

Fort Jackson Soldier Health Promotion: Significant Public Health and Policy Implications

The USC-Institute for Partnerships to Eliminate Health Disparities (IPEHD) has secured a \$7.4 million-dollar cooperative agreement with the U.S. Army Medical Research and Materiel Command (USAMRMC) through a Department of Defense effort to address disparate health issues at Fort Jackson, the nation's largest training Army Base in Columbia, SC.

This innovative and promising study is called the Fort Jackson Identifying Health Barriers Project: Soldier Health Promotion to Examine and Reduce Health Disparities (SHPERHD).



“This multi-investigative research effort has significant public health implications for both the military and civilian populations”

-Dr. Saundra Glover, Institute Director and principal investigator for the project

Objective: This effort examines the root causes of military attrition and many of the issues that contribute to Soldier health issues (diet, military environment, physical activity patterns, physical readiness, stressors and anxiety), both pre- and post-deployment. A key area of focus will be post-traumatic stress disorder (PTSD) and mental health.

Approach: Phase I of the project brings together several USC researchers with expertise in nutrition and diet intervention, physical fitness and musculoskeletal injuries, athletic training, and mental health research. Among the primary objectives are to

assess baseline data of military personnel at key stages of recruitment through basic combat training to better develop the appropriate interventions to reduce attrition.

Ft. Jackson is the U.S. Army Basic Combat Training Center of Excellence (USABCTCoE), through which the Experimentation and Analysis Element (EAE) has a primary goal of linking training and research communities to better formulate research studies. Joint Initial Entry Training (IET) workshops facilitate research discussions among representatives from other military installations such as Ft. Sill, Ft. Benning, and Ft. Leonard Wood, in addition to military personnel from the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), and the Telemedicine and Advanced Technology Research Center (TATRC) at Ft. Detrick, MD.

Dr. Saundra Glover leads the investigative team as Project Director of the SHPERHD Coordinating Center. The co-investigative team includes Dr. Sonya Jones, Dr. Mark Davis, Dr. James Mensch, and Dr. Shawn Youngstedt. To optimize research findings and develop the most appropriate interventions,



each project lead is paired with a member of the EAE research staff at Ft. Jackson. Dr. Kelly Williams and Dr. Stephanie Muraca, in addition to LTC Sonya J. Cable, will work with each of the respective investigators to refine the research design and establish the most relevant work plan and project interventions.

“This community-based research project affords a tremendous opportunity to continue shaping the training environment with science”

-LTC Sonya J. Cable, Director of the Experimentation & Analysis Element (EAE), USABCTCoE and Fort Jackson site principal investigator

Military Relevance: This project will provide a framework for understanding the historical and cultural backgrounds of Soldiers and how certain factors (poverty, educational history, inequities in healthcare access, diet, mental health) contribute to health disparities.

Timeline/Key Deliverables (Schedule) & Cost						
	Phase I	Phase II		Phases III-IV		
MILESTONES	FY07	FY08	FY09	FY10	FY11	FY12
Establish Coordinating Center	█					
Study Design and Intervention Plan	█	█	█			
Nutrition Intervention			█	█	█	
Drill Sergeant Survey			█	█	█	
Subjective/Objective Sleep Study			█	█	█	
BCT Mental Health Assessment			█	█	█	
Injury Prevention Intervention				█	█	
Global Assessment Tool					█	█
TOTAL: \$7.4M	\$1.1M	\$2.1M		\$4.2M (XXX)		

Key Deliverables/Project Descriptions: Standardized Global Assessment Tool, Key Findings and Intervention Plan

Project 1 - Obesity/Nutrition (Dr. Sonya Jones, Co-Investigator). This will be a 3-pronged approach that involves (1) evaluation of the Physical Training (PT) program; (2) assessment of whether obesity de-motivates Soldiers; and (3) drill sergeant knowledge of nutrition/obesity issues. A primary interest will be the “life course perspective” (impact on Soldier entrance into the military environment) in order to better understand the transition.

Project 2 - Injury Prevention (Dr. Mark Davis / Dr. James Mensch). Utilizing data mechanisms such as the Battalion Aid System, Project 2 will assess the baseline data for injury rates and examine the training regimen (load and progression) during basic combat training (BCT), with the recommendation of Ft. Jackson personnel. The Certified Athletic Trainer-Forward (ATF) program collaborates with onsite certified athletic trainers to analyze data related to lost hours from training, Troop Medical Center visits, heat-related injuries and Army Physical Test scores.

Project 3 - Mental Health (Dr. Shawn Youngstedt). The priorities of this component are to examine (1) the methods for screening recruits for mental health problems (such as PTSD) at point of intake; (2) stigma associated with seeking mental health services; (3) the career path of soldiers; (4) the small number of mental health referrals; and (5) the impact of sleep deprivation on mental health (also a factor in Soldier injury).

Project Co-Investigators & Research Staff

Sonya Jones, PhD, Co-Investigator
Mark Davis, PhD, Co-Investigator
James Mensch, PhD, Co-Investigator
Shawn Youngstedt, PhD, Co-Investigator
Edward Frongillo, PhD, Co-Investigator
Toni Torres-McGehee, PhD, Co-Investigator
Ruth Saunders, PhD, Co-Investigator
Cheri Shapiro, PhD, Co-Investigator
Christine Blake, PhD, Co-Investigator
Angela Murphy, PhD, Co-Investigator
Martin D. Carmichael, PhD, ATC
Thomas P. Dompier, PhD, ATC
Monal Shroff, Post-Doctoral Fellow

SHPERHD Coordination Center Project Staff

Edith M. Williams, PhD, Project Manager (Acting)
Menia D. Lee, Research Administrator
Gwen Preston, Assistant Project Manager - Project 1
Andrea Williams, Assistant Project Manager - Project 2
Lisa Wigfall, PhD, Assistant Project Manager - Project 3
Sidney Bates, Budget Coordinator
Larrell Wilkinson, Doctoral Student