

Opportunity Title: EACE R&S Applied Biomechanics Postdoctoral Fellowship

Opportunity Reference Code: EACE-2021-0011



Organization U.S. Department of Defense (DOD)

Reference Code EACE-2021-0011

How to Apply

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

Description

The Extremity Trauma & Amputation Center of Excellence (EACE) is a unique organization within the DoD consisting of teams of researchers embedded at the point of care within multiple Military Treatment Facilities across the nation. In line with the congressionally directed mission of the EACE, the research efforts undertaken focus on the mitigation, treatment and rehabilitation of traumatic extremity injuries and amputations with a specific focus on translating their findings into clinical practice to improve the care of injured Service Members and Veterans. The Extremity Trauma and Amputation Center of Excellence (EACE) is offering a postdoctoral opportunity at the Naval Medical Center San Diego (NMCS), located in San Diego, California.

What will I be doing?

This fellowship offers the opportunity to develop and integrate biomechanical outcomes with other clinical initiatives aimed at improving the quality of care and well-being of military Service members with extremity amputations. As the selected candidate and under the guidance of mentor(s), you will collaborate among a diverse group of researchers and clinicians, and will have the opportunity to conduct research that is focused on developing novel and innovative approaches to process and analyze data from various biomechanical sources including motion capture systems and wearable sensors. More specifically, you will have the opportunity to engage with large-scale, longitudinal analyses of biomechanical data following limb trauma and amputation in the military. Additionally, you will be given the opportunity to oversee efforts to develop novel approaches for processing biomechanical data collected using wearables from patients with limb amputations and will be provided hands-on, collaborative experience to take an early-stage project from initiation to analysis to knowledge product generation in a short period of time with high return on investment. Finally, you will have the opportunity to contribute to grant submissions to add to your knowledge of pursuing funding and becoming an independent researcher. As the selected candidate, you will be a part of a network of ORISE fellows nationally across the EACE.

What is the appointment length?

EACE is prepared to begin this fellowship in early **October** pending review of applications and the selection of a candidate. This appointment is a twelve month research appointment, with the possibility to be renewed for additional research periods. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant. This research fellowship will be located at the Naval Medical Center San Diego (NMCS).

What are the benefits?

You will receive a stipend to be determined by EACE. 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 EACE

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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

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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 Preferred Knowledge, Skills, and Abilities:

- Comfortable with data processing and visualization using MATLAB or a related program
- Experience with statistics and experimental test matrix design as well as hands-on experience utilizing wearable sensors and analyzing/interpreting data
- Knowledge of anatomy and physiology in the context of biomechanics and human performance
- Self-motivated, detail-oriented, organized, and enjoy working in a team environment with associated strong communication skills

Eligibility Requirements:

- Able to obtain a Secret security clearance. If selected, you will be subject to a government security clearance investigation and must meet the requirements for access to classified information
- U.S. citizenship

Minimum Education/Training Requirements: Possess a PhD in Mechanical Engineering, Biomedical Engineering, or a related discipline

Highly Preferred Experience: 0-2+ years of experience working in the area of biomechanics or human performance.













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.](#)

If you have questions, send an email to STEM-WORKFORCE@orise.ora.gov.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 12/31/2021 11:59:00 PM.
- **Discipline(s):**
 - **Communications and Graphics Design** (2 )
 - **Computer, Information, and Data Sciences** (16 )
 - **Earth and Geosciences** (21 )
 - **Engineering** (27 )
 - **Environmental and Marine Sciences** (14 )
 - **Life Health and Medical Sciences** (45 )
 - **Mathematics and Statistics** (10 )
 - **Other Non-S&E** (2 )
 - **Other Physical Sciences** (12 )
 - **Other S&E-Related** (1 )
 - **Physics** (16 )
 - **Social and Behavioral Sciences** (27 )