

Garrison Soldiers Stand Ready to 'Forge the Future'

By Erickson Barnes, USAG Public Affairs

U.S. Army Garrison Fort Detrick joined the Army team that is helping "Forge the Future" during a ceremony Feb. 19. The patch ceremony saw a change in the unit's Shoulder Sleeve Insignia from Army Materiel Command to Army Futures Command, better aligning it with the senior command here: U.S. Army Medical Research and Development Command.

"The Chief of Staff of the Army had the intent to operationalize garrison commands in support of the senior commander, and the adoption of the senior commander's patch is a visual representation of that operationalization of the garrison team in support of the mission here in Fort Detrick," said Maj. Gen. Paula C. Lodi, commander of USAMRDC, during the ceremony. "Now, this in no way takes away the garrison command's ability to bring to bear all the expertise, power, capability, resourcing of Installation Management Command, which was represented by the Army Materiel Command patch, but it means that we're a little bit tighter knit here on Fort Detrick with a unity of command and unity of purpose."

The recent publication of Department of Army EXORD 123-25 solidifies that relationship by designating tactical command of Army garrisons to each installation's senior command. The garrison here supports five cabinet-level agencies and elements of all the military branches.

Maj. Gen. Lodi discussed the significance of the AFC insignia, shaped like a shield as a testament to its role in defending our nation and featuring a blacksmith's anvil that represents the AFC motto: Forge the Future.

"The anvil was adopted as the signature feature of the patch because it represented fortitude, determination, and perseverance," she said. "I think that those are three characteristics that ... distinctly represent what our garrison team provides to us: fortitude, determination, and perseverance.

"Our garrison team is what makes Fort Detrick and Forest Glen Annex a safe and great place to live and serve. They are incred-



Maj. Gen. Paula C. Lodi, commander, U.S. Army Medical Research and Development Command, affixes the Army Futures Command patch to U.S. Army Garrison Fort Detrick Command Sgt. Maj. Erick Detrich during a ceremony, Feb. 19, 2025. (Photo by Charles Bell, MRDC Public Affairs)

ible conduits to an incredible community outside our gates that we all love, and they're an incredible linkage to a great support system and administration from Installation Management Command," said Maj. Gen. Lodi. "So, what we're doing today is nothing but good because it just adds more power to the performance of our garrison command team."

VOL. 41 NO. 1

PATCH, continued from Page 1

The general also talked about what a unique post Fort Detrick is among the nation's military installations.

"I have said since I got here that this installation is unique to the Army and unique to the nation in that it provides critical defense capability. It has intelligence, communications, research, biodefense, medical logistics, contracting, joint partners, and innumerable support enabling capabilities," said Maj. Gen. Lodi. "That is what is unique about Fort Detrick, and that is what is unique about what our garrison teammates give to us. I've been on a lot of Army installations over the course of my career, and Fort Detrick is by far the most nuanced in the way that we live the way we get supported – and how we live is inextricably linked to our ability to do our very important work. The garrison command team blends that masterfully."



Top: Col. Christopher Chung, commander, U.S. Army Garrison Fort Detrick, affixes the Army Futures Command patch on the sleeves of garrison Soldiers during a ceremony, Feb. 19, 2025. Bottom left: Maj. Gen. Paula C. Lodi, commander, U.S. Army Medical Research and Development Command, shakes hands with U.S. Army Garrison Fort Detrick Command Sgt. Maj. Erick Detrich. Bottom right: Col. Christopher Chung, commander, U.S. Army Garrison Fort Detrick, speaks during a "patch" ceremony. (Photos by Charles Bell, MRDC Public Affairs)



Detrick's DPW saves the (snow) day!



February brought a lot of cold and snowy weather, with four named storms (Freya. Garnett, Harlow, and Iliana) dumping enough snow to interrupt non-essential operations on post several times. The Directorate of Public Works was ready each time, though, with personnel staged and ready to clear roads and parking areas so operations could resume as soon as it was safe to do so. Thank you for your hard work and dedication DPW!(Courtesy photos)



My Army Post App Connects Community with Installation Resources

By Lanessa Hill, USAG Public Affairs

Join us on the new "My Army Post" application for Fort Detrick. This app is now the official information center for Army garrisons around the world, and now it is available for our post.

