San Antonio Military Medical Research Leaders Consortium Newsletter

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Table of Contents

New study highlights risks in en route insulin administration, calls for enhanced protocols

By: 59th Medical Wing Chief Scientist's Office, Science & Technology, Joint Base San Antonio-Lackland, TX | JBSA NEWS/ Published Dec. 15, 2025

A new study, Insulin Administration Safety Profile During Military En Route Critical Care Transports, published in Military Medicine, is raising important questions about insulin administration practices during Critical Care Air Transport, or CCAT, missions.

A group of 59th Medical Wing Airmen place a simulated patient and secure their liter onto a KC-135 Stratotanker, Joint Base San Antonio-Kelly Field Annex, Texas, June 18, 2024. A collaboration between the 59th MDW, the 54th Air Refueling Squadron, Critical Care Air Transport Team Pilot Unit, Aeromedical Evacuation National Guard Bureau, and the air evacuation crew from the 137th Special Operations Wing provided an opportunity to conduct joint service training during a CCATT exercise. (USAF. photo by Senior Airman Melody Bordeaux)

This collaborative effort, involving researchers from the Center for Sustainment of Trauma and Readiness Skills, University of Cincinnati, the En route Care Research Center, 59th Medical Wing, Science & Technology, Defense Health Agency, Joint Base San Antonio, and the Department of Surgery, University of Cincinnati College of Medicine, analyzes a decade's worth of data and reveals critical insights into potential risks and areas for improvement in this challenging environment.

The study, conducted by researchers at the En Route Care Research Center in San Antonio, retrospectively reviewed 2,998 patient records from CCAT missions between 2012 and 2022. Focus was placed on the 59 patients (2%) who received insulin during air transport.

The aeromedical evacuation setting presents unique logistical and physiological stressors from confined spaces and low-light conditions to persistent aircraft noise and resource limitations. These factors can significantly increase the risk of adverse drug events, making medication safety a paramount concern.

The findings revealed a concerning trend: while insulin infusions were relatively infrequent, administered in only 13 cases, they were associated with a notably high rate of hypoglycemia, at 23%. This underscores the inherent difficulty in precisely managing insulin infusions in the dynamic and often unpredictable air transport environment.

Altus AFB KC-46 delivers airpower in Vapor Trails exercise U.S. Air Force Air Education and Training Command and Critical Care Air Transport Team (CCATT) patches are displayed during the "Vapor Trails" exercise at Kelly Airfield, San Antonio, Texas, Aug. 21, 2025. CCATT is a three-person medical team, usually consisting of a physician, a critical care nurse, and a respiratory therapist. (U.S.A.F. photo by Airman 1st Class Lauren Torres)

Furthermore, the study highlighted inadequate glucose monitoring practices, particularly during intravenous push insulin administration. A staggering 60% of IVP administrations lacked a documented glucose check within one hour, potentially leaving patients vulnerable to undetected and untreated hypoglycemia.

These findings highlight the need for reevaluating current CCAT practices. The current model relies heavily on individual healthcare provider expertise, but this study reveals significant vulnerabilities in the consistency and accuracy of medication management.

The research team suggests that these vulnerabilities stem from the unique challenges of en route critical care, which demand heightened awareness and standardized protocols.

Considering these findings, the study's authors recommend a shift towards prioritizing subcutaneous insulin as the first-line treatment for hyperglycemia during ERCC missions. This recommendation is based on the increased predictability and ease of administration associated with SQ injections compared to infusions and IVP. However, the researchers emphasize that if CCAT teams opt for intravenous insulin administration, they must implement robust glucose monitoring protocols to ensure patient safety.

The researchers hope that the study will catalyze change, informing pre-deployment readiness training for CCAT personnel and guiding the development of updated clinical care practice guidelines.

By implementing standardized protocols, prioritizing SQ insulin administration where appropriate, and emphasizing rigorous glucose monitoring, the aim is to mitigate the risk of hypoglycemia and ultimately improve patient outcomes in the challenging ERCC environment. Further research is planned to investigate the effectiveness of specific interventions in enhancing medication safety during air transport.

DHA and VelocityTX partner to accelerate military medical innovation

Sept. 23, 2025 | By Defense Health Agency Communications

This strategic partnership, led by DHA's Research and Engineering Directorate, positions VelocityTX as a trusted operational hub for translational science, agile infrastructure deployment, and cross-sector collaboration.

The Defense Health Agency launched a transformative partnership with VelocityTX, a premier nonprofit bioscience innovation campus in San Antonio's Innovation District. This partnership aims to accelerate modernization research and development efforts across military medicine.

This strategic partnership, led by DHA's Research and Engineering Directorate, positions VelocityTX as a trusted operational hub for translational science, agile infrastructure deployment, and cross-sector collaboration. The agreement consolidates existing independent research and development efforts — including those with the U.S. Army Institute of Surgical Research and the 59th Medical Wing — under a unified, mission-aligned framework.

Structured under the Federal Technology Transfer Act, the agreement sets forth three primary assurances:

1) Intellectual property safeguards: robust protection for all parties, while preserving government purpose rights
2) Modular collaboration pathways: scalable sub-agreements enable adaptive deployments across regions
3) HIPAA (Health Insurance Portability and Accountability Act)-compliant integration: ethical and secure frameworks for future research operations

"This agreement transforms how military medicine innovates," said Dr. Diana del Mónaco, DHA's Regional Research Support Center project lead. "It unlocks the governance, intellectual property safeguards, and translational agility needed to drive mission-focused results at scale."

San Antonio: A strategic nexus for military medicine

Known as "Military City, USA," San Antonio is home to Joint Base San Antonio — comprised of Lackland Air Force Base, Fort Sam Houston, and Randolph Air Force Base — and Brooke Army Medical Center, the Department of Defense's only Level I trauma center. VelocityTX's proximity to these institutions enables seamless collaboration between military and civilian research ecosystems.

"San Antonio has long been at the forefront of military medical research, with an unmatched concentration of expertise, infrastructure, and mission-driven collaboration," said Rene Dominguez, chief executive officer of VelocityTX. "This agreement builds on that legacy by connecting our city's world-class military medical assets with cutting-edge private sector innovation to address critical capability gaps. Together with DHA, we are creating a pathway to rapidly translate new discoveries into solutions that strengthen warfighter readiness and improve care for military families and civilians alike."

Enhancing partnerships, accelerating innovation

In May 2025, the two agencies hosted the second annual Promoting Professional Engagement Among Military Medical Laboratories, or ProPEL, at the VelocityTX campus. They also worked together on the AIM Health R&D Summit, which convenes military, academic, and industry leaders from across the country to share research and explore opportunities for collaboration.

"Events like ProPEL and AIM enhance research collaborations and synergy between the public and private sectors," said del Mónaco. "By leveraging the scientific ecosystems VelocityTX is building in the Innovation District of San Antonio, military medical researchers are able to drive advancements and health care solutions aligned with DHA priorities with the ultimate goal of enabling warfighter and military family readiness, catalyze dual-use innovations, and reinforce DHA's commitment to real-time, real-world readiness."

The DHA Research and Engineering Directorate leads the discovery of innovative medical solutions responsive to the needs of combatant commands, the military services, and the Military Health System. More information is available at https://www.health.mil/Military-Health-Topics/Research-and-Innovation/DHA-Research-and-Engineering-Directorate.

VelocityTX Recruits DHA Leader to C-Suite

by Brian Peters VelocityTX I Dec 11, 2025, I Featured, Press Releases

Economic Development Organization Doubles Down on Strategy with Major Investment in San Antonio's Military Medical Ecosystem

SAN ANTONIO (December 9) - VelocityTX, the Eastside innovation hub and economic development organization, announced today the appointment of Jeremy Nelson, PhD, as its new Chief Innovation Officer.

