



US DEPARTMENT OF DEFENSE

# BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

## Injury Models

### Developing Robust, Predictive UBB Methodology for the Test and Evaluation Community

USARL, sponsored by the RDECOM UBB Program, participated in the development and evaluation of a fast-running model of the lower leg of an ATD. This model will be used in support of Live Fire Test and Evaluation (LFT&E) programs for all combat vehicles that have a requirement to provide UBB protection. USARL also supported an Army Analysis of Alternatives by assessing the vulnerability of current and conceptual combat vehicles to UBB, providing force-level modelers with data appropriate for evaluating alternative combat-vehicle designs with and without UBB protection within the context of a combat scenario. These efforts will aid in the design of combat vehicles with improved survivability for mounted Service Members exposed to UBB events. Additionally, these studies may reduce the overall cost of acquiring survivable vehicles by factoring in survivability early in the design phase, thereby decreasing the amount of testing required.