The U.S. Army's My Army Post app is free and available for download now in the Apple Store or Google Play. Special features of the app include real time updates, push notifications, announcements, ID Cards scheduling, work order submissions, events and much more.

The My Army Post app is a user-focused tool designed to assist Soldiers, Army families, and garrison teams. The app makes navigating Army life easier with centralized access to ongarrison resources and information that will make life easier for Soldiers and their families. A great feature is users can choose what installation to get accurate information about. This is helpful during PCS season and when personnel are TDY to another Army post.

The app was launched at the behest of the Chief of Staff of the Army, who in 2023 requested the Army Software Factory execute a proof-of-concept. Several installations conducted usability testing and provided feedback to the developers.

After a successful pilot, Army leaders coalesced to empower the Army Materiel Command (AMC) to take on the MAPA mission. AMC oversees the Communications Electronics Command Software Engineering Center (CECOM SEC) that leads the MAPA technical support. Installation Management Command provides the majority of the garrison resources and information content for the app.

The team at Fort Detrick focused their efforts on building content for the app so our community can benefit from the platform.

The search capability helps users quickly find what they need and bookmark their favorites, allowing only notifications from their bookmarked favorites, such as events or training cancellations.

Just download the app on your phone or tablet and select the installation you want to review. Navigate the user-friendly menu's and customize your experience by saving information for easy access later.

My Army Post replaces the previous (Digital Garrison) app, which is no longer supported.

<u>FAQ's</u>

Do I need a military ID card to download or access the My Army Post app?

No, the app is free and available to the public. Find and download the app to your phone via Apple or Google Play app stores.

Does the My Army Post app cover all Army posts?

Not at this time. The My Army Post app will roll out to additional garrisons as quickly as possible. Right now 25 installations are live on the app.

If I have Digital Garrison downloaded, will it automatically transition to My Army Post?

No, My Army Post is a separate application and will require separate download.

How do I update the app? Is the app automatically update? Will I need to update?

The My Army Post app will update based on user selection on their mobile device. Users may authorize automatic updates or require user acceptance for an app update.

Q7. Can I curate the information I receive?

Users may bookmark their favorite resources to receive notifications of any changes, event happenings, and current garrison emergent notices.



Download the My Army Post App

WE ARE THE ARMY'S HOME | HOME.ARMY.MIL | ARMYMWR.COM

Singapore Armed Forces delegation learns about BESS

By Erickson Barnes, USAG Public Affairs

A delegation from the Singapore Armed Forces began their week in the D.C. area by visiting Fort Detrick's Area B to learn about its BESS (Battery Energy Storage System), Feb. 24.

ME7 (Col.) Sreekanth Shankar, Head of Joint Logs and Deputy Chief for the SAF Sustainability Office, led the delegation of seven from Singapore, and was accompanied by Noah Garfinkle, Director for Environmental Security, Office of the Deputy Assistant Secretary of the Army (Environment, Safety, and Occupational Health).

"The delegation was enthusiastic about all they learned, and it perfectly set the stage for a week of diplomacy," said Garfinkle.

Battery Energy Storage Systems are devices that store electricity from renewable sources, in this case from the solar farm on Area B. They can then release this energy when needed, reducing costs and helping to stabilize the electrical grid for Fort Detrick, which is home to some of the Army's most important communications and medical research commands.





Above: A technician explains how Fort Detrick's BESS system operates to members of the Singapore Armed Forces (SAF). Below: Representatives from Fort Detrick, Office of the Deputy Assistant Secretary of the Army (Environment, Safety, and Occupational Health), and SAF. Left: USAG Fort Detrick Commander Col. Christopher Chung speaks with senior leaders from SAF. (Photos by Erickson Barnes, USAG Public Affairs)





USAMMA holds detachment change of command

By C.J. Lovelace, AMLC Public Affairs

The U.S. Army Medical Materiel Agency held a Headquarters and Headquarters Detachment change of command ceremony here, Feb. 21, recognizing outgoing commander, Capt. Andrew Whittenbarger, and welcoming the unit's new commander, Capt. Paul Abucher.

Reflecting on his first foray into command, Whittenbarger characterized his time leading the USAMMA detachment as humbling and a great learning experience.

