Opportunity Title: Biomedical Engineering and Physiological Monitoring Fellowship at USARIEM
Opportunity Reference Code: USAMRMC-RIEM-2022-0004

Organization U.S. Department of Defense (DOD)

Reference Code USAMRMC-RIEM-2022-0004

How to Apply Click on *Apply* at the bottom of the opportunity to start your application.

Description The United States Army Research Institute of Environmental Medicine (USARIEM), located in Natick, Massachusetts, is offering a current bachelor's student fellowship in biomedical engineering and physiological monitoring.

What will I be doing?

As an ORISE participant, you will join a multidisciplinary team of physiologists, epidemiologists, data analysts, and Army personnel to investigate risk factors that support warfighter health and performance and reduce musculoskeletal injury risk. This learning experience will provide you with knowledge and understanding in conducting research in military and civilian environments and provide a platform for you to use your current knowledge within the field.

Why should I apply?

Under the guidance of a mentor, you will gain research experience analyzing information collected from Military Service Members on the efficacy of deployed physiological status monitoring (PSM) systems.

Along the way, you will engage in activities and gain experience within several areas. These include but are not limited to:

- Transcribing, categorizing, and analyzing responses from military focus group soldiers whose sessions have been video-taped.
- Learning the use of SPSS statistical software and how to transform qualitative data (focus group responses) into quantitative (e.g., frequency of like responses).
- Gaining an understanding of the U.S. Army's acquisition process.

Throughout your appointment you will have the potential to participate under other research projects, taking part in:

- Investigating the necessary characteristics to develop and assess blood oxygen levels in high altitude Military Free-Fall Jumpers who are potentially mobile.
- Developing a research protocol to assess the utility and acceptability of physiological status monitoring compression shirts in a military environment.
- Assessment (data collection and analysis) of percent body fat and lean body mass in Marine and Navy personnel that may have specialized jobs (e.g., divers) resulting in specific body types that may or may not conform to accurate tape circumferences of percent body fat.
- Examining some physiological and performance attributes associated with successful completion of elite military combat training (e.g., U.S. Army Ranger training) by female Soldiers.

Opportunity Title: Biomedical Engineering and Physiological Monitoring Fellowship at USARIEM
Opportunity Reference Code: USAMRMC-RIEM-2022-0004

- Collaborating with various principal investigators to include your mentor with the goal of participating in both laboratory and field research and covering the major aspects of the research process (study preparation/protocol development, data collection, data reduction/data analysis, and report write-up).

During your fellowship your mentor will develop learning objectives to fit your personal career development goals, while providing guidance and education that will prepare you for your future.

Where will I be located?

Natick, Massachusetts

What is the anticipated start date?

USARIEM is ready to make appointments in May of 2022. Exact start dates will be determined at the time of selection and in coordination with the selected candidate. Applications are reviewed on an ongoing basis and fellowships will be filled as qualified candidates are identified.

What is the appointment length?

Appointments are initially for one year with the option to extend the appointment for up to four additional years, contingent upon project needs and funding availability.

What are the benefits?

You will receive a stipend to be determined by USARIEM. Stipends are typically based on a participant's academic standing, discipline, experience, and research facility location. Other benefits may include the following:

- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE)*
- Relocation Allowance
- Training and Travel Allowance

About USARIEM

The United States Army Research Institute of Environmental Medicine (USARIEM), located in Natick, Massachusetts, is an internationally recognized center of excellence for Warfighter health and performance science and its applications. The Institute functions as a world-class laboratory for environmental medicine, physiology, and nutrition research. The Military Nutrition Division conducts research on nutritional issues affecting the health and mission-readiness of military personnel, and supports the US Army Surgeon General's responsibilities as the Department of Defense's executive agent for nutrition research. USARIEM collaborates with multiple military and civilian institutions including the Department of Nutrition and Integrative Physiology at Florida State University.

To learn more about USARIEM, click here.

Opportunity Title: Biomedical Engineering and Physiological Monitoring Fellowship at USARIEM
Opportunity Reference Code: USAMRMC-RIEM-2022-0004

About ORISE

This program, administered by Oak Ridge Associated Universities (ORAU) through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the ORISE Research Participation Program at the U.S. Department of Defense.

Qualifications

The qualified candidate should be currently pursuing a Bachelor's degree in biomedical engineering or associated program with a 3.5 GPA or better.

Highly competitive applicants will have the following knowledge, skills and qualities:

- Detail oriented
- Knowledge of biomedical engineering and laboratory procedures
- An interest in advancement of physiological monitoring and other technologies that can aid in a Warfighter's heath and performance
- Demonstrated strong communications skills and the ability to collaborate with other team members
- Ability to operate independently in a remote setting (necessary in this COVID-19 environment)
- Personal experience in physical performance and the necessary training to meet high level performance in sport or military physical performance tasks
- Understanding of the research process to include human subjects' protection (although the individual will be trained to meet the organization's regulatory requirements)
- At least three years of college/university study in a relevant field with an intention of pursuing a M.S. or Ph.D. program.

U.S. Citizenship and travel are required.

The successful applicant will be required to comply with Environmental, Safety and Health (ES&H) requirements of the host facility, including but not limited to COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination).

Application Requirements

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Click here for detailed information about acceptable transcripts.
- One Recommendation

zintellect
climb higher

Opportunity Title: Biomedical Engineering and Physiological Monitoring Fellowship at USARIEM
Opportunity Reference Code: USAMRMC-RIEM-2022-0004

If you have questions, send an email to ARMY-MRMC@orise.orau.gov. Please list the reference code of this opportunity [USAMRMC-RIEM-2022-0002] in the subject line of the email.

Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Currently pursuing a Bachelor's Degree.
- **Overall GPA:** 3.50
- **Discipline(s):**
  - **Engineering** (2 👁)
- **Age:** Must be 18 years of age