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Perceptronics Solutions Awarded PAL-MEDIC Phase II Contract

Perceptronics Solutions has been awarded a Small Business Innovation Research (SBIR) Phase II contract by the US Army MEDCOM Telemedicine and Advanced Technology Research Center (TATRC) to develop Predictive Algorithms and Learning for Combat Medic (PAL-MEDIC). The PAL-MEDIC system will provide an intelligent computing infrastructure and a mobile app that will help improve proactive care for trauma patients in the field. It will enhance pre-hospital care by combat medics, particularly in prolonged care cases when it is not feasible to evacuate casualties quickly.

PAL-MEDIC will provide decision support by processing data from field sensors that monitor a patient's vital signs. The PAL-MEDIC Analysis Engine will use Artificial Intelligence and Machine Learning algorithms to detect subtle patterns in the physiological data. Based on these patterns and observational data from the medic, the system will be able to predict potential deterioration in the patient's status. The system will then generate patient-specific alerts and recommended interventions using a knowledge base of standard Army TC3 protocols and other related sources, and provide these to the medic via an intuitive user interface.

The Phase II effort will expand on a successful proof-of-concept of the Machine Learning algorithms demonstrated Phase I. In Phase II a complete PAL-MEDIC prototype system will be implemented and evaluated in both laboratory and field settings.

Dr. Gershon Weltman, Principal Investigator on the PAL-MEDIC project said, "PAL-MEDIC will serve as a seminal program in the application Artificial Intelligence to acute care, and the technology developed will benefit not only the US Armed Forces but also civilian emergency response agencies and intensive care units."

To learn more about Perceptronics, [contact us](#).

About Perceptronics: Perceptronics develops intelligent computing technologies that help people make better decisions when facing uncertainty or operating in high stress environments. Our world-class scientists, engineers and human-computer interaction experts design and implement solutions that apply advanced algorithms to build systems that focus on the user. By combining innovative science, artificial intelligence and compelling design, we help our clients tackle the most difficult problems now faced by the US Department of Defense and security agencies, local governments, and corporate enterprises.