"That's what happens when you're surrounded by people who have spent decades perfecting their craft, and the microwave across the hall from your office is older than you are," Whittenbarger said, prompting laughter from members of the workforce.

USAMMA Commander Joselito "Joe" Lim presided over the ceremony, featuring the passing of the unit colors to symbolize the changeout of command and the senior leader's confidence in the new commander.

"Over the past two years, Andrew has led this company with dedication, professionalism and steadfast commitment to excellence," Lim said of Whittenbarger. "Your leadership has strengthened this unit – this unit's readiness, cohesiveness and effectiveness."

USAMMA's HHD command provides administrative management, enforcement and accountability of all military personnel for the organization of roughly 300 Soldiers, civilians and contractors. The detachment commander implements unit policies, oversees the health and welfare of the agency's Soldiers and provides leader development to the organization's service members.

USAMMA is one of three direct reporting units to Army Medical Logistics Command, the Army's life cycle management command for medical materiel. Both units are headquartered at Fort Detrick.

Whittenbarger, who hails from Kingston, Tennessee, said he was thankful for the opportunity to lead the HHD, even though



Capt. Paul Abucher speaks after taking command of the USAMMA's Headquarters and Headquarters Detachment, or HHD. (U.S. Army photo by C.J. Lovelace)



Col. Joselito "Joe" Lim, commander of the U.S. Army Medical Materiel Agency, passes the colors to Capt. Paul Abucher during a change of command ceremony. (U.S. Army photo by C.J. Lovelace)

he was an "inexperienced and relatively unknown" first lieutenant when he first arrived at USAMMA in 2023.

"Getting to serve as your commander has been the honor and privilege of a lifetime," he told his colleagues. "... I'm proud to have served alongside each and every one of you during my time at USAMMA."

Whittenbarger's next assignment will be the Program Management Acquisition Internship Program, a structured internship designed to develop future acquisition management professionals.

In welcoming Abucher, Lim expressed full confidence in the incoming captain to hit the ground running.

"You bring a wealth of experience, a strong sense of purpose and a commitment to both mission and Soldiers under your charge," Lim said. "I have no doubt that you will continue to build on the strong foundation that's been set before you."

A Haitian immigrant who came to the U.S. in 2014, Abucher joined the Army in September 2015 as an enlisted health care specialist (68W). He later direct commissioned as a health care administrator (70B) in 2019.

He most recently served as the brigade medical logistics adviser with 1st Security Force Assistance Brigade from October 2022 to December 2024 at Fort Moore, Georgia.

Abucher reminded the workforce that "medical care starts with you."

"It's true you are not behind the weapon systems down range (or) applying the tourniquet or packing a wound ... however, you are present everywhere a piece of medical equipment or medical supply is used," he said.

"You are present throughout the continuum of care," Abucher added. "Without what you do, the sharpest medical skills will be useless. This is why we cannot afford to become complacent."

AFC's Rainey Talks Teamwork, Transformation

By Paul Lagasse, USAMRDC Public Affairs

During his recent all-hands town hall at the U.S. Army Medical Research and Development Command at Fort Detrick, Gen. James E. Rainey, commanding general of Army Futures Command, emphasized the importance of prioritizing mental and physical health to ensure that the Army is prepared to engage and win in future conflicts.

"If you walk out of here today and only remember one thing, it should be that in AFC, including your organization, we are never one person away from mission failure," said Rainey. "On any given day, you are not going to make or break the success. I want people to reach their maximum potential, and they can't do that if they're burning 50% of their calories worrying about something that may or may not happen at some point in the future."

The reason for that, Rainey emphasized, is to ensure that everyone is able to give their best effort to ensuring AFC can carry out its mission to transform the Army to ensure war-winning future readiness.

"We're the best Army in the world today, I believe; making sure that statement is true in 2030, 2035, 2027, 2040 – that's why Army Futures Command exists," said Rainey. "We're closer to 2040 than we are to 9/11. The world has never gone 100 years without a major global conflict in the history of the world, and 1945 is a long time ago."

Over 300 USAMRDC and DHA teammates gathered in Fort Detrick's auditorium and more than 750 logged in via Teams to hear Rainey and AFC's Command Sgt. Maj. Brian A. Hester discuss how AFC is transforming the Army to ensure warwinning future readiness and explain how USAMRDC supports this vision. The town hall was followed by an awards ceremony.

