MEDICAL SIMULATION AND INFORMATION SCIENCES
RESEARCH & DEVELOPMENT

THE GENEVA FOUNDATION

Driving Innovation through Simulation and Science

Geneva drives advancements in AI, simulation, and digital health research to strengthen how the military trains, plans, and delivers care. From immersive training environments to predictive tools, our work improves clinical precision, operational preparedness, and force readiness, with broad potential for civilian healthcare and disaster response.

The Geneva Advantage

With deep DoD expertise and agile infrastructure, Geneva accelerates innovation by guiding promising ideas through complex regulatory, operational, and contracting pathways—transforming research into deployable solutions.

> **Mission-Aligned Expertise**
> Proven track record executing DoD-prioritized, operational research for service members

> **End-to-End Support**
> From proposal to dissemination, we manage every step

> **Strategic Access**
> Embedded at military sites with direct reach to service members and multidisciplinary partners

> **Accelerated Impact**
> Advancing research to field-ready solutions through agile, cross-sector partnerships

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Data represents 1 January 2024 - 1 June 2025

Mission Metrics

Active Funds Managed in 2024
$72.8M

Active Research Projects
17

Principal Investigators
13

Research Sites
23

Critical Areas of Innovation

AI Decision Support
Machine learning for faster, smarter care

Immersive Training
VR/AR to sharpen trauma care skills

Wearable Sensors
Tracking health & performance in real time

Performance Optimization
Data-driven training and recovery

Health Informatics
Digital tools to improve clinical workflows

Predictive Simulation
Modeling for surgery and mission prep

Digital Health
Remote platforms for care in limited settings

Medical Simulation and Information Sciences

Leading the Frontlines of Research — Project Spotlights

Enhancing Trauma Care with Autonomous Support Tools

Geneva supports the Connected and Autonomous Procedure Support Tools for Combat Trauma and Casualty Management project to improve outcomes in austere and high-pressure environments. The research team is developing tools that guide life-saving interventions when evacuation or on-site expertise is limited through AI-enabled decision support, simulation-based testing, and virtual health integration.

Impact

This project strengthens battlefield care by reducing treatment delays and enhancing procedural accuracy, ultimately increasing survival rates and readiness in combat and remote settings.

Wearable Technology Unlocks Insights into Sleep and Readiness

Through a collaborative initiative, researchers are using wearable technology to explore sleep patterns and enhance rest quality in service members facing insomnia risks linked to TBI and PTSD. By collecting biomarker and sleep data in real-world environments, this project aims to uncover the underlying mechanisms of poor sleep and develop targeted interventions to restore rest and enhance performance.

Impact

This research advances the use of wearable tech to monitor and improve sleep, strengthening warfighter readiness, psychological resilience, and long-term health through data-driven, personalized solutions.

Together, We're Redefining What's Possible in Medical Simulation and Information Sciences

Whether you're a researcher, policymaker, or industry innovator, Geneva brings the expertise, infrastructure, and partnerships needed to deliver results where they matter most—on the front lines of defense health.

Let's develop battlefield-ready solutions that save lives and shape the future of medical simulation and information sciences.

Learn more about Geneva's MedSim research: