysta Farina, Air Force Col. Nisa Pistone, Air Force Maj. Lindsey Cline, Air Force Master Sgt. Catrina Kious and Air Force Tech. Sgt. Nicholas Warner.

The group’s quality team focused on improving the partnership between patients and clinical care teams to ensure a patient-centered care enterprise and to increase patient and provider satisfaction. Their efforts resulted in a 16% increase in patient satisfaction on outpatient surveys.

“We worked to standardize and increase communication with our patients, strengthened our relationships with community medical facilities, and worked to build a stronger Patient and Family Partnership Council to unify these improvements,” said Jennifer Rice, 377th group patient advocate/patient experience officer. “Ultimately, we improved our patient experience, patient satisfaction, and helped providers better serve our active-duty military members and their families.”

Along with the four winning teams, DHN Central Director Maj. Gen. Thomas Harrell expressed his admiration for all personnel who took the time to submit an abstract.

“These submissions represent a massive amount of time, passion, and dedication to improving the Military Health System,” the general said. “Congratulations to all who submitted. Thank you for your incredible efforts and collaboration to ensure Ready Reliable Care for all we are privileged to serve.”

The Winners’ Abstract booklet and the Abstract Booklet for All Submissions will be published on the Health.mil website at [health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Quality-And-Safety-of-Healthcare/Patient-Safety/Quality-Patient-Safety-Awards](https://health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Quality-And-Safety-of-Healthcare/Patient-Safety/Quality-Patient-Safety-Awards).

## **59th MDW: Office of the Chief Scientist, Science and Technology Scores High With Multiple Presenters Accepted at AsMA Annual Scientific Meeting**

By 59th Medical Wing Chief Scientist's Office, NEWS | Jan. 22, 2024, JOINT BASE SAN ANTONIO-LACKLAND, TX

The 59th Medical Wing, Office of the Chief Scientist, Science and Technology will have a strong showing at the 2024 Aerospace Medical Association Conference held in Chicago in May 2024.

The Aerospace Medical Association (AsMA) is international in both membership and scope of interest, providing opportunities to connect and exchange ideas with some of the world’s foremost medical specialists and internationally renowned scientists in the field of Aerospace Medicine and Human Performance.

The primary objective of the AsMA Annual Scientific Meeting is to provide the latest results in sessions designed for aerospace medicine professionals under one roof. The scientific program will benefit residents, medical and graduate students, and advanced undergraduates who have an interest in aerospace medicine.

The Annual Scientific Meeting presentations come from leading experts of diverse backgrounds who will enhance the world’s knowledge and understanding of the current challenges in Aerospace Medicine and demonstrate an impact on improving the health, safety, and human performance of those involved in aviation, space, and extreme environments.

The annual scientific meeting also presents an opportunity to learn about the work of our colleagues from around the world, to share the knowledge and wisdom which we gain in our day-to-day work and practice and is a great way to expand the overall community of aerospace medicine.

The following are the 10-minute oral presentations / presenters that were selected:

- Rathod, Jay, Capt, USAF, MC. “United States Aeromedical Evacuations From Antarctica From 2015-2023: a Retrospective Review of Military and Civilian Data.” Oral Presentation.
- Vannispen, Christiaan, CPT, MC, USA. “Quantifying the Risk of Venous Air Embolism From IV Fluids in Microgravity and Assessing the Stability of Airless IV Bags for Exploration Missions.” Oral Presentation.
- Rezentes, Corinne R. Capt, USAF, MC. “Determining Pharmaceutical Stability After Long-duration Exposure to Spaceflight Aboard the International Space Station: Phase 1 of the Dribble Study.” Oral Presentation.
- Nowadly, Craig D., Maj, USAF, MC, FS. “Quantifying the Impact of Sustained Acceleration on Critical Care Transport Medical Equipment.” Oral Presentation.
- Beer, Jeremy, PhD., Sherman, Paul, MD., et al. "Severity of Hypoxia Effects in Rapid vs. Gradual Decompression." Oral Presentation.

In addition, Dr. Paul Sherman, MD, Director of Radiological and Aerospace Medical Research, 59th Medical Wing Chief Scientist’s Office will be hosting a Panel Session titled: “Where are we with White Matter and Hypobaria? Latest Research and Outcome of NATO Collaboration.”

In this panel session, Dr. Sherman will present “Warfighter Brain Health in Hypobaric Environments Post NATO HFM RTG-274” and “Review of the Effects of Extreme Hypobaric Environments Upon the Brain in Aviators and High-Altitude Special Operations in the Past Decade.” There will be other presentations in the panel session from UK and Canadian NATO-RTG274 colleagues.

The outstanding performance of the Office of the Chief Scientist, Science and Technology aerospace medical researchers demonstrates they are recognized leaders and pioneers in the emerging frontier of clinical and operational space medicine and innovation.

## SAMMRL Membership



59th Medical Wing, Office of the Chief Scientist  
 U.S. Army, Institute of Surgical Research  
 Naval Medical Research Unit-San Antonio  
 711th Human Performance Wing-Air Force Research Laboratory  
 San Antonio Uniformed Services Health Education Consortium  
 Dental Research and Consultation Service  
 Brooke Army Medical Center-Department of Clinical Investigations  
 Air Force Consultant in Dental Research  
 Uniformed Services University-Southern Region Campus  
 Medical Education and Training Campus  
 San Antonio Medical Health System Market



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