During the event, Rainey talked about a tenet of his leadership philosophy that he considered to be "the one real nonnegotiable thing" that he believes in, which is that people should treat others with respect and dignity. Likewise, Rainey said, if anyone witnesses someone mistreating another person at work, they are obligated to intervene or report it to their chain of command.

In response to a question from the audience, Rainey took the opportunity to emphasize the central importance of the joint force.

"In my worst days in combat, I cannot imagine not having the Air Force there for support," said Rainey. "I can't imagine going to war next time without Space Command or Cyber Command. We're inherently a joint force, and that's our superpower. And I should add, our partners and allies are part of that. If we fight another major conflict, nobody is going to be sitting it out."

During their visit to Fort Detrick, Rainey and his leadership staff had an opportunity to see firsthand some of the cutting-edge research being conducted at USAMRDC to improve the readi-



Gen. James E. Rainey, commanding general of Army Futures Command, offers remarks during a recent all-hands town hall at the U.S. Army Medical Research and Development Command at Fort Detrick. (Photo by Paul Lagasse, USAMRDC Public Affairs Office)

ness and lethality of the force. Col. Matt Scherer, director of the DOD Blast Injury Research Coordinating Office, briefed them on the current strategic landscape related to force health protection from blast overpressure. They also attended a demonstration of medical systems developed by researchers from the Telemedicine and Advanced Technology Research Center and the U.S. Army Institute of Surgical Research that will be tested at Project Convergence Capstone 5, a joint multinational exercise that will take place in the western United States and the U.S. Indo-Pacific Command theater later this year.

Looking to the future, Rainey said he was excited for what lay ahead for USAMRDC and for AFC.

"I'd love to have 15, 20 more years of this," said Rainey. "It's going to be awesome."

First JPEO-CBRND Industry Day Generates Ideas, Stimulates Collaboration

By Melissa Myers, JPM CBRN Medical

The world is full of unpredictable biological threats, each with the potential to pose extraordinary biodefense challenges in unique ways. As the threat landscape continues to change, staying ahead of these threats is becoming more and more challenging, increasing the importance of threat-agnostic solution development. Recently, the Joint Project Manager for Chemical, Biological, Radiological, and Nuclear Medical's (JPM CBRN Medical) Biological Defense Pharmaceuticals (BDP) program team, a component of the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND), hosted its first ever Host Directed Therapeutics Industry Day. This collaboration brought together leading U.S. government (USG), academia, and industry experts to brainstorm potential partnership opportunities and spur the development of critical host directed therapeutic products to ultimately combat these unknown and unpredictable threats.

Hosted at the U.S. Patent and Trademark Office (USPTO) in Alexandria, Virginia, the event drew 115 attendees, including representatives from industry and academia, as well as interagency representation from the Biomedical Advanced Research and Development Authority (BARDA), the Defense Threat Reduction Agency's Joint Science and Technology Office (DTRA-JSTO), the National Institute of Allergy and Infectious Diseases (NIAID), the Army xTech Prize Competition program and the Army Small Business Innovation Research program.

Day one opened with remarks from Mr. Camilo Morales, Director of Medical Research, Development, and Acquisition for the Office of the Deputy Assistant Secretary of Defense for Chemical and Biological Defense.

"Staying ahead of the threat has become increasingly challenging, and threat agnostic approaches play a crucial role as they allow us to migrate the impacts of a broader range of threats that share similar characteristics," opened Morales. "These engagements provide valuable opportunities to bring together DOD counterparts, interagency organizations, and industry partners to solve the complex challenges our warfighters are facing today and will face tomorrow."

Host directed therapeutics are treatments targeting a patient's immune response to infection or illness. Rather than targeting a specific virus or infection, these broad-spectrum solutions have the potential to prevent, reduce, or lessen immediate and longterm harm to the body by promoting a balance of healthy cells, tissue, immune system, and organ function. Broad-spectrum medical countermeasures (MCMs) are effective across multiple threats, offering a frontline defense, and buying time to deploy targeted MCMs.

