

Opportunity Title: Muscle Biology and Human Performance Research Fellowship
at USARIEM

Opportunity Reference Code: USAMRMC-RIEM-2022-0017

Organization U.S. Department of Defense (DOD)

Reference Code USAMRMC-RIEM-2022-0017

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 post bachelor's or post-master's fellowship in biomedical engineering and physiological monitoring within the Military Performance Division.

What will I be doing?

The Military Performance Division of USARIEM is focused on research to optimize Warfighter performance, operational effectiveness, and prevent or mitigate performance decrements due to physical or mental overload, nutritional deficits, environmental and occupational hazards, or musculoskeletal injury. Within the Military Performance Division, you will participate in major research efforts including:

- Studying the impact of nonsteroidal anti-inflammatory drugs on muscle adaptation to exercise.
- Studying the cellular mechanisms of detraining on maintaining military performance.
- Additional opportunities for independent projects using cell culture models.

The primary objective of these protocols is to identify physiological mechanisms of the musculoskeletal system in military populations related to exercise, drugs, or injury.

Why should I apply?

Under the guidance of a mentor, you will gain experience within all aspects of the research processes including:

- Sample collection from humans or rodents
- Biochemical analyses
- Data organization (including collection and reduction)
- Manuscript preparation

Throughout your internship 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?

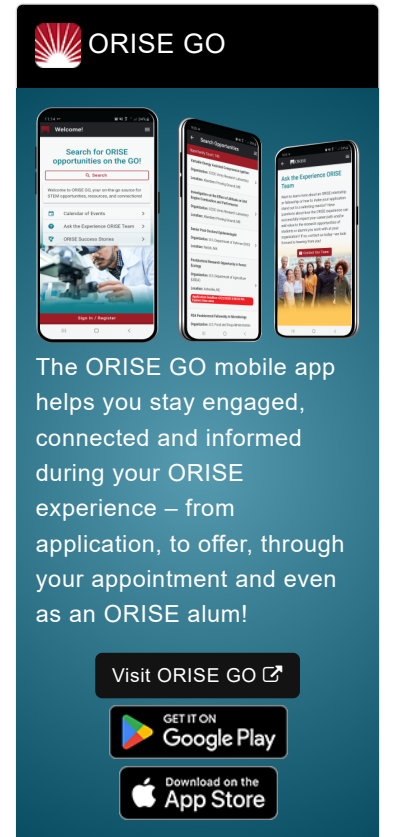
Exact start dates will be determined at the time of selection and in coordination with the selected candidate. Applications are reviewed on an ongoing basis and fellowships will be filled as qualified candidates are identified.

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



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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

USARIEM was established in 1961 as a research laboratory under the U.S. Army Medical Research and Development Command (now USAMRMC). USARIEM is internationally recognized as the DoD's premier laboratory for Warfighter health and performance research and focuses on environmental medicine, physiology, physical and cognitive performance, and nutrition research. Military guidance has been published for operations in heat, cold and high-altitude environments and nutrition for health and performance. The Institute is organized into four divisions: Military Performance, Military Nutrition, Thermal and Mountain Medicine, and Research Support. By leveraging its unique capabilities and facilities with industry, academia, and the government, USARIEM produces a variety of important products, including performance optimization doctrine, preventive medicine and planning doctrine, material development support, physiological monitoring strategies and predictive algorithms, and Health Hazard Assessments. To learn more about USARIEM, click [here](#).

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 have a Bachelor's degree or Master's degree in exercise science with a molecular background or associated program with a 3.2 GPA or better.

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

- Laboratory experience
- Experience conducting biochemical assays such as enzyme-linked immunoassay (ELISA), muscle histology, polymerase chain reaction (PCR), and basic cell culture
- Knowledge of biological sample processing (muscle, serum, plasma, urine) procedures and biosafety precautions
- Phlebotomy experience
- Good computer skills and experience with word, excel, and basic statistical knowledge

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).

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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

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:** Bachelor's Degree or Master's Degree received within the last 60 months or anticipated to be received by 12/30/2022 12:00:00 AM.
- **Overall GPA:** 3.20
- **Academic Level(s):** Any academic level.
- **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#) )
 - **Communications and Graphics Design** ([2](#) )
 - **Computer, Information, and Data Sciences** ([17](#) )
 - **Earth and Geosciences** ([21](#) )
 - **Engineering** ([27](#) )
 - **Environmental and Marine Sciences** ([14](#) )
 - **Life Health and Medical Sciences** ([48](#) )
 - **Mathematics and Statistics** ([11](#) )
 - **Physics** ([16](#) )
 - **Science & Engineering-related** ([2](#) )
 - **Social and Behavioral Sciences** ([28](#) )
- **Age:** Must be 18 years of age