Moulage Tattoos: A New Innovative, Alternative to Traditional Moulage

The AMEDD Advanced Medical Technology Initiative (AAMTI) is proud to announce its first ever AAMTI Rapid Innovation Fund recipient! Dr. Joseph Lopreiato submitted a proposal for a project entitled “Temporary Tattoo Rapid Application Moulage Kits.” These moulage tattoo kits are based on illustrations created by Medical Illustrator, Elizabeth Weissbrod at the Val G. Hemming Simulation Center at Uniformed Services University of the Health Sciences (USUHS). This project demonstrates how creating realistic, rapid application and cost effective moulage tattoos can fully engage learners and personnel for medical training exercises and courses.

Moulage is the art of applying mock injuries for the purpose of training Emergency Response Teams and other medical and military personnel. Moulage may be as simple as applying pre-made rubber or latex “wounds” to a healthy “patient’s” limbs, chest, head, etc., or as complex as using makeup and theatre techniques to provide elements of realism (such as blood, vomitus, open fractures, etc.) to the training simulation. The practice dates to at least the Renaissance, when wax figures were used for this purpose.

Training scenarios often require the application of moulage and traditionally, they are created using various types of stage makeup and/or silicone prosthetics. The process requires a trained moulage artist(s) on staff and each application can take up to 20 minutes of application time per patient. If moulage artists are not adequately trained, the applied moulage may be poor and detrimentally affect the quality and effectiveness of the training.

There are many courses offered to military personnel that could be enhanced and improved if temporary tattoo moulage packets were provided. Advanced Traumatic Life Support and Tactical Combat Casualty Care courses are examples where excellent moulage can really enhance the learner’s experience. Inadequate or poorly applied moulage can greatly decrease the efficacy of training for learners even if the medical training portion is superb. This project demonstrates how issues with traditional moulage can be alleviated through the use of pre-made moulage tattoo packets that correlate directly and consistently with the scenarios associated with the course. The creation and implantation of using temporary tattoos for use with moulage application has the potential to create a significant impact on the quality, application time and cost of training for military service members.

“It’s exciting to see the advances and improvements to the traditional moulage kits and how having something like this is enhancing training experiences for medics,” stated Mr. Geoff Miller, TATRC’s Medical Modeling and Simulation Innovation Center’s Lab Manager. AAMTI Program Manager, Holly Pavliscsak and AAMTI Project Officer, Sharon Garlena recently visited Dr. Lopreiato and Ms. Weissbrod at the Val G. Hemming Simulation Center at USUHS along with Mr. Geoff Miller, to discuss this project.