"With the proliferation of the number of threats, we can no longer rely on a 'one bug, one drug' approach," reiterated Deputy Joint Program Executive Officer Ms. Nicole Kilgore, JPEO-CBRND. "At its core, our (JPEO-CBRND) medical strategy aims to exploit rapid response capabilities to respond faster to the unknown, while keeping our Joint Forces at the forefront. To-

day's conversations on host directed therapeutics will help us get after broad-spectrum MCMs by addressing the body's response to the infection, without even knowing what the specific pathogen is."

"I see the Host Directed program as a key component of this strategy," added Mr. Jeffrey Zerhusen, deputy JPM, JPM CBRN Medical, during his own opening remarks.

With the new advanced development Host Directed Therapeutics program not set to begin until Fiscal Year 2028, conversations and data from this event will critically shape the approach of the new program.

"Our intent here is not only to communicate what our strategy is and what we're looking for as we stand up this program, but also to hear from you," Zerhusen continued. "This program is not locked as far as how we will approach it, and the intent of doing this early is to learn from you all on what you think is in the realm of possibility."

It takes a team to tackle tough problems, embracing out-of-thebox thinking to solve out-of-the-box problems, and no one in this space can do it alone.

"Our industry, academic, and interagency partners are crucial to developing those host directed therapeutics and other MCMs that we need," said Morales. "We can only accomplish our goals by creating and leveraging sustainable partnerships with you, and that's why we've brought everyone here today. Everyone here has something to contribute."

Following opening remarks, the event kicked off with a packed agenda. Guest speaker Dr. Aarthi Narayanan, a professor in the department of biology at George Mason University, shared her research on vector-transmitted viral infectious diseases, with emphasis on host pathogen interactions. The afternoon continued with presentations from U.S. Army SBIR xTech, JPM CBRN Medical, BARDA, DTRA-JSTO, and NIAID representatives. Each agency shared current efforts in host directed therapeutics, as well as future plans and opportunities for partnering to continue development. Given that each agency funds projects at varying stages of development, bringing together all groups into one place provided a holistic overview of USG efforts, regardless of the end user.

Both industry and interagency attendees found the presentations to be useful, helping all involved to better map the current landscape, especially those attendees not located in the National Capital Region. Face-to-face networking opportunities like this industry day have been waning since the COVID-19 pandemic, but these in person, relationship-building events have proven invaluable.

"Overall, the Host Directed Therapeutics Industry Day was a stellar success," said Lieutenant Colonel Edwin Kolen, Joint Product Manager for BDP, JPM CBRN Medical. "It not only provided industry with the ability to both learn about upcoming procurement timelines and acquisition strategies from multiple gov-



School Age Center Valentine's Dance





INDUSTRY, continued from Page 7

ernment organizations with enough time to reasonably react and apply resources towards those timelines, but also allowed our academic and industry partners the opportunity to present and discuss their capabilities and challenges, while receiving immediate feedback from government partners."

This event informed the market research for the upcoming advanced development effort and was supplemented by the release of a Request for Information (RFI) on SAM.gov, prior to the event. Nearly 20 companies submitted whitepapers in response to the RFI, and a review panel composed of representatives from all attending USG development partners reviewed and selected 11 companies to provide follow-up presentations.

These presentations were provided to the USG interagency by invitation on October 30, 2024. The presenting companies were provided immediate feedback to better prepare them to respond to future funding opportunities from any of the USG partners.

Industry Days are critically important engagements, bringing together subject matter experts from all sectors early, spurring collaboration and critical thinking, ultimately leading to the creation and availability of MCMs to treat our warfighters as quickly as possible. The information learned at this event and through the whitepaper responses will be combined with a patent search, in conjunction with the USPTO, to conduct comprehensive market research on Host Directed Therapeutic candidates.

USAISR, MIT Team Up on AI Tool for Nerve Block Anesthetics

By Paul Lagasse, USAMRDC Public Affairs Office

The U.S. Army Institute of Surgical Research Organ Support and Automation Technologies team here at Fort Detrick is working with the Massachusetts Institute of Technology's Lincoln Laboratory to develop a new device for providing regional pain control in trauma patients while they are still at or near the point of injury.

The device uses advanced artificial intelligence technology to recognize and map the location of regional nerve bundles on the patient's body and automatically guide a needle to the correct location for delivery of pain control medications. A safety mechanism prevents needle insertion until the appropriate anatomical target has been identified. These features will enable the device to be used by medics with little or no expertise in providing regional anesthesia, making it ideal for use in mass casualty events and other scenarios where such experts will likely be in short supply.



