

# WRAIR

## Center for Military Psychiatry and Neuroscience Blast-Induced Neurotrauma

### CHARACTERIZE

From lab to field: Determine the biomechanical, neurobiological, and behavioral consequences of blast and repeated overpressure exposures to inform the development of countermeasures.

Develop algorithm for blast gauge dosimeter

Determine severity of acoustic insult

Document "Breacher's Brain"

### PROTECT

Develop solutions that target the urgent need to shield Warfighters against primary blast exposure.

Develop medical injury criteria to enable testing and fielding of bomb suits and Personal Protective Equipment (PPE).

Understanding biophysical injury mechanisms by studying interaction of blast wave with the organism.



Brain Health



Hearing



Vision



Lungs



Wound Infections

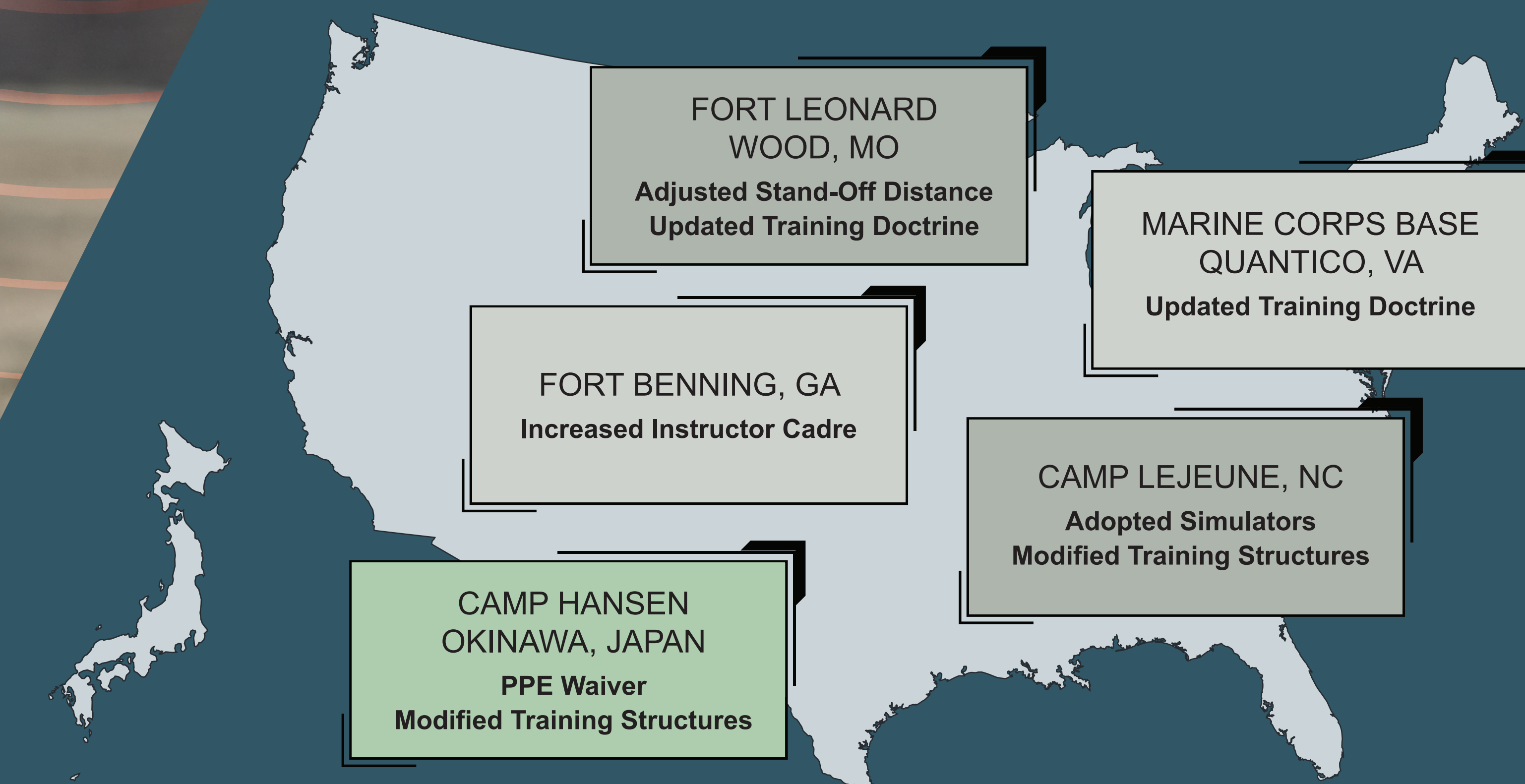
### TREAT

Test pharmaceutical and nutraceutical agents that can serve as therapies against blast TBI neuropathology.

### BLAST IN ALL-DOMAIN OPERATIONS

Maximize next-generation protection systems.

### WEAPON SYSTEMS TRAINING



Develop recommendations for specific training ranges to minimize harm from repeated blast overpressure exposure.