Nelson's addition marks a significant milestone in the organization's strategy to expand the city's military medical ecosystem, accelerate innovation-driven economic growth, and drive jobs and investment across the region.

A nationally recognized leader in defense health innovation, Nelson brings more than 20 years of experience aligning scientific discovery with operational needs across the Department of War, academic medical institutions, and emerging life science companies. His expertise spans human performance, neurophysiology, medical technology innovation, and complex program execution-placing him at the center of national conversations about military medicine, readiness, and translational science.

Continued on page 3

Continued from page 2

VelocityTX President and CEO Rene Dominguez emphasized that Nelson's appointment is part of a broader commitment to elevate San Antonio's position as the nation's premier hub for military medicine and bioscience innovation.

"VelocityTX is investing in world-class leadership to accelerate the growth of San Antonio's military medical ecosystem," Dominguez said. "Jeremy's expertise, network, and strategic vision will help us attract more companies, more federal and academic partnerships, and ultimately drive more jobs and investment into San Antonio."

As Chief Innovation Officer, Nelson will lead innovation strategy, strengthen defense and federal partnerships, expand research and commercialization pathways, and build collaborative ecosystems that connect startup innovators, academic researchers, clinicians, and military medical leaders.

Nelson most recently served as Portfolio Manager for Biological Systems within the Defense Health Agency, where he guided strategy for the Department of War's medical science and technology investments in brain, musculoskeletal, and sensory systems health. Prior to this, Nelson served in a variety of roles across academia, industry, and the military, including serving as Deputy Director of UT Health San Antonio's Military Health Institute.

Throughout his career, Nelson has led multidisciplinary teams, shaped national-level research strategy, and established public-private partnerships that accelerate technology development and transition-experience directly aligned with VelocityTX's mission to grow San Antonio's innovation economy.

Reflecting on his new role, Nelson said, "My career has focused on translating cutting-edge science into operational capabilities. At VelocityTX, that mission will include supporting innovators, strengthening partnerships, and building systems that turn discovery into deployable solutions and economic impact."

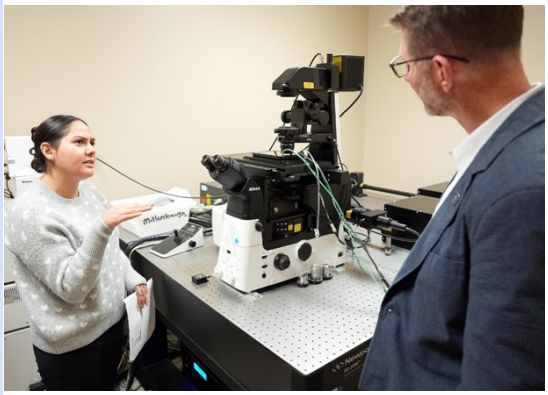
Nelson continued, "VelocityTX sits at a critical intersection-where research, technology, and military medicine converge to drive regional growth. I'm excited to help elevate a strategy that not only expands San Antonio's military medical ecosystem, but also directly fuels job creation, investment, and long-term competitiveness for the region."

With Nelson's leadership, VelocityTX aims to accelerate its work to support early-stage companies, attract federal and private-sector investment, and create high-paying jobs within the bioscience and military medical sectors, industries that account for more than $80 billion of annual economic impact to San Antonio.

DARPA's FSHARP program manager visits NAMRU San Antonio, tours research laboratories

By Burrell Parmer / Published Dec. 12, 2025, JOINT BASE SAN ANTONIO-FORT SAM HOUSTON, TX

Dr. Jeremy Pamplin, program manager, Biological Technologies Office, Defense Advanced Research Projects Agency, visited with leadership and research scientists assigned to Naval Medical Research Unit San Antonio at the Battlefield Health & Trauma Research Institute at Joint Base San Antonio-Fort Sam Houston on Dec. 8.



Research scientist Phylisia Dimas, assigned to Naval Medical Research Unit San Antonio, speaks with Dr. Jeremy Pamplin, program manager, Biological Technologies Office, Defense Advanced Research Projects Agency, on the Nikon Eclipse Ti2 confocal microscope utilized for the assessment of DARPA's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program's novel synthetic blood product at the Battlefield Health & Trauma Research Institute. The FSHARP program works to develop a deployable, shelf-stable, universal whole blood substitute as a hemorrhage countermeasure to sustain injured warfighters in austere, pre-hospital settings. NAMRU San Antonio serves as the Independent Validation & Verification partner for the FSHARP program to perform laboratory testing for safety and efficacy. The confocal microscope can capture images of fixed and live tissue using magnifications from 4X to 60X at four different fluorescent filters. Other features include a controlled environmental chamber to perform live cell

During his visit, Pamplin, a retired U.S. Army colonel, toured laboratories where research scientists, within the Combat Casualty Care and Operational Medicine directorate, perform experiments that support the Independent Validation & Verification effort for DARPA's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program.

The FSHARP program is working to develop a deployable, shelf-stable, universal whole blood substitute as a hemorrhage countermeasure to sustain injured warfighters in austere, pre-hospital settings.

"We are honored to contribute NAMRU San Antonio' rigorous verification and validation expertise to DARPA's groundbreaking FSHARP program, ensuring the reliability and effectiveness of this critical initiative," said chief science director Dr. Darrin Frye. "We recognize the program's immense importance and are dedicated to providing objective assessments that strengthen its impact."

The CCC&OM directorate, which includes subject matter experts in polytrauma, hematology, endotheliopathy and blood products testing, has been the IV&V partner for the FSHARP program for three years.

"NAMRU San Antonio is the best option for IV&V support for DARPA because we have a strong team of subject matter experts and the required capabilities to perform rigorous evaluation of blood and blood products for DARPA programs," said Dr. Dao Ho, a research immunologist within CCC&OM. "Our long-standing experience in using trauma models and cell-based platforms allows us to provide the necessary verification of safety and efficacy of newly developed products for hemorrhage resuscitation in a battlefield scenario."

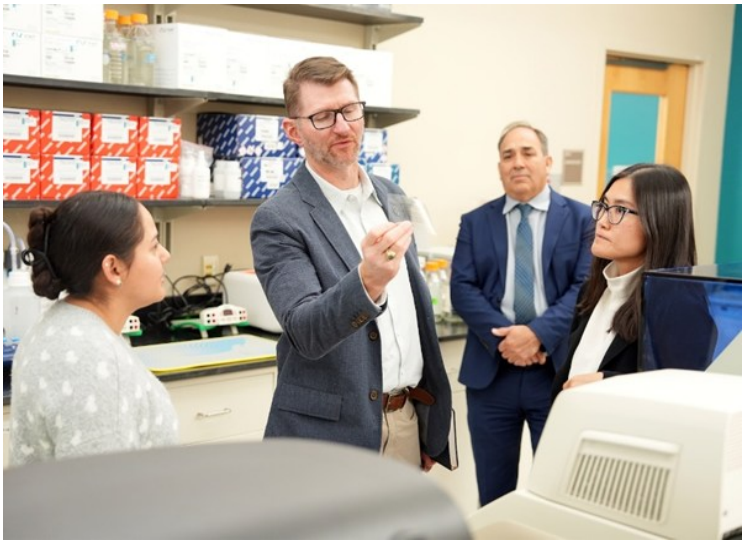
NAMRU San Antonio, part of Navy Medicine Research & Development, works alongside research partners in the civilian sphere, academia, industry, and other government agencies to drive support of the Department of War's objectives for a lethal fighting force and ensures U.S. service members have access to the latest scientific advances.

NAMRU San Antonio conducts gap-driven combat casualty care, craniofacial, and directed energy research in support of Navy, Marine Corps and joint U.S. warfighter health readiness and lethality while engaged in routine and expeditionary operations.

