Develop effective biomedical countermeasures against operational stressors and to prevent physical and psychological injuries during training and operations in order to maximize the health, readiness and performance of Service members and their Families, in support of Multi-Domain Operations, Army CFT and SECDEF Lethality Priorities, and Human Performance Optimization & Enhancement and DoD Total Force Fitness concepts.

**JROC approved Joint Military Operational Medicine Initial Capabilities Document, NOV 2018**
MOMRP Solutions Across the Military Lifecycle

Developing and Maintaining a Ready and Resilient Force

Ready & Resilient Force

- Operational Medicine
- Personalized Medicine

- K-12 thru Accession
  - Accession standards & strategies to predict retention
  - Assessment of potential

- Basic Training/Advanced Individual Training
  - Women in combat/gender-specific vulnerabilities

- Post-Deployment
  - Return to duty standards & criteria

- Post-Military Surveillance
  - Epidemiological studies to evaluate health risks pertaining to military deployments

- Mobilization/Pre-Deployment
  - Human Systems Integration
  - Training technology

- Deployment/Employment
  - Performance optimization in the context of MOS
  - Physical & cognitive load

- Separation
  - Resilience training
  - Leader training
  - Measures of unit cohesion
  - Behavioral screens
  - Cultural awareness training & education

- Reset
  - Measures of unit cohesion

- Re-Deployment
  - Resilience training
  - Leader training
  - Measures of unit cohesion
  - Behavioral screens
  - Cultural awareness training & education

Wearables for Health, Readiness and Performance
Commander Christopher T. Steele, PhD  
Director, Military Operational Medicine Research Program

Commander Steele is the Director of the Military Operational Medicine Research Program (MOMRP) at the US Army Medical Research and Materiel Command, FT Detrick, MD and Chair of Joint Program Committee (JPC-5) for the Defense Health Agency. CDR Steele drives planning, programming and budgeting for medical research to protect the health, support readiness and sustain/enhance performance of warfighters faced with environmental extremes, inappropriate nutrition, physical degradation, sleep and circadian disruption, toxic chemical exposures, blast and physical injuries and under acute & chronic psychological stress.

Commander Steele received a Ph.D. from North Carolina State University (Raleigh, NC) in 2005, and subsequently accepted a commission as a Navy officer to support the Navy and Marine Corps Combat Team as a Chronobiologist. CDR Steele, a Navy Research Physiologist, spearheaded work to promote submarine crew endurance and reduce unwarranted circadian rhythm disruption and sleep inefficiency at the Naval Submarine Medical Research Laboratory (Groton, CT) in 2006. CDR Steele designed and executed at-sea research on submarines to demonstrate improved watchstanding schedules and developed a fatigue management awareness module at NSMRL for submarine officers. In 2009, Steele became an Assistant Professor at the Uniformed Services University (Bethesda, MD) where he directed a Military Applied Physiology course and led a field leadership exercise of 65 officers and enlisted cadre that exposed over 800 medical officers to operational challenges faced by warfighters. In 2012, CDR Steele reported to the Office of Naval Research (ONR) as a Program Officer in the Warfighter Performance Department (Code 34). He provided leadership and direct oversight for a $45M annual portfolio in Military Operational Medicine, Combat Casualty Care, and Medical Radiological Defense comprising 70 research groups at over 25 Department of Defense and civilian institutions. At ONR, CDR Steele consolidated a program on warfighter health protection and performance sustainment under environmental stressors including hypoxia, thermal challenges, non-isobaric conditions, and quickly grew a “Circadian, Sleep and Fatigue” program. This program drove basic and applied biomedical sciences in order to translate findings into useable information and functional products to support operational communities.

CDR Steele has served on organizing committee and as session chair of two NSF-funded US-South American workshops on Neuroendocrinology to promote scientific discourse between the US and seven South American countries. He is an active participant in Sleep and Circadian Research Society Trainee workshops designed to emphasize the difficulties and importance of transitioning basic science to fielded applications. In a Joint leadership role, Steele led a task area for JPC-5 on operational performance sustainment in extreme environments across the DoD and served as the Navy’s JPC-5 S&T representative to ensure the Navy Medical Research enterprise is represented and Navy/Marine Corps gaps were addressed in Defense Health Agency programs. He served as the MOMRP Deputy Director from 2015 to 2018 prior to being named in his current position as Director.

CDR Steele’s operational background includes three years in the U.S. Army as an artilleryman and twelve years in the Army National Guard serving in Aviation, Armor and Engineering units as a non-commissioned officer in both Nuclear Biological & Chemical Operations and Military Intelligence. Steele has deployments to Iraq and Afghanistan and has supported Humanitarian Service operations in the state of North Carolina. CDR Steele is the current Specialty Leader for the Navy’s Medical Service Corps Research Physiology community.

Certifications: Member, Navy Acquisition Corps; Defense Acquisition Workforce Science and Technology Manager (III) and Program Manager (II).