

At a Glance

Near term:

- Understanding of the fundamental components of resilience: mental, physical and social
- Methods and training strategies for enhancing mental, physical and social performance in individuals

Mid term:

- Ability to track and tailor training based on individual differences in resilience
- Methods and training strategies for small unit and team leader focused resilience training

Far term

- Ability to modify individual neurobiological processes to improve resilience before, during and after deployments
- Ability to deliver individualized resilience-building approaches in response to immediate needs

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Expeditionary warfighters must achieve mission success and return home uninjured, while operating under conditions and circumstances that challenge mental, physical and social abilities.

Warriors must:

- ◆ Work and fight in extreme heat, humidity, wind, cold and/or altitude
- ◆ Deploy on short notice to extreme climates
- ◆ Adapt to challenging and uncertain environments
- ◆ Interact and coordinate with local populations, coalition forces and non-governmental organizations
- ◆ Face enemy forces well-versed in conventional, asymmetric and irregular warfare



Our objective is to develop multidimensional intervention strategies that enhance individual, leader and team psychological, physical and social resilience skills; deliver strategies that optimize physical performance and injury resistance; and harden warfighters to adapt to operations in complex, chaotic, full-spectrum environments.

These resilience-building strategies and approaches will result in measurable improvements in resilience and reductions in mental health symptoms and physical injuries.



Research Challenges and Opportunities:

- Map out individual neurodynamic, physiological and behavioral indicators of resilience
- Identify the interplay between nutritional supplementation, physical conditioning and operational performance in the context of combat tasks
- Model exposure and recovery processes of body and brain to combat stressors, recovery, reset and pre-deployment workups
- Develop, test and evaluate compelling virtual/immersive resilience-building training strategies and technologies
- Identify small team social indicators and leader characteristics associated with team resilience