Continued on page 4

Continued from page 3

Research scientist Juan Curbelo (left) and research immunologist Dr. Dao Ho assigned to Naval Medical Research Unit San Antonio's Combat Casualty Care and Operational Medicine directorate, explain the cell-based, in vitro platforms used to test the safety and efficacy of the Defense Advanced Research Projects Agency's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program's novel synthetic blood product to Dr. Jeremy Pamplin, program manager, DARPA's Biological Technologies Office at the Battlefield Health & Trauma Research Institute. (U.S. Navy photo by Burrell Parmer/Released)



Dr. Jeremy Pamplin, (center) program manager, Biological Technologies Office, Defense Advanced Research Projects Agency, examines the method by which research scientists at Naval Medical Research Unit San Antonio assess a wide range of inflammatory biomarkers in biological samples in support of DARPA's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program at the Battlefield Health & Trauma Research Institute. NAMRU San Antonio serves as the Independent Validation & Verification partner for the FSHARP program to perform laboratory testing for safety and efficacy. The FSHARP program works to develop a deployable, shelf-stable, universal whole blood substitute as a hemorrhage countermeasure to sustain injured warfighters in austere, pre-hospital settings. (U.S. Navy photo by Burrell Parmer/Released)

Dr. Jeremy Pamplin, (center) program manager, Biological Technologies Office, Defense Advanced Research Projects Agency, views a novel synthetic blood product that is being developed under DARPA's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program at the Battlefield Health & Trauma Research Institute. Naval Medical Research Unit San Antonio serves as the Independent Validation & Verification partner for the FSHARP program to perform laboratory testing for safety and efficacy. The FSHARP program works to develop a deployable, shelf-stable, universal whole blood substitute as a hemorrhage countermeasure to sustain injured warfighters in austere, pre-hospital settings. (U.S. Navy photo by Burrell Parmer/Released)

Dr. Jeremy Pamplin, (center) program manager, Biological Technologies Office, Defense Advanced Research Projects Agency, is briefed by research immunologist Dr. Dao Ho (right) and research scientist Phylisia Dimas, assigned to Naval Medical Research Unit San Antonio on the specific methods by which NAMRU-SA assesses the viability and proliferation of living cells for DARPA's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program at the Battlefield Health & Trauma Research Institute. The FSHARP program works to develop a deployable, shelf-stable, universal whole blood substitute as a hemorrhage countermeasure to sustain injured warfighters in austere, pre-hospital settings. (U.S. Navy photo by Burrell Parmer/Released)

Dr. Jeremy Pamplin, (center) program manager, Biological Technologies Office, Defense Advanced Research Projects Agency, visited with leadership and research scientists assigned to Naval Medical Research Unit San Antonio at the Battlefield Health & Trauma Research Institute. During his visit, Pamplin, a retired U.S. Army Colonel, toured laboratories where research scientists, within the Combat Casualty Care and Operational Medicine directorate, perform experiments that support the Independent Validation & Verification effort for DARPA's Fieldable Solutions for Hemorrhage with bio-Artificial Resuscitation Products, or FSHARP, program. The FSHARP program works to develop a deployable, shelf-stable, universal whole blood substitute as a hemorrhage countermeasure to sustain injured warfighters in austere, pre-hospital settings. (U.S. Navy photo by Burrell Parmer/Released)

Naval Medical Forces Development Command plugs into future of trauma care simulation at JBSA Expo

By Petty Officer 1st Class Shayla Hamilton / Published Nov. 19, 2025, JOINT BASE SAN ANTONIO-LACKLAND, TX

A team from the Naval Medical Forces Development Command's Navy Medical Modeling and Simulation Training program attended the Joint Trauma System Combat Casualty Care Simulation Expo at Joint Base San Antonio-Lackland, Nov. 13-14, 2025.
Located within the Navy Medicine enterprise, the NMMAST program serves as the central hub for identifying, evaluating, validating, and overseeing the use and implementation of new and emerging simulation methodologies to support both medical education and training, and Expeditionary Medical systems for the purpose of improving overall health-related outcomes.

U.S. Navy Capt. Tshawnda Burke, program director, Navy Medical Modeling and Simulation Training (NMMAST), checks the airway of a simulation mannequin during the Joint Trauma System Combat Casualty Care Simulation Expo at Joint Base San Antonio-Lackland, Nov. 13, 2025. The NMMAST program, housed within the Naval Medical Forces Development Command enterprise, serves as the central hub for identifying, evaluating, validating, and overseeing the use and implementation of new and emerging advanced learning technologies and methodologies to support medical education and training for healthcare teams and patients for the purpose of improving overall health-related outcomes. (U.S. Navy photo by Mass Communication Specialist 1st Clas Shayla D. Hamilton)

At the symposium, NMMAST team members engaged with industry vendors, academic partners, and military medical leaders to explore the latest in simulation-based training technologies, immersive medical environments, and trauma-care best practices. Their participation both supports the Navy's expeditionary medical readiness and strengthens NMMAST's mission of ensuring operational medical personnel's readiness and effectiveness by providing realistic and challenging training opportunities to enhance medical skills, teamwork, communication and are proficient in high-risk, low volume procedures through simulation.

Service members watch a mannequin performance demonstration during the Joint Trauma System Combat Casualty Care Simulation Expo at Joint Base San Antonio-Lackland, Nov. 13, 2025. (U.S. Navy photo by Mass Communication Specialist 1st Class Shayla D. Hamilton)

"The expo was a vital opportunity for NMMAST because it allowed us to collaborate with industry experts and simulation leaders across the services to ensure we are delivering the training that our EXMED platforms need," said Navy Capt. Tshawnda Burke, NMMAST program director. "By engaging directly with vendors and understanding the latest advancements in simulation technology, we can better evaluate and recommend modalities that precisely match the demands of the EXMED training that will keep our Sailors ready for any operational environment."

U.S. Navy Capt. Tshawnda Burke, program director, Navy Medical Modeling and Simulation Training (NMMAST), tests virtual reality medical training equipment during the Joint Trauma System Combat Casualty Care Simulation Expo at Joint Base San Antonio-Lackland, Nov. 13, 2025. The NMMAST program, housed within the Naval Medical Forces Development Command enterprise, serves as the central hub for identifying, evaluating, validating, and overseeing the use and implementation of new and emerging advanced learning technologies and methodologies to support medical education and training for

The event aimed to address critical needs in military medical training, emphasizing integration of advanced simulation technologies with robust data analytics. During the event, participants had the opportunity to test out the latest technologies in augmented and virtual reality.

"As Navy medicine adapts to the ever-changing operational demands, it's imperative that our NMMAST program stay at the cutting edge of technology and industry development to maintain a ready, capable and responsive medical force," said Navy Capt. Sharon House, NMFDC's deputy commander.

NMFDC is the headquarters element designated within the Bureau of Medicine and Surgery as a direct subordinate to the Surgeon General of the Navy, charged with leading and managing all medical training, education, professional development, and instruction to produce highly trained and ready medical personnel.

Naval Medical Forces Development Command leads TCCC integration into entry-level Corpsman training at METC

By Petty Officer 1st Class Shayla Hamilton / Published Dec. 8, 2025, JOINT BASE SAN ANTONIO-FORT SAM HOUSTON, TX

Two classes of the Hospital Corpsman Basic program at the Medical Education and Training Campus completed an updated pilot curriculum integrating Tactical Combat Casualty Care principles into entry-level training, marking a shift in how Navy Medicine prepares corpsmen for the modern battlespace.

HCB classes 170 and 190 graduated Sept. 10 and Oct. 7, 2025, respectively, with full TCCC Tier 3 Combat Medic and Corpsman certifications from the Defense Health Agency's Joint Trauma System, an unprecedented milestone for new accession hospital corpsmen.

