

# COVID-19 Airway Management Isolation Chamber “CAMIC” Team Selected for Prestigious Technology Transfer Award

A multi-disciplinary team of scientists, engineers, and doctors who invented the COVID-19 Airway Management Isolation Chamber, or “CAMIC,” was selected to receive a 2021 Excellence in Technology Transfer Award from the Federal Laboratory Consortium for Technology Transfer (FLC). The FLC is the congressionally mandated organization that educates, promotes, and facilitates Federal Technology Transfer. This highly competitive award is presented annually to laboratory employees who have accomplished outstanding work in the process of transferring federally developed technology. The CAMIC Team was also given the distinction of being a COVID-19 Response Award winner as well!

TATRC’s own Mr. Nathan Fisher, Chief of the Medical Robotics and Autonomous Systems Division was one of the lead inventors and contributors for CAMIC. The team was recognized by the FLC during the award ceremony which took place on April 8th. The FLC Award stated, “The CAMIC is a clear isolation chamber that drapes around the head, neck and shoulders of a patient, creating a portable negative pressure environment that captures and removes viral particles using vacuum lines. CAMIC was conceived in the Spring of 2020 by physicians at Walter Reed National Military Medical Center (WRNMMC) and refined in just three weeks with the support of three Army labs: the Telemedicine & Advanced Technology Research Center (TATRC), U.S. Army Medical Materiel Development Activity (USAMMDA) and the Clinical and Translational Research Program Office (CTRPO). CAMIC’s simple construction from readily available materials allowed for the rapid fabrication of the chambers by military treatment facilities after the Food and Drug Administration (FDA) granted an emergency use authorization in June.”

The FDA emergency use authorization allowed CAMIC schematics and instructions to be shared with military treatment facilities (MTFs), allowing staff to fabricate their own devices using locally sourced materials as a supplement to PPEs—including at an MTF in Afghanistan and medics in the field. CAMIC also was used to conduct the Department of Defense’s first COVID-positive surgery at WRNMMC, protecting medical staff and resulting in no additional infections. This simple, yet innovative invention helped rapidly place technology in the hands of the Warfighter and the



CAMIC in use after FDA Emergency Use Authorization

medical personnel tasked with treating them.

“The speed at which this diverse and multi-organizational team came together and began achieving results was truly remarkable,” stated Mr. Fisher. “This is a massive credit to Dr. Steven Hong for sharing his vision and leading the team through many hurdles without losing stride to meet an emergent need during the COVID-19 crisis.”

The CAMIC was recently featured as one of many MHS innovations in the battle against COVID-19 in a health.mil article, which can be found at: <https://health.mil/News/Articles/2021/01/05/MHS-operational-innovations-continue-in-battle-against-COVID-19>.

Congratulations to Mr. Fisher, and the entire CAMIC Team, for working together in partnership on this well-deserved recognition and award! ■■■

**For more information on this project, please contact Mr. Nathan Fisher, [nathan.t.fisher3.civ@mail.mil](mailto:nathan.t.fisher3.civ@mail.mil).**