



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Injury Models

Capturing Biological Variability for Injury Prediction in the Lower Leg

USARL has developed a computational framework to facilitate a functional modification of the FE model of the lower leg. This framework allows for key biological measurements to be specified (e.g., femur length, tibia length). A modified digital FE model can then be generated to meet the specified measurements. This approach will enable the development of injury corridors from a single FE model and the representation of multiple Service Members, thus better representing the full Warfighter spectrum. This technology will assist the development of improved blast protection capabilities for Warfighters.