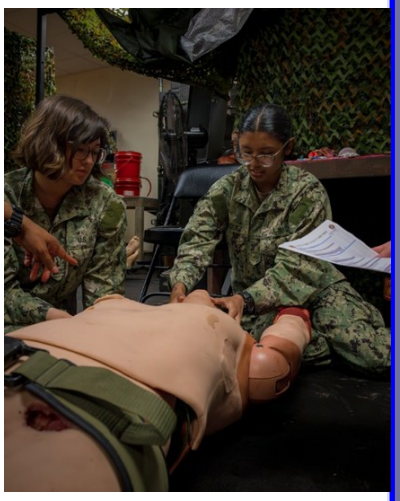
Hospitalman Jacob Barnes, a Hospital Corpsman Basic student at the Navy Medicine Training Support Command, wraps up his final training evolution (FINEX) at Joint Base San Antonio, Texas, Sept. 09, 2025. At FINEX, HCB students put their combat lifesaver skills to the test, mastering crucial battlefield medical techniques like tourniquet application, airway management and medication administration. Successfully completing this final assessment is the last step toward graduation and on to the fleet where they will play a vital role in the well-being of U.S. Navy and U.S. Marine Corps service members and their families. (U.S. Navy photo by Malcolm McClendon).

Tier 3 Combat Medic and Corpsman TCCC training traditionally occurs prior to deployment or in fleet-training pipelines. Integrating it into the HCB program curriculum means every newly trained corpsman will report to the fleet ready to perform battlefield-relevant lifesaving interventions from day one.

Naval Medical Forces Development Command collaborated with Navy Medicine Training Support Command, and METC, the tri-service campus that trains Navy, Army, and Air Force enlisted medical personnel, to revise instructional design, align learning objectives, update skills stations, and create scenario-based training modeled after real-world combat casualty situations. Before full implementation, METC must complete validation processes to identify final training gaps and confirm curriculum effectiveness.

Hospitalman Nicole Acostacabrera, left, a Hospital Corpsman Basic student at the Navy Medicine Training Support Command, wraps up her final training evolution (FINEX) at Joint Base San Antonio, Texas, Sept. 09, 2025. At the FINEX, HCB students put their combat lifesaver skills to the test, mastering crucial battlefield medical techniques like tourniquet application, airway management and medication administration. Successfully completing this final assessment is the last step toward graduation and on to the fleet where they will play a vital role in the well-being of U.S. Navy and U.S. Marine Corps service members and their families. (U.S. Navy photo by Malcolm McClendon).

"The normal pass rate of HCB, historically, has been about 70 to 80 percent," said Cmdr. Thomas Sather, the U.S. Navy's TCCC program director. "For this integration, we had two validation classes. For the first one, we graduated 80 out of 86 students that started the program. The second class that went through validation did even better with 83 out of the 86 students graduating with full certification. So, we're already seeing a graduation rate change from the 70s to around 95 percent. That's huge for us and members of our sea services."



Hospitalman Recruit Melanie Vasquez, right, a Hospital Corpsman Basic student at the Navy Medicine Training Support Command, wraps up her final training evolution (FINEX) at Joint Base San Antonio, Texas, Sept. 09, 2025. At FINEX, HCB students put their combat lifesaver skills to the test, mastering crucial battlefield medical techniques like tourniquet application, airway management and medication administration. Successfully completing this final assessment is the last step toward graduation and on to the fleet where they will play a vital role in the well-being of U.S. Navy and U.S. Marine Corps service members and their families. (U.S. Navy photo by Malcolm McClendon).

Sather also said TCCC is a joint services requirement and became the baseline lifesaving standard across the Department of War after policy shifts directed all services to train personnel in combat-relevant casualty response. The Navy Surgeon General identified TCCC as a top priority and directed Navy Medicine to build a scalable program to certify all corpsmen, providers, and eventually the entire Navy force.

"Our job is to support a more lethal, more survivable force," Sather said. "If we can stop bleeding, secure an airway, and get a patient to the next level of care, we can save lives on the battlefield. And our battlefield isn't just on land — it's in the littorals, at sea, anywhere the Navy finds itself. It's truly a team effort."

To meet Navy-wide requirements, Sather's team trained nearly 7,000 personnel in fiscal year 2025, exceeding initial goals by more than 40 percent.

"We increased our instructor cadre across the Navy and Marine Corps by over 330 certified instructors over the past year," Sather said. "These instructors can train everyone from providers to entry-level Sailors. "The goal is to build a self-sustaining system across the Navy."

New corpsmen will receive training on various skills ranging from bleeding control interventions, airway and respiratory management techniques to prevention and treatment of shock, burns, eye injuries, and splints. Additionally, students will learn various drags and carry skills, communication and documentation of casualty information needed for evacuation.

"Every corpsman graduating from HCB will already be certified at the Tier 3 level," he said. "That means they're deployable, and they're immediately capable of providing lifesaving care in a hostile environment."

Scenario-based training replicates austere environments found aboard ships, in the littorals, or while attached to Marine Corps air or land units. Students learn to apply tourniquets under stress, manage airways while simulating incoming fire, and conduct rapid trauma assessments in field conditions, training that previously occurred at much later times in a corpsman's pipeline.

For corpsmen already serving in the fleet, NMFDC is developing a bridge program to bring all Sailors to the full TCCC Tier 3 standard. The bridge course aims to condense the traditionally eight-to-ten-day curriculum into a fleet-friendly format while still meeting certification requirements.

Continued on page 7

Continued from page 6

Formalizing TCCC at accession-level training not only enhances Navy Medicine's ability to build readiness but ensures Sailors enter the fleet prepared for the complex realities of maritime and joint combat operations.

"Integrating TCCC Tier 3 at the accession level strengthens our warfighting foundation," said Master Chief Charles Padilla, senior enlisted leader for NMFDC's education and training department. "It ensures every new corpsman joining the Naval force is ready to protect the health and survivability of our Sailors and Marines—an investment in readiness that reflects our commitment to lethality, accountability, and force-wide preparedness."

NMFDC is the headquarters element designated within the Bureau of Medicine and Surgery as a direct subordinate to the Surgeon General of the Navy, charged with leading and managing all medical training, education, professional development, and instruction to produce highly trained and ready medical personnel.

Hospitalman Nicole Acostacabrera, left, a Hospital Corpsman Basic student at the Navy Medicine Training Support Command, wraps up her final training evolution (FINEX) at Joint Base San Antonio, Texas, Sept. 09, 2025. At FINEX, HCB students put their combat lifesaver skills to the test, mastering crucial battlefield medical techniques like tourniquet application, airway management and medication administration. Successfully completing this final assessment is the last step toward graduation and on to the fleet where they will play a vital role in the well-being of U.S. Navy and U.S. Marine Corps service members and their families. (U.S. Navy photo by Malcolm McClendon).

Uniformed Services University Announces Lt. Col. Adam M. Willis as Chair of Department of Neurology and Rehabilitation Medicine

Distinguished Air Force neurologist and DARPA program leader to guide newly integrated USU department.

December 4, 2025, by Claire Pak, USU News

The Uniformed Services University (USU) F. Edward Hebert School of Medicine has announced the appointment of Air Force Lt. Col. (Dr.) Adam M. Willis as chair of the newly integrated Department of Neurology and Rehabilitation Medicine.

Willis is a highly accomplished neurologist and neurointensivist with a distinguished record in military medicine, medical science, and defense innovation.

"We are thrilled to welcome Dr. Willis to lead this new department," said Dr. Eric Elster, dean of the School of Medicine. "His expertise in neurology, neurocritical care, and defense innovation will be invaluable as we continue to advance USU's mission of educating military health professionals and advancing cutting-edge research."

