

Biophysiology of Stress

1. **Research Title:** Biophysiology of Stress
2. **Individual Sponsor:**

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3. **Academic Area/Field and Education Level**
Psychology, biology, physiology (MS or PhD level)
4. **Objectives:** Perform biomarker field research for Battlefield Airmen training and operations.
5. **Description:** The 711th Human Performance Wing is currently assessing the biological, physiological, and cognitive states of Battlefield Airmen during their training pipeline and during operations. I seek a Master's Level or Doctorate researcher with knowledge of neuroscience and biology to support this research. New biomarkers that predict change in cognition and physiology due to stress are needed for biosensor development and further performance augmentation. Biofluids of interest include saliva, sweat, and blood. The typical data collection suite includes standard biofluid collection with the development of less invasive methods, subjective distress questionnaires, portable cognitive assessment methods, and physiological health and safety monitoring. Most of the research is located in various locations in the US and potential for foreign areas in the future.
6. **Research Classification/Restrictions:** Unclassified/unrestricted
7. **Eligible Research Institutions:** Indicate to what organizations this topic should be provided



DAGSI (Wright State University, AFIT, Ohio State University, University of Dayton, Miami University, Ohio University, University of Cincinnati) NOTE: Topics submitted to DAGSI must be approved for public release. Need PA Approval #



AFIT (only)



USAFA (only)

If you are submitting a topic for the USAFA, indicate if you are also interested in sponsoring a USAF Cadet in summer 2015 (Average cost for USAF Cadet for 33 days is \$5000)

Yes

No