



US DEPARTMENT OF DEFENSE  
**BLAST INJURY RESEARCH PROGRAM**  
**COORDINATING OFFICE**

## **Pain Management and Rehabilitation after Amputation A Mechanism-based Classification of Phantom Limb Pain**

Although PLP occurs in up to 85% of individuals with amputation, studies report characteristics that vary widely in PLP onset, duration, frequency, and overall description. This heterogeneity has led to widespread recognition among researchers that PLP likely has multiple causes. A research team at CRSR at USUHS conducted a meta-analysis, published in *Pain*, of randomized controlled trials of treatments for PLP published in the last decade. The researchers concluded that there may be many effective treatments for PLP that only work in specific subpopulations. Consequently, a mechanism-based classification of PLP was recommended, re-conceptualizing it as a cluster of pain disorders rather than as one single disorder. Future work should attempt to link subtypes of pain to a shared pathophysiological mechanism to generate clinically significant distinctions across patients that can be applied to PLP research. A mechanism-based classification system for PLP would allow future researchers to generate specific hypotheses and target a specific patient population according to the theorized mechanism of action of the treatment in question. Recognizing the complexity of the disorder while still seeking to create a system that allows for generalization across patients is critical to the progress of PLP treatment and research.