Air Force Lt. Col. (Dr.) Adam M. Willis has been selected as chair of the newly integrated Department of Neurology and Rehabilitation Medicine at USU's School of Medicine. (Photo credit: Tom Balfour, USU)

Willis completed his undergraduate studies at the University of Notre Dame, graduating cum laude with a Bachelor of Science in Physics. He went on to earn both a Master of Science and PhD in Theoretical and Applied Mechanics from the University of Illinois at Urbana-Champaign, followed by his medical degree at the University of Illinois at Chicago. His neurology residency was completed at the San Antonio Military Medical Center, and he later pursued a fellowship in neurocritical care at the University of Texas Southwestern. He is board certified in neurology and neurocritical care and holds the special experience identifier as a physician member of the Critical Care Advanced Transport Team (CCATT).

Willis currently serves as a program manager in the Biological Technologies Office at the Defense Advanced Research Projects Agency (DARPA), a position he has held since 2023. In this role, he leads initiatives aimed at advancing technologies to improve warfighter survivability and performance, managing a $250 million portfolio across 96 institutions in areas including casualty care, neuroscience, autonomy robotics, and human team performance.

Prior to joining DARPA, Willis served as the medical director of Joint Integrated Clinical Medicine within the 59th Medical Wing Office of the Chief Scientist at Lackland Air Force Base, Texas, and practiced as a staff neurologist and neurointensivist at Brooke Army Medical Center in San Antonio. He also holds an appointment as an associate professor of Neurology at USU and has secured multi-million-dollar grants supporting research in brain injury biomechanics, neuroergonomics, and operational medicine.

Elster added, "Dr. Willis's outstanding combination of clinical expertise, research excellence, and leadership in defense medicine makes him uniquely qualified to guide the Department of Neurology and Rehabilitation Medicine into the future."

USU School of Medicine has announced the appointment of Air Force Lt. Col. (Dr.) Adam M. Willis as chair of the newly integrated Department of Neurology and Rehabilitation Medicine. (Courtesy photo)

Continued on page 8

Continued from page 7

Elster also praised Army Col. (Dr.) Brett Theeler, chair of the Department of Neurology, and Dr. Paul Pasquina, chair of the Department of Physical Medicine and Rehabilitation, for their dedicated service.

Under Theeler's leadership, the Department of Neurology has achieved numerous milestones, including key staffing appointments, clerkship enhancements, major grant awards, and continued excellence on the Association of American Medical Colleges Graduation Questionnaire for the neurology clerkship and neuroscience module. Nationally, Theeler serves on the Clinical Pathways Development Team for Brain and Central Nervous System Cancers and is a founding board member of the Association VA Neurology Services with the U.S. Department of Veterans Affairs. He will retire from the Army in August 2026 and join the faculty at Vanderbilt University in Nashville, Tennessee.

Pasquina, the founding chair of the Department of Physical Medicine and Rehabilitation, has guided the department through substantial growth in research funding, publications and presentations, educational outreach, clinical impact, service, and the Wounded Warrior Service Dog Program. He has been appointed to lead the new Center for Advanced Research in Military Optimization, Readiness, and Rehabilitation (ARMORR) division within the Department of Neurology and Rehabilitation Medicine.

ARMORR represents the strategic consolidation of three major USU organizations—the Center for Rehabilitation Sciences Research, the Consortium for Health and Military Performance, and the Musculoskeletal Injury Rehabilitation Research for Operational Readiness (MIRROR) program—into a unified division dedicated to advancing human performance, resilience, and recovery across the Military Health System. Under Pasquina's leadership, ARMORR will enhance interdisciplinary collaboration, accelerate research-to-practice translation, and strengthen support for warfighters and beneficiaries through innovative approaches to readiness, rehabilitation, and force health protection.

Dr. Willis will officially assume the role of Chair on June 1, 2026.

VelocityTX deal with Pentagon beefs up collaboration in medical research

The East Side biotech hub will be a 'trusted partner' under an agreement with the Defense Health Agency.

By Brandon Lingle. Staff Writer, Business, San Antonio Express-News, Oct 16, 2025

Military medical researchers will have more freedom to work with their civilian counterparts at a San Antonio biotech hub as part of its new partnership with the Pentagon.

The nonprofit VelocityTX recently entered into a research agreement with the massive organization that oversees the military's health care system.

Master Sgt Justin Williamson and Staff Sgt. Gerardo Corona, both instructors with the 937th Training Support Squadron, demonstrate tactical combat casualty care to participants of the 2025 U.S. Central Command Medical Security Cooperation Exchange at the Medical Readiness Training Center on Camp Bullis Military Training Reservation, Joint Base San Antonio-Fort Sam Houston. Joshua Garcia/502nd Air Base Wing

"This agreement transforms how military medicine innovates," said Dr. Diana del Monaco, project lead at DHA's Regional Research Support Center.

It's the latest move to spur collaboration among Pentagon researchers and private industry as VelocityTX seeks to create a $60 million "military medical collision center" adjacent to its current campus.

According to Rene Dominguez, VelocityTX's president and CEO, the agreement with DHA is an "umbrella CRADA," or cooperative research and development agreement. It establishes the hub as a "trusted partner" with the DHA, which means the researchers and companies at the hub can collaborate with researchers from across all the military branches.

Rene Dominguez is the president and CEO of VelocityTX.

"It really allows us to advance our partnership with them, because this CRADA is really meant to support the researchers, the private industries and the deployment of their technologies," he said. The teams working at the hub will be able to "work with DHA to test them (their innovations), refine those technologies, and then hopefully dep oy (them) for our service members."

The result of about six months of work, it's VelocityTX's first such agreement creating a "framework for collaboration," Dominguez said. The agreement also allows for work on subprojects under the larger deal, which he said has "never been done before."

While the agreement is expected to speed up research, there's no direct dollar value on the deal. These types of agreements allow for resource, equipment and facility sharing between the government and its civilian partners. However, the federal entities can't provide funds to its non-government partners. It can, however, accept funding from the civilian entities it works with under the agreement.

Continued on page 9

Continued from page 8

As part of the deal, VelocityTX will host a "sandbox environment" where DHA can simulate its computer networks to allow testing and evaluation of new software and other technologies.

"Together with DHA, we are creating a pathway to rapidly translate new discoveries into solutions that strengthen warfighter readiness and improve care for military families and civilians alike," Dominguez said.

Structured under the Federal Technology Transfer Act of 1986, the research agreement assures intellectual property safeguards, collaboration pathways and compliance with federal health privacy laws.

"It unlocks the governance, intellectual property safeguards and translational agility needed to drive mission- focused results at scale," del Monaco said.

VelocityTX already has smaller-scale deals with DHA units based in San Antonio, including the Air Force's 59th Medical Wing and Army's Institute of Surgical Research, both of which lease space at the campus.

The Defense Health Agency already has substantial operations in San Antonio. including Brooke Army Medical Center at Joint Base San Antonio-Fort Sam Houston. It's the largest inpatient medical facility in the Department of Defense. San Antonio Express-News file photo

VelocityTX also has hosted programming alongside DHA units, including an annual conference focused on military medical laboratories and summits focused on research and development for health technologies.

"Increasingly, we hear from our military partners that collaboration with industry is critical to the DOD's medical mission," Dominguez said earlier this year. "In helping the military work off-post, VelocityTX seeks to promote cross-sector partnership and drive economic activity that will create jobs and investment in San Antonio's bioscience industry."

He sees the research agreement as another milestone toward recruiting military medical research units to VelocityTX's 12-acre campus. It's part of the organization's larger vision to develop the "military medical collision center," where military medicine can "collide" with its civilian counterparts. The center would anchor a bigger development that eventually could create up to 2,400 jobs.

Renderings of the roughly 100,000-square-foot center show a multistory building that would include office space, labs, a "sandbox" area to test equipment, an auditorium and parking. VelocityTX is planning for it to house about 150 workers.

DHA is still considering that proposal, which is separate from its efforts to consolidate its more than 3,000 employees working at sites across the city.

Military leaders have said the current setup is inefficient and that they're looking to reorganize the agency's local workforce into more centralized locations.

