



## Advanced Medical Technology Initiative (AMTI) Update

As with most things in the DoD, change is a common occurrence. In the last year the AMEDD Advanced Medical Technology Initiative (AAMTI) has undergone some big changes of its own. Primarily, a name change. In FY99, the Army Surgeon General, through TATRC at the U.S. Army Medical Research and Materiel Command (USAMRMC) stood up a program called the AMEDD Tele-health Initiative (ATI) with \$5M to enable technology demonstrations across the AMEDD. The program became known as the AMEDD Advanced Medical Technology Initiative (AAMTI), in the early 2000s to reflect the technology and clinically agnostic nature of program investments submitted for funding. Fast forward to FY2020 and you'll note another name change to the program, which is known today as the Advanced Medical Technology Initiative (AMTI), because it now serves multiple branches of military services. That's right; AMTI now accepts proposals from Army, Navy and Air Force. Ultimately, AMTI provides an opportunity to demonstrate technologies in a Military Treatment Facility (MTF) or operational unit (OU) to assess the cultural, business, and clinical implications that impeded the adoption of new technologies

As AMTI has supported local identification of problems and potential solutions through demonstration of emerging technologies at the MTF level for over twenty years, it provides a valuable opportunity to identify and demonstrate key technologies that are medically and militarily unique through short term projects that provide knowledge and material products that in turn, empower leadership to make more informed research and acquisition decisions.

The knowledge and materiel by-products of AMTI are a reflection of AMTI's commitment to support projects that ultimately have an operational application and positively impact performance, readiness, cost, access, quality and/or safety. These knowledge and materiel products manifest themselves as peer

review publications (over 200 in the last five years), presentations (over 250 in the last five years), new standard operating procedures, patents (two currently in process), ruggedization, customization, and prototypes. Some AMTI funded projects will go on to be the starting point for clinical research, while a few of the best ideas will ultimately be adopted by the Military Health System (MHS) enterprise and become programs of record.

A few years ago AMTI reached out to our awardees, 'Innovators' as we call them, and asked for their testimonials on the value of the AMTI Program, and how its funding has made a difference for them directly. These personal accounts speak for themselves with regard to the impact AMTI can make on individual Service Members and government service civilians, the specialties they service, and the MHS as a whole.

Dr. Joseph O. Lopreiato, Associate Dean for Simulation Education and Director of the Val G. Hemming Simulation Center, was part of the AMTI funded Moulage Tattoo Project.

**Abrasion**



**GSW**



**Many medical combat training scenarios incorporate theatrical makeup (moulage) to simulate wounds. The Val G. Hemming Simulation Center has developed a variety of temporary wound tattoos specifically for medical combat simulations. Custom medical illustrations were created from real-world injury references and printed on commercially available tattoo paper. Our detailed renderings ensures precise and detailed wounds that can stand alone or act as a base for further application of traditional moulage.**

He stated, “The Uniformed Services University Simulation Center was able to create, develop, implement, and now market the first ever temporary wearable tattoos for combat casualty scenarios and advanced trauma life support. These tattoos have been distributed to many military treatment facilities and TCCC programs and has saved countless hours of manpower, supplies, and personnel time in creating combat wounds that are realistic and useful for training. The project involved creating medical art, finding the appropriate tattoo paper for printing, getting feedback from the field on its use and practicability, and finally, transitioning to a commercial product that is now available worldwide. None of this could have been possible without the tremendous support of AMTI and its seed funding to allow us to take this project from concept to commercial reality.”

MAJ Dan Yourk, Deputy Director of Operations at the Virtual Medical Center is part of the The ADvanced Virtual Support to OpeRational Forces (ADVISOR) Program. MAJ Yourk said, “The ADVISOR Program was initially created using AMTI funds to establish the Virtual Critical Care Consultation (VC3) capability. The lessons learned and support structure developed with the VC3 program allowed the Virtual Medical Center to grow that initial capability for critical care support into what is now the ADVISOR program. The ADVISOR program provides 24/7/365 on-demand consultation support to operational forces around the world for critical care, general / trauma surgery, orthopedic surgery, pediatrics, toxicology, infectious disease, hematology / oncology, the burn center, military working dog vet support, chemical casualty support and emergency medicine department support. Over the past two years, the ADVISOR program has supported 102 real-world calls for urgent and emergent medical support to both U.S. and NATO forces across the world and over 300 training calls to support prolonged field care training and special forces training.

The AMTI funding allows us to validate the capability, stress the importance to senior leaders for additional funding, and then grow the program to support all services. None of this would have been possible without the AMTI Program.”

CPT Robert Whitehurst, a Board-Certified Clinical Specialist in Orthopaedic Physical Therapy OIC, Hope Mills Medical Home Physical Therapy, Fort Bragg, NC worked on the Rapidly Tracking Outcomes in Rehabilitation (RAPTOR) project. He stated, “The AMTI Program has been pivotal in allowing us to take a local idea and solution and further develop the functionality and implement it to reach a vast audience. From just one clinic at Fort Bragg, we have expanded to multiple clinics and multiple MTFs, and requests come in weekly of people wanting to implement the RAPTOR system at their location. Without AMTI, this would have never been possible. Not just their funding, but their mentorship, collaboration, support, and subject matter expertise have been invaluable in helping us to improve and expand our idea and product. With their help, we really do hope to influence the way patient outcomes are tracked across the enterprise as a whole.”

AMTI looks forward to supporting many more great ideas in the years to come. Consider submitting your great idea today! AMTI is open for preproposals for FY22, and you can find more information at <https://tatrc.amedd.army.mil/AAMTI/> or contact AMTI at [usarmy.detrick.usamrdc.list.aamti-team@mail.mil](mailto:usarmy.detrick.usamrdc.list.aamti-team@mail.mil). ■■■

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**For more information on this and other exciting AMTI Program initiatives, please contact AMTI's Program Manager Ms. Holly Pavliscsak at [holly.h.pavliscsak.ctr@mail.mil](mailto:holly.h.pavliscsak.ctr@mail.mil).**

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