



# USAMRDC Good News Story



## U.S. Army Medical Research and Development Command

### *USAMRDC Puts Fatigue Fears to Bed with Licensing of Novel 'Alertness' Tool*

- In late October, the U.S. Department of Defense (DOD) successfully licensed the groundbreaking *2B-Alert* fatigue-management artificial intelligence (AI) tool to *Integrated Safety Support*, a company focused on fatigue training and analysis.
- The *2B-Alert* tool, a device designed to counteract the negative impact of sleep deprivation and general fatigue, was initially conceived by researchers at the USAMRDC Walter Reed Army Institute of Research (WRAIR) ten years ago, then developed further at the USAMRDC Telemedicine and Advanced Technology Research Center (TATRC).
- The licensing effort was spearheaded by Dr. Jaques Reifman, initial project developer and current Director of TATRC's Biotechnology High Performance Computing Software Applications Institute (BHSI).
- The *2B-Alert Web* tool is a PC-based application that allows users to predict how sleep-wake schedules and alertness-improving measures affect cognitive performance, while the *2B-Alert App* tool is a smartphone application that allows users to monitor their own alertness levels and generate personalized alertness-enhancing recommendations.
- Given the potential of commercial partners to add improvements and features to new technologies to create value-added products, the possibilities for a new generation of scientifically validated fatigue-management devices seem limitless.



Screenshots of the 2B-Alert App tool (images by TATRC)

**OUTCOME:** By predicting future alertness levels and improving cognitive performance, the *2B-Alert* tool supports the Army's modernization strategy by reducing accidents and injuries among Service Members, which enhances Soldier readiness, resilience, and ultimate lethality.