U.S. Army Institute of Surgical Research teammates Lt. Col. Brian Kirkwood, left, a comprehensive dentist and chief Artificial Intelligence officer with Organ Support and Automation Technologies team, engineer Carlos Bedolla, and science lead Dr. Jose Salinas pose with the prototype of an Al-enhanced ultrasound nerve block device developed by USAISR in partnership with MIT Lincoln Laboratory. (Photo by USAISR Public Affairs Office)

Clinical studies have shown that ultrasound guided femoral nerve blocks provide greater pain reduction than intravenous or intramuscular opioids. However, the technique requires a high level of dexterity to ensure accurate needle placement near the target nerve bundle when delivering the anesthetic. By utilizing a combination of AI and robotics, the device's creators hope to be able to overcome this limiting factor in providing effective and timely combat casualty care. Not only that, but the interdisciplinary collaboration between engineers and military clinicians that led to the development and testing of the device suggests a possible pathway for more streamlined implementations of clinical AI applications in the military.

While systemic pain control drugs such as morphine or ketamine are effective at treating pain, they also render the patient drowsy or unconscious, making them incapable of communicating effectively, continuing to fight, or leaving the battlefield under their own power. Systemic pain medications also potentially introduce physiological risks, such as a reduced respiratory rate that increases the susceptibility to cardiac arrest. Furthermore, patients treated by systemic pain control methods require constant monitoring by a medic, and should they require evacuation, will need to be transported by litter – all of which pulls additional personnel out of the fight.

Lt. Col. Brian Kirkwood, a comprehensive dentist and chief Al officer with the USAISR team, known as CRT3, said the inspiration for the ultrasound nerve block device was a talk by Maj. Gen. Michael J. Talley, then the commanding general of MRDC, during a command-wide town hall meeting in October 2020. Talley, who mobilized MRDC's laboratories to respond to the coronavirus pandemic, encouraged attendees to think about the kinds of military medical technologies that would be needed on the battlefield of tomorrow. "Think Stalingrad meets Star Wars," Kirkwood recalls Talley saying.

"After the town hall meeting, I was thinking about that question as I was walking back to the office with Dr. Jose Salinas, our science lead," recalled Kirkwood, the project's overall principal investigator. "I told him, 'I'm a dentist. I know how to administer anesthesia to manage pain. If you were to give me some type of technology that would enable me to jump in and help provide regional anesthesia in an area outside the mouth in a mass casualty event beyond just doing triage, I'd be more than willing to help get a Soldier of pain.' And that idea eventually evolved into this device."

To develop a prototype device that would be capable of allowing a non-expert to deliver a regional nerve block with pinpoint precision, USAISR partnered with the Metis Foundation, a nonprofit research organization, and MIT's Lincoln Laboratory, which specializes in research, development, and rapid prototyping of advanced technologies for national security applications. The lab had developed a handheld ultrasound device called AI-GUIDE, which allows specialists to accurately place femoral vascular catheters and guide wires, that could serve as the basis for the new device. The team applied for and received support through a funding solicitation by the Medical Technology Enterprise Consortium, a nonprofit international affiliation of over 600 academic institutions, businesses, nonprofits and other organizations in the biomedical technology sector that operates through a contractual agreement with MRDC. The funding support for this research and development effort is supported by the Combat Casualty Care Research Program.

To learn how regional nerve blocks are administered in a clinical setting, Kirkwood observed several anesthesiologists as they worked and used that knowledge to help inform the design of the device and its operational technique. For example, he noted

Origins of the Nerve Block Device

USAISR, continued from Page 9

that, unlike AI-GUIDE, in which the needle is inserted out-of-plane - that is, perpendicular to the cross-sectional image produced by the ultrasound transducer - the prototype was developed with the needle inserted in-plane, parallel with the transducer, to mimic how the anesthesiologists he observed performed regional nerve blocks. Inserting the needle in-plane provides an opportunity to observe the needle during insertion to aid in development and adds to the safety system designed into the software. This important distinction needed to be taken into account when designing both the hardware and software used in the new device.

