# Dossier: NEUROMERSIVE, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,248,073.00

**Award Date:** 2024-06-14

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

NEUROMERSIVE, INC. is a technology company focused on developing and deploying innovative neurotechnology and extended reality (XR) solutions primarily for defense, aerospace, and first responder training and performance enhancement. Their primary business revolves around creating immersive training environments that leverage neurofeedback, biometrics, and personalized learning algorithms to accelerate skill acquisition, improve cognitive performance under stress, and enhance operational readiness. They aim to solve the challenge of inadequate and inefficient training methods in high-stakes environments by providing data-driven, adaptive, and engaging simulations that optimize learning outcomes. Their unique value proposition lies in their ability to combine cutting-edge neuroscience with XR technology to create personalized training experiences that are more effective and engaging than traditional methods, resulting in improved performance and reduced training time.

**Technology Focus:**

* Neuro-adaptive Training:\*\* Employs real-time brain activity monitoring (EEG) and biometric data (heart rate, eye-tracking) within XR simulations to personalize training difficulty and content, optimizing learning based on individual cognitive states and stress levels. They claim their system can reduce training time by up to 50% and improve skill retention significantly.
* Immersive Simulation Platforms:\*\* Develops customized XR environments (VR/AR) tailored to specific operational scenarios, such as flight simulations, combat training, and emergency response drills. These platforms integrate with neurofeedback and biometric data to provide personalized feedback and track progress.
* Cognitive Performance Enhancement Tools:\*\* Provides software and hardware solutions aimed at improving attention, memory, and decision-making skills in high-pressure situations. These tools leverage neurofeedback techniques to help users learn to regulate their brain activity and improve cognitive control.

**Recent Developments & Traction:**

* SBIR Funding:\*\* Awarded multiple Small Business Innovation Research (SBIR) grants from the Department of Defense (DoD) over the past two years (2022-2024) to develop and test their neuro-adaptive training technologies for specific military applications, including pilot training and special operations readiness.
* Partnership with AFWERX:\*\* Collaborated with AFWERX, the innovation arm of the U.S. Air Force, on pilot programs to evaluate the effectiveness of their XR-based neurofeedback training in enhancing aircrew performance and resilience.
* Product Launch (SimX):\*\* In partnership with SimX, a leading VR medical simulation provider, Neuromersive integrated its neuroadaptive learning platform into SimX's advanced VR-based medical training scenarios.

**Leadership & Team:**

* Jeff Bail, CEO:\*\* Experienced entrepreneur with a background in neurotechnology and immersive learning. Prior experience includes founding and leading other successful startups in the education technology and gaming sectors.
* Dr. Stanley Yang, Chief Science Officer:\*\* Neuroscientist with extensive research experience in cognitive training, neurofeedback, and brain-computer interfaces. Previously held research positions at leading academic institutions.

**Competitive Landscape:**

* STRIVR:\*\* STRIVR focuses on VR-based sports and enterprise training but does not appear to have a strong neurofeedback integration. Neuromersive's key differentiator is its core focus on neuro-adaptive learning, utilizing real-time brain activity data to personalize and optimize training experiences, especially within the defense and aerospace sectors.
* AppliedVR:\*\* AppliedVR primarily targets pain management and therapeutic applications of VR. Neuromersive distinguishes itself by focusing on performance enhancement and skills training within high-stakes operational environments.

**Sources:**

1. [https://www.neuromersivelabs.com/](https://www.neuromersivelabs.com/)

2. [https://www.einnews.com/pr\_news/654240118/neuromersive-showcases-innovative-neuro-adaptive-training-solutions-at-i-itsec-2023](https://www.einnews.com/pr\_news/654240118/neuromersive-showcases-innovative-neuro-adaptive-training-solutions-at-i-itsec-2023)

3. [https://www.prnewswire.com/news-releases/neuromersive-wins-us-air-force-sbir-phase-ii-award-301865153.html](https://www.prnewswire.com/news-releases/neuromersive-wins-us-air-force-sbir-phase-ii-award-301865153.html)

4. [https://www.simxvr.com/news/simx-to-integrate-neuromersive-neuroadaptive-learning-platform](https://www.simxvr.com/news/simx-to-integrate-neuromersive-neuroadaptive-learning-platform)