City, county and JBSA officials have been in behind-the-scenes talks for the past few years about refreshing an old building at JBSA-Fort Sam Houston for some of the DHA workers. Along the way, the discussions have expanded to include other area players including VelocityTX and Port San Antonio. The talks are ongoing, but they appear to have slowed under the Trump administration as Defense Secretary Pete Hegseth has halted many reorganization and modernization efforts.

A rendering of the proposed "'Military Medical Collision Center'· that VelocityTX envisions as an anchor for its development on the former G.J. Sutton property. Illustration courtesy of VelocityTX

NAMRU San Antonio, Performer Teams meet to discuss support of DARPA's RBC Factory Program

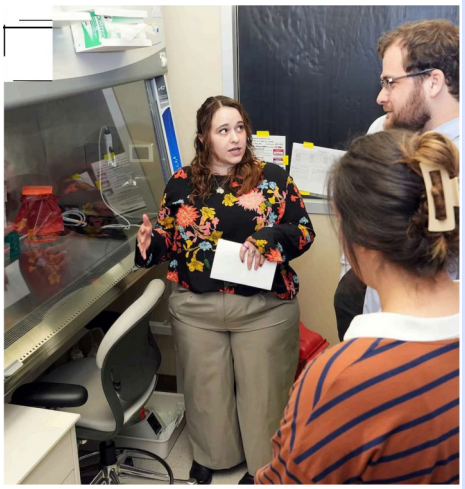
By Burrell Parmer/ Published Sept. 26, 2025, JOINT BASE SAN ANTONIO-FORT SAM HOUSTON, TX

Representatives of DesiCorp, Inc., met with leadership and research scientists assigned to Naval Medical Research Unit San Antonio at the Battlefield Health and Trauma Research Institute.

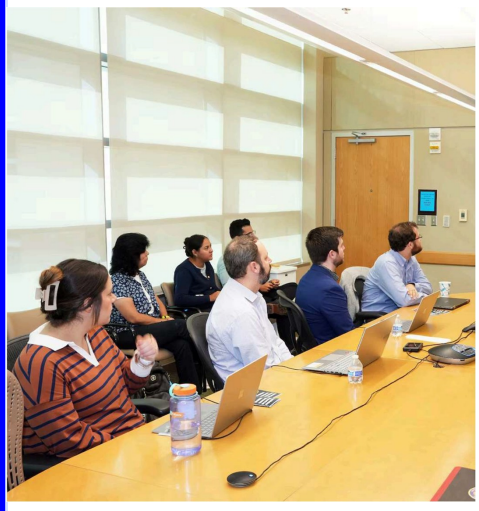
Juan Curbelo, a research scientist assigned to Naval Medical Research Unit (NAMRU) San Antonio's Cellular and Immune Based Adjuncts (CIBACC) Department, speaks with representatives of DesiCorp, Inc., during a tour of laboratory facilities at the Battlefield Health and Trauma Research Institute on Sept. 9. The representatives traveled from Louisville, Kentucky, for discussions on blood products, protocols, and an alpha prototype in support of the Defense Advanced Research Projects Agency (DARPA)

The representatives traveled from Louisville, Kentucky, for discussions on blood products, protocols, and an alpha prototype in support of the Defense Advanced Research Projects Agency, or DARPA, Red Blood Cell Factory program.
DARPA's RBC Factory program aims to create a medical device-based platform to determine if it is possible to insert additional biologically active components (e.g., cargoes) into human RBCs.

"NAMRU San Antonio is serving as the Independent Validation and Verification (IV&V) partner on DARPA's RBC Factory program to provide testing and evaluation that verifies and validates research conducted by program performers," said Dr. Dao Ho, a research immunologist assigned to NAMRU San Antonio's Cellular and Immune Based Adjuncts Department "This collaborative effort ultimately helps the warfighter by offering novel ways by which to deliver treatments and/or protection to the warfighter."



Bridney Lundquist, a laboratory manager assigned to Naval Medical Research Unit (NAMRU) San Antonio, speaks with representatives of DesiCorp, Inc., during a tour of laboratory facilities at the Battlefield Health and Trauma Research Institute.



Chief Science Director Dr. Darrin Frye, of Naval Medical Research Unit (NAMRU) San Antonio, briefed command mission and research capabilities to representatives of DesiCorp, Inc., who met with leadership and research scientists on Sept. 9.

CIBACC, a subordinate department under the Combat Casualty Care and Operational Medicine directorate, conducts research on stem cell and immune based therapeutics intended to improve warfighter outcomes and survival.

NAMRU San Antonio, part of Navy Medicine Research & Development, works alongside research partners in the civilian sphere, academia, industry, and other government agencies to drive support of the Department of Defense's objectives for a lethal fighting force and ensures U.S. service members have access to the latest scientific advances.

NAMRU San Antonio conducts gap-driven combat casualty care, craniofacial, and directed energy research in support of Navy, Marine Corps and joint U.S. warfighter health readiness and lethality while engaged in routine and expeditionary operations.

Dr. Erica Molina, a research physiologist assigned to Naval Medical Research Unit (NAMRU) San Antonio's Cellular and Immune Based Adjuncts (CIBACC) Department, speaks with representatives of DesiCorp, Inc., during a tour of laboratory facilities at the Battlefield Health and Trauma Research Institute.

Defense Health Agency Research & Development-Medical Research and Development Command's Post

11/26/2025 –LinkedIn

The US Army Institute of Surgical Research - ISR & ISR Burn Center welcomed a new Commander to lead the team. COL Shaun Brown assumed command of the USAISR in an Assumption of Command ceremony held at the USAISR Headquarters in Joint Base San Antonio, Fort Sam Houston, TX. The ceremony was presided by Commanding General, MG Paula Lodi, who passed the colors to COL Brown, delegating command and authority to the new Commander.

COL Brown most recently served as the Chief of Professional Services for the 44th Medical Brigade until May of 2025. He is currently serving as the XVIII Airborne Corps Command Surgeon and is the General Surgery Consultant to The Surgeon General.

Upon assuming command of the ISR, COL Brown said, "The defining question for us is no longer just how we treat a casualty, but how to enable prolonged care in an austere environment under fire with limited resources. This is our challenge. This is our time. Our mission is to outpace the threats of tomorrow."

We look forward to what USAISR will accomplish under the leadership of COL Shaun Brown & welcome him to the MRDC family. Read more about his storied career at: **https://usaisr.health.mil/inde.../about/leadership/commander**. https://www.linkedin.com/posts/defense-health-agency-research-and-development-medical-research-and-development-command_scienceforthesoldier-forgethefuture-activity-7397730363407765504-zB0w

Uniformed Services University of the Health Sciences president talks with local tri-service dental researchers

By Burrell Parmer / Published Sept. 26, 2025, JOINT BASE SAN ANTONIO-FORT SAM HOUSTON, TX

Dr. Jonathan Woodson, president of the Uniformed Services University of the Health Sciences (USUHS) visited with military dental researchers at the Battlefield Health and Trauma Research Institute.

Col. Scott Irwin of the U.S. Air Force Dental Research & Consultation Service, briefs Dr. Jonathan Woodson, president of the Uniformed Services University of the Health Sciences during Woodson's visit to the Battlefield Health and Trauma Research Institute Aug 19.

Dr. Jonathan Woodson, president of the Uniformed Services University of the Health Sciences, visited with military dental researchers at the Battlefield Health and Trauma Research Institute at Joint base San Antonio-Fort Sam Houston, Texas, on Aug. 19.

Woodson, who is responsible for the academic, research and leadership mission of the university, was briefed by staffers assigned to Naval Medical Research Unit San Antonio, U.S. Army Institute of Surgical Research, and U.S. Air Force Dental Research & Consultation Service.

Joining Woodson were personnel assigned to USUHS, along with Dr. Drew Fallis, executive dean of the Postgraduate Dental College.

Topics of discussion included, but were not limited to, funding priorities of dental research, portfolio management, the future of military dental research to enhance readiness, and advocacy.