The prototype device developed by CRT3 and Lincoln Laboratory consists of a 3Dprinted handheld frame that holds an ultrasound transducer. The AI software utilizes both segmentation and object detection techniques were trained on nerve, artery, and vein landmarks from ultrasound scans of swine lower-body neurovascular bundles. In addition to detecting anatomy, the software also controls the device guidance system, which is a robotic arm that adjusts needle angulation and insertion. Once the target location has been identified by the AI software and safety checks are cleared, the operator is prompted to press the trigger button to deploy the needle. Once the needle is inserted at the proper location, the anesthetic can then be delivered.

Tests Validate Concept, Point to Improvements

Over the course of a year, Kirkwood's team conducted multiple rounds of tests of the prototype. For the tests, at least ten different operators - including health care providers, engineers and technicians attempted to use the device to place the needle for a femoral nerve block. On the ex-vivo model, each attempt began at the knee, scanning proximally toward the inguinal crease between the leg and groin until the AI recognized the target location. The device would prompt the operator's directional movements until the target location was identified, at which point the trigger button would be activated to allow for needle deployment. Insertion time and

needle placement location were collected after each attempt to continuously improve the device.

Each round of tests identified areas requiring further work. The team at USAISR communicated the necessary hardware and software improvements to the Lincoln Laboratory team after each round of testing so that it could update the prototype. Kirkwood and his team decided to reduce the number of operators to the two who were most proficient with the device, in order to focus on the device's performance.



The prototype of an Al-enhanced ultrasound nerve block device developed by the U.S. Army Institute of Surgical Research Organ Support and Automation Technologies team in partnership with MIT is demonstrated on a manikin. (Photo by USAISR Public Affairs Office)

"From the initial testing, we have shown that this type of technology can enable a minimally experienced person to place a needle for regional anesthesia in under 40 seconds," said Kirkwood. "During the pilot study, we were also able to show that the Al system works in both normal and hypotensive conditions, which is important because we can expect to see a wide range of damage to limbs on the battlefield. We still need to conduct larger preclinical studies in animal models to validate some of the systems that guide the device and needle placement. The ultimate goal is a device that is self-contained to improve portability for a frontline battlefield application."

Furthermore, as the prototype advances from the preclinical phase to clinical testing, the AI system will need to be thoroughly trained on human data, said Kirkwood. Eventually, usability testing is necessary to capture the insights and experience of clinical experts to refine the device for the end-user. Kirkwood is currently exploring funding options to support continued development and testing of the device in 2025 and beyond.

Project Demonstrates Value of Interdisciplinary Collaboration

Another important outcome of this project is its demonstration of the value of collaboration between clinicians and engineers in successfully developing and demonstrating an AI-based medical device for the future battlefield. This accomplishment spotlights one of CRT3's core competencies.

"One of the main missions of CRT3 is to use advanced engineering technologies to address documented capability gaps - in this case, the need to provide regional pain control on the battlefield," said Salinas. "To that end, we have put together heterogeneous and multidisciplinary teams that specialize in applying engineering technologies to develop medical solutions. It's not an easy solution, because there aren't any degrees out there that will teach you how to do this. An engineer isn't taught how to speak medical. Physicians aren't taught how to speak engineering. Creating these teams and getting them to speak the same language to the point where they can actually generate solutions is something that we have been very successful at doing."

Kirkwood – who is now pursuing a doctorate in translational science – and Salinas will be discussing the importance of interdisciplinary collaboration in developing AI systems to assist in clinical decisionmaking in military medicine at the 2025 AMSUS Annual Meeting in March 2025, in a breakout session titled "Bridging the Gap: Engineers and Clinicians Working Together to Advance Expeditionary Medical and Dental Applications of Artificial Intelligent Systems."

"It's important that we have good communication between clinicians and engineers to shape the development of AI systems so that the end user has trust and confidence in the systems that we're developing," said Kirkwood.

Military Health System Beneficiaries Urged to Download Old Medical Records by April 1

By Army Medicine Daily

The Department of Defense plans to decommission the online portal patients use to access old military health information and recommends patients download their digital medical records if they want to retain copies.

With the Defense Health Agency's transition to the MHS Genesis electronic health record complete, the Tricare Online Patient Portal will cease to be available as of April 1, according to the Pentagon. Medical providers will continue having access to the records and copies of old records will be maintained at military health facilities, but they won't be accessible online after that date. Officials are urging patients to maintain their own copies, according to several DoD news releases.

