

**Research VA Advanced Postdoctoral Fellowship
War Related Illness and Injury Study Center
Washington DC VA Medical Center**



Michelle Costanzo, Ph.D.
WRIISC-DC Research Fellowship Director
50 Irving Street, NW
Washington, DC 20422
<https://www.warrelatedillness.va.gov/>
Fellowship Year Begins: September 2021

Specific requirements:

Participate in ongoing research projects and proposals

- Recruitment activities
- Acquire informed consent
- Participant Follow-up
- Data management
 - Data quality checks performed during study data collection timepoints
 - Organizing data files (renaming to convention)
 - Data inventory keeping and reporting
- Online survey operations using Qualtrics
- Research equipment inventory keeping, maintenance and management according to study protocol
- Assist with IRB protocol amendments, regulatory audits and review. Involves interacting with PI, Privacy Officer, ORD personnel, IRB and R&D.
- Perform literature review for presentations and manuscripts
- Participate in data analysis efforts
- Participate in manuscript writing for publication in scientific journals and present at conferences.
- Attend regular staff/research meetings

Note: Training will be provided for all the above tasks. The tasks themselves provide real world experience in conducting research studies in a clinical setting within a Government Agency.

TBI and blast exposure / Neuro-cognition Focus

- Assist in protocol development for large project on blast and chemical exposure assessment in Active Duty Service Members and Veterans with Explosive Ordnance Disposal experience (EOD-Track).
- Perform key functions in ongoing study on TBI and blast exposure in Veterans involving multi-modal remote data acquisition such as 2-year longitudinal self-report measures, EEG, comprehensive sleep evaluation, heart rate, actigraphy and neuropsychological assessment.
- Assist / Lead manuscript development using data from multiple ongoing and completed WRIISC-DC research studies and clinical trials with a focus on the following research questions:
 - Brain-Body-Behavior relationship
 - Mindfulness and meditation related health outcomes
 - TBI blood biomarker characterization
 - Characterizing MRI markers and its relationship with health outcome and behavior
 - Characterizing EEG markers in the context of mindfulness meditation
 - Self-report and clinically diagnosed mental health outcomes
 - Neuropsychology related outcomes
- Develop neurofeedback proof-of-concept projects to enhance brain function / cognitive resiliency
- Weekly journal club meeting / brain storming session for idea generation and advancing manuscripts.

Exercise Physiology Focus

- Assist with the development of exercise interventions for clinical populations
- Oversee primary data collection in both remote and onsite settings, including:
 - Actigraphy and other wearable devices for monitoring Veterans remotely
 - Self-report questionnaires and diaries
 - Fitness tests (e.g., cardiovascular, flexibility, strength, and body composition)
 - Exercise-related parameters
- Prepare data for analysis
 - Example: process actigraphy data to define sleep/wake patterns, circadian rhythms, and physical activity levels
- Evaluate and interpret data from multiple sources and tests protocols
- Supervise exercise sessions (remote and onsite)
- Assist and/or lead manuscript development using data collected from exercise-related studies and/or other ongoing WRIISC-DC research studies