NAMRU San Antonio, part of Navy Medicine Research & Development, conducts gap-driven combat casualty care, craniofacial, and directed energy research in support of Navy, Marine Corps and joint U.S. warfighter health readiness and lethality while engaged in routine and expeditionary operations.

Col. Kevin Gillespie of the U.S. Army Institute of Surgical Research (USAISR), briefs Dr. Jonathan Woodson, president of the Uniformed Services University of the Health Sciences (USUHS) during Woodson's visit to the Battlefield Health and Trauma Research Institute. Woodson, who is responsible for the academic, research and leadership mission of the university, was briefed by staffers assigned to USAISR, Naval Medical Research Unit (NAMRU) San Antonio, and U.S. Air Force Dental Research & Consultation Service (DRCS).

Dr. Darrin Frye, chief science director of Naval Medical Research Unit (NAMRU) San Antonio, briefs Dr. Jonathan Woodson, president of the Uniformed Services University of the Health Sciences (USUHS) during Woodson's visit to the Battlefield Health and Trauma Research Institute. Woodson, who is responsible for the academic, research and leadership mission of the university, was briefed by staffers assigned to NAMRU San Antonio, U.S. Army Institute of Surgical Research (USAISR), and U.S. Air Force Dental Research & Consultation Service (DRCS).

Operational truth and technological vision: DARPA, 59th Medical Wing shape the future of warfighter care

By 59th Medical Wing Chief Scientist's Office, Science & Technology, Published Jan. 7, 2026, Joint Base San Antonio-Lackland, TX

Operational Truth and Technological Vision: DARPA and the 59th Medical Wing Shape the Future of Warfighter Care Personnel from the 59th Medical Wing and civilian observers examine in-flight medical equipment aboard a military aircraft during a demonstration at Joint Base San Antonio-Lackland, Texas, on Jan. 6, 2026. The event show-

The 59th Medical Wing and the San Antonio Military Health System recently hosted the Defense Advanced Research Projects Agency's Biological Technologies Office for a two-day strategic offsite at Joint Base San Antonio-Lackland, bringing together the Air Force's oldest medical wing and one of the Department of War's most innovative research organizations.

The event welcomed the whole 39-member BTO delegation, led by director Dr. Michael Koeris and deputy director Dr. Robert Saperstein. Their visit represented a historic moment that brought together the Department of Defense's oldest continuous military medical wing and one of its most forward-leaning research organizations. At its core, the engagement reflected a shared commitment to grounding emerging biotechnology in the operational realities confronted by today's medics and warfighters.

A Century of Medical Innovation

As the Air Force's oldest and largest medical wing, the 59th Medical Wing carries a legacy that spans more than a century of military medicine. Its 4,600-member enterprise delivers comprehensive care to more than 250,000 beneficiaries across SAMHS, trains thousands of Air Force medics annually, and provides essential support to global operations. Over decades of conflict, humanitarian response, and medical advancement, its mission has remained consistent: to train medics, deliver trusted care, and advance capabilities that preserve life across the spectrum of military operations.

Continued on page 12

Continued from page 11

Within this historical context, the arrival of DARPA's BTO marked a natural intersection of innovation and operational necessity. The office's mandate-to explore, develop, and accelerate biotechnology informed by real warfighter needs-aligns directly with the Wing's priorities in Tactical Combat Casualty Care autonomous systems, human-machine teaming, and emerging threat surveillance. This alignment set the stage for a purposeful and future-focused collaboration.

Operational Truth and Technological Vision: DARPA and the 59th Medical Wing Shape the Future of Warfighter Care. Visitors enter the rear cargo bay of a simulated military transport aircraft during a public engagement event at Joint Base San Antonio-Lackland, Texas, on Jan. 6, 2026. The demonstration highlighted the role of air mobility in medical and operational readiness. (U.S. Air Force photo by 59th Medical Wing Chief Scientist's Office, Science & Technology team)

Translating Concept into Operational Practice

The two-day offsite was intentionally structured to connect advanced research concepts with the practical requirements of battlefield medicine. BTO program managers engaged in a wargame built around evolving chemical and biological threat scenarios. These simulations were shaped by the friction, uncertainty, and constraints inherent to austere environments. Subject matter experts from the 59th Medical Wing provided real-time feedback, ensuring that proposed solutions reflected operational constraints rather than ideal laboratory conditions.

The visit also included a Tactical Combat Casualty Care dry run at the Wing's VAPOR Trails and TORCH training sites. Here, BTO personnel experienced firsthand the sensory overload, time compression, and resource limitations that define contemporary military medical response. The exercise provided a critical perspective on how new technologies must function when seconds matter, information is incomplete, and lives are at stake.

Operational Truth and Technological Vision: DARPA and the 59th Medical Wing Shape the Future of Warfighter Care, U.S. Air Force Brig. Gen. Gwendolyn A Foster, 59th Medical Wing Commander, addresses attendees during a science and technology symposium hosted by the 59th Medical Wing at Joint Base San Antonio-Lackland, Texas, on Jan. 6, 2026. The event brought together military and civilian experts to discuss innovations in warfighter care. (U.S. Air Force photo by 59th Medical Wing Chief Scientist's Office, Science & Technology team)

Advancing the Next Generation of Battlefield Medicine

The collaboration between the 59th Medical Wing and Defense Advanced Research Projects
Agency's BTO demonstrated the enduring value of pairing operational insight with technological vision.

The wing contributed its deep experience in frontline medical care, while DARPA brought its tradition of pioneering unconventional solutions to complex challenges. Together, this partnership is positioned to develop capabilities that are not only innovative but also rugged, intuitive, and resilient, designed to save lives in the first minute and the first mile of a conflict.

This engagement reaffirmed the longstanding connection between the U.S. Air Force and DARPA, linking decades of medical heritage with the promise of next-generation biotechnology. The foundation laid during this visit will shape future advancements in battlefield medical care and strengthen protections for warfighters in the years ahead. The 59th Medical Wing remains committed to supporting the continued evolution of military medical innovation.

Air Force Independent Duty Medical Technician alum shares experiences with METC staff, students

By Lisa Braun/ Published Jan. 6, 2026, JOINT BASE SAN ANTONIO-FORT SAM HOUSTON, TX

Retired Senior Master Sgt. Michael Currey, a former Air Force Independent Duty Medical Technician, spent the afternoon answering questions and sharing stories about his experiences from decades ago with IDMT course instructors and students on Nov. 20, 2025, at the Medical Education and Training Campus at Joint Base San Antonio-Fort Sam Houston, Texas.

An Independent Duty Medical Technician, or IDMT, is a highly skilled medical technician trained at the level of a physician's assistant. They are assigned to operate medical aid stations at remote or isolated duty stations worldwide, as well as provide medical support to non-medical field units, other government agencies, and joint service missions as directed by the Department of War.

After enlisting in 1965, Currey attended medical apprentice technical school at Gunter Air Force Base in Montgomery, Alabama, where he learned basic emergency medical care, as well as various aspects of nursing and primary patient care.

His first assignment brought him to Peshawar Air Station, Pakistan.

"I enjoyed Pakistan," Currey shared. "There was a 1,500-man security service facility. We had a full clinic with physicians and surgeons, and we had a repeater site (Cold War communication/radar station) up in the mountains. The guys who worked in the clinic emergency room would rotate out every three months to provide medical support to personnel at the repeater site, out in the middle of nowhere. It was good duty back there."

Continued on page 13

Continued from page 12

As a medic, Currey was able to travel with the Chief of the Military Assistance Advisory Group (MAAG) in Pakistan.

IDMT Alum Reminisces with Staff, Students. Retired Senior Master Sgt. Michael Currey, a former Air Force Independent Duty Medical Technician, with IDMT course instructors and students at the Medical Education and Training Campus at Joint Base San Antonio-Fort Sam Houston, Texas, on Nov. 20, 2025. Currey spent the afternoon answering questions and sharing stories about his experiences from decades ago.