"All military hospitals and clinics have transitioned to MHS Genesis. We encourage you to take these important steps to save your personal health records before the [Tricare Online] Patient Portal decommissions," said Rear Adm. Tracy Farrill, a DHA electronic health records expert, in a statement.

Military treatment facility patients who want to download their records must go to and sign in with a DS Logon, Common Access Card or myPay login. They then must go to the Tricare Online page and click on the blue "Health Record" tab to view their data and follow directions for downloading.

They can download a PDF or XML continuity of care file that can be shared with other providers, health care systems or family.

Patients may not find complete copies of their medical records, depending on when they entered the military health system and when their military treatment facility began using a digital electronic health records platform, according to DHA spokeswoman Brenda Campbell.

Likewise, their legacy records will be only as new as when their military hospital or clinic switched over to MHS Genesis, a transition completed by the military health system between 2017 and 2024.

"Legacy electronic health records in [Tricare Online] only reflect periods of time when a beneficiary's military hospital or clinic was using the previous electronic health record platform. MHS Genesis health records only reflect periods of time when a beneficiary's military hospital or clinic was using MHS Genesis," Campbell said in a Jan. 27 email to Military.com.

The new MHS Genesis records do not contain information from previous electronic and paper health records, but providers still have access to those records to treat their patients, she added.

The Defense Department embarked on a multiyear contract with Cerner, now part of Oracle Health, in 2015 to provide an electronic health records system that would be completely compatible with the Department of Veterans Affairs system.

MHS Genesis is now used at 138 military hospitals and clinics and more than 3,600 DoD locations worldwide, according to the Defense Department.

The VA contracted with Cerner for a similar system in 2018, but the VA required that its system, now called the Federal Electronic Health Records System, include the capability to upload all legacy medical records. The VA has encountered multiple issues in adopting the new program and has installed it at only six facilities with the intention to restart the rollout next year.

With the decommissioning of the DoD portal, parents of those under the age of 12 can still view and download their children's legacy health records, but they may view only limited information such as test results for flu or COVID-19, allergies, vitals and immunization data for children ages 12 to 17 online. Children of those ages can request copies of their own medical records at their military treatment facility, and parents can ask their adolescent children's providers or clinics for printed health records. Parents may not download dependent records for children over the age of 18. Those beneficiaries -- active or former -- are eligible for a DS Logon, according to Campbell, and can access their own legacy health records.

Again, she added, copies of old records, either paper or electronic, can be requested at a nearby military hospital and clinic.

According to Tricare, the portal decommissioning should not affect a service member's ability to file a claim with the VA since providers still will have access to complete health records.

The DHA urged patients to download records and store them to ensure that they are available if needed.

"Your medical history is a valuable resource for managing your health, and saving your records now ensures you have access if you need it," Farrill said.



News - Events - Training

New ATM at the Post Exchange

The new Navy Federal Credit Union at Fort Detrick has installed an ATM at the Post Exchange and is now fully operational. The ATM is located between the PX and the food court..

Nallin Pond Recreation Area's playgrounds will be closed through early April 2025

This closure is necessary to allow crews to update the play area and equipment. The updates will remain ADAcompliant and include new swings, slides, and play surfaces. Upgrades will also involve reinstalling and updating the electricity. Safety fencing will surround the construction area; please avoid the area.

We appreciate your patience and understanding during

this time; we look forward to a great place for our children to enjoy in Spring 2025.

ID Cards Office has moved

The ID Cards Office has moved to 1520 Freedman Drive, Suite 115, Fort Detrick, MD.

The new phone number is (301) 619-7311.

Fort Detrick Barber Shop

The Fort Detrick Barber Shop is fully staffed and available for walk-ins every weekday. For more information, call (301) 619-2345.

For FMWR News and Events, visit www.detrick.armymwr.com, Instagram us at #DetrickMWR, and like us on Facebook.



Single Service Member Meal

The Fort Detrick Chapel sponsored a single service members meal, Feb. 18, serving up a variety of sandwiches and soups, along with fruit, snacks and desert. More than 50 single service members showed up to eat and commune with one another and Command Sergeants Maj. Micheal Dills (MRDC) and Detrich (USAG).