"We traveled all over the country, saw the locals and everything. We got to go all over India, we got to go to Nepal, we got to go to Burma, all over that part of the world." He encouraged the students to get out and experience the culture wherever they are assigned. "Pakistan was a good assignment, but we got out. Don't stay on base. Get out and see the local people, the economies. It's wonderful, and you really learn a lot."

Following Pakistan, Currey served two back-to-back tours in Vietnam, one as a combat medic for an Army unit.

"I got to Vietnam in the summer of '66 and the Army was so short on medics that they were borrowing from the Navy and from the Air Force," Currey recalled. "I'd been on station for about three days, when I was called into the squadron commander's office and asked if I had unpacked yet. I said no, and he told me to go pick up some supplies then go to the armory and pick up a weapon. I asked where I was going and he said, 'we don't know.'

"For the next six months I was with the 509th then with the 173rd Airborne Brigade out in the Iron Triangle as a combat medic with no experience. I just prayed for the first three weeks that I wouldn't kill anybody. Luckily, I didn't," Currey chuckled.

The valuable skills Currey learned in Vietnam prepared him for emergencies he would encounter in subsequent assignments.

"We had a light aircraft go down when I was in Hebo [Mount Hebo Air Force Station, Oregon] and the fire service went down and rescued the pilot and brought him to me. He was in very bad shape. In Vietnam I learned how to put in chest tubes and (other trauma care) in the field, so I was ahead of the game. We got the chest tubes in him and took care of his other injuries. If I had not known how to do that from my time in Vietnam, he would not have survived."

IDMT Alum Reminisces with Staff, Students. Retired Senior Master Sgt. Michael Currey, a former Air Force Independent Duty Medical Technician, spent the afternoon answering questions and sharing stories about his experiences from decades ago with IDMT course instructors and students on Nov. 20, 2025, at the Medical Education and Training Campus at Joint Base San Antonio-Fort Sam Houston, Texas.

Upon his return stateside, Currey was selected for duty as an IDMT without formally training as one. Currey explained that on the job training for IDMTs was standard practice before a school was created.

"Back then, you learned by yourself and hopefully you've got a senior tech on station who's been out there for a while and can guide you," he explained. "If you were trained to do it and you were comfortable doing it then you'd do it. If you weren't trained don't do it, don't compromise the patient care."

IDMT Alum Reminisces with Staff, Students. Former Air Force Independent Duty Medical Technician, retired Senior Master Sgt. Michael Currey, is presented the IDMT badge from Senior Master Sgt. Zachary Pingree, IDMT course senior enlisted leader, as a token of thanks for his visit. Currey answered questions and sharing stories about his experiences from decades ago with IDMT course instructors and students Nov. 20, 2025, at the Medical Education and Training Campus at Joint Base San Antonio-Fort Sam Houston, Texas.

Then, in 1969, an IDMT technical school was created at Sheppard AFB in Wichita Falls, Texas. The Air Defense Command mandated that all members serving as IDMTs would attend the new six-week school. Although he was already on independent duty, Currey attended the school and was in the second graduating class along with fourteen others, some of whom had been on independent duty for as long as fifteen years. "It did help being in the school because some of the things that we went over, like some of the environmental health and lab stuff, was useful. But seeing patients and the other things I was already doing, there really wasn't a lot of difference being in the school."

Currey completed five overseas remote tours, five domestic isolated tours, and two long tours as an IDMT, ending his service as the Superintendent of Hospital Emergency Services at the Air Force Academy following an illustrious 26-year career.

Asked what his favorite tour or most memorable experience was, Currey stated that he didn't really have a favorite tour. But one experience stood out. "Delivering a baby on station," he answered.

Continued on page 14

Continued from page 13

"Most of the places where we were had families. When I was up at Havre Air Force Station in Montana in February of '69 we got a stretch of weather that, when I got there it was minus 25, the next day it was minus 52 and three days later it warmed up to minus 46 and that was the worst we saw in a stretch of three days. I had a partner at the time but, unfortunately, he still lived in town. We were isolated because of the snowstorm, 40 miles out, so he couldn't get to work. So, I'm managing the aid station with multiple patients; these two guys who have the flu, one guy who got shocked after grabbing a line on a radar tower, and one of the dependent wives was having her baby. She was having postpartum bleeding, but I couldn't stop it and didn't have any drugs to do that, so the commander sent four guys on snowmobiles eight hours into town to get me the drugs that I needed to stop the bleeding. I'm up there for nine days helping all these folks in the aid station. If I didn't have the help of one of the wives on base who was a nurse I couldn't have done it."

Because IDMTs were operating independently most of the time, Currey and a few colleagues recognized the need for a reference guide of rules and procedures they could follow.

"We had no protocols back then. In '71 or '72 a few of us got together and wrote the original protocols. You're operating independently. You can pick up the phone if you've got a phone connection to your supervising physician if you can get them on the phone, but most of the time you can't, you're on your own making the decisions knowing full well what the repercussions are if you make a bad decision."

Currey praised the meeting, calling it "an unbelievable experience" and beyond his expectations. The opportunity also inspired IDMT course instructors and students.

"Hearing where he's served and what he's accomplished in his career was incredible," stated Capt. Colleen Bernal, an IDMT Instructor. "His story shows us the advancement and what the future of our IDMTs could and will continue to do."

"It's amazing to be able to see history through the eyes of someone who lived it," said Senior Airman Jose Lopez, one of the IDMT students who met with Currey. Another student, Staff Sgt. Rylee Hatch, added that "listening to Mr. Currey made us realize that we're stepping into a lineage much bigger than ourselves. His service has set the foundation we're standing on today."

IDMT student Staff Sgt. Andrew Null summed up the impact Currey's visit had on him and his classmates. "Listening to his missions and experiences was invaluable. He's lived the kind of moments we're training for."

IDMT Alum Reminisces with Staff, Students. Retired Senior Master Sgt. Michael Currey, a former Air Force Independent Duty Medical Technician, spent the afternoon answering questions and sharing stories about his experiences from decades ago with IDMT course instructors and students Nov. 20, 2025, at the Medical Education and Training Campus at Joint Base San Antonio-Fort Sam Houston, Texas.

2026 AIM ACADEMIA INDUSTRY MILITARY HEALTH R&D SUMMIT

We are pleased to announce the **AIM 2026 Health Research and Development Summit** that serves as a premier forum uniting **A**cademia, **I**ndustry, and **M**ilitary researchers to advance innovation, collaboration, and excellence in health research.

The AIM 2026 Health R&D Summit will take place on **May 19, 2026**, at the **San Antonio Convention Center**.

The AIM 2026 Scientific Organizing Committee invites you to join us for the **3rd Annual AIM Health R&D Summit** and to present your research, results, and perspectives across a broad spectrum of themes—from battlefield health and trauma to precision medicine and emerging technologies. We encourage you to submit an abstract by **February 20, 2026**, and be a driving force for change as we work together to redefine research, clinical practice, and healthcare.

Conference Website: https://www.aimsatx.com/

Abstract Submission Site: https://utsaresearch.infoready4.com/#freeformCompetitionDetail/2003650

To submit abstracts, click on https://utsaresearch.infoready4.com/#freeformCompetitionDetail/2003650, scroll down and select “AIM - SURF Call for Abstracts | 2026”. Click on the “PDF” box in the upper right for complete instructions.
We look forward to your participation.

Best regards,

The 2026 AIM Science Organizing Committee

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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Chief Scientist's Office
Science and Technology
59th Medical Wing
1632 Nellis Street, Bldg. 5406,
JBSA-Lackland TX 78236
Admin Support (292-2097)
ST email: usaf.jbsa.59-mdw.mbx.59-mdw-st@health.mil