

Opportunity Title: EACE Rehabilitation Research Fellowship

Opportunity Reference Code: EACE-2020-0006

Organization U.S. Department of Defense (DOD)

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How to Apply Components of the online application are as follows:

- Profile Information
- 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.
- 1 Recommendation Required

Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blacked out, blackened out, made illegible, etc.) prior to uploading into the application system.

If you have questions, send an email to STEM-WORKFORCE@orise.orau.gov. Please list the reference code of this opportunity in the subject line of the email.

All documents must be in English or include an official English translation.

Description

The Extremity Trauma and Amputation Center of Excellence (EACE) is the leading advocate for research and treatment of Department of Defense (DoD) and Department of Veterans Affairs (VA) patients with extremity trauma and amputation. The EACE leads efforts to enhance collaboration between the DoD and the VA extremity trauma and amputation care providers and conduct scientific research to minimize the effects of traumatic injuries and improve clinical outcomes (<https://www.health.mil/About-MHS/OASDHA/HSPO/EACE>). This research opportunity will be housed at the Center for the Intrepid (CFI), Brooke Army Medical Center, San Antonio Military Medical Center, San Antonio, TX.

The EACE Rehabilitation Research Fellow will collaborate with the Senior Scientist for the CFI Military Performance Laboratory; a laboratory which conducts translational research to enable readiness and return Service Members to high function after extremity trauma (e.g. amputation and complex limb salvage).

The EACE Rehabilitation Research Participant will support the Senior Scientist to:

- Define clinical outcomes data that demonstrate long term outcomes after patients with amputation or limb salvage.

Under the guidance of a mentor, the participant will, along with clinical staff at the CFI, conduct research that is focused on patients who have undergone amputation and complex limb salvage. During the appointment, the participant will:

- Develop consistent collection methods of various measures of a person's rehabilitation.
- Utilize data collection and storage methods.
- Learn how to use data to report outcomes in research.
- Develop skills for utilizing electronic health records to investigate the changes in clinical outcome measures over time.

During this opportunity, the participant will have the opportunity to:

- Utilize the Military Performance Lab and utilize sophisticated equipment such as, a 30-camera motion capture system (Motion Analysis Corp.)
- Utilize 8 force platforms embedded in tandem in a level ground walkway (AMTI, Inc.), an instrumented treadmill (Treadmetrix) with adjustable inclinations for inclined and declined locomotion.
- Utilize an instrumented 16-step staircase that can be converted into an adjustable inclining walkway (AMTI, Inc.).
- Utilize two terrain pits with either gravel or uneven grass terrains.
- Utilize 16-channel electromyography system (Motion Lab Systems, Inc.).

The participant will also learn to use analysis software which will include Matlab, Visual3D, Microsoft Office, and SPSS statistical analysis software. All of these systems are integrated and synchronized to capture kinematic and kinetic data.

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Appointment Length

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.

Participant Benefits

Participants will receive a stipend to be determined by **EACE**. Stipends are typically based on the 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

Nature of Appointment

The participant will not enter into an employee/employer relationship with ORISE, ORAU, DOD, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

Qualifications



Required Knowledge, Skills, and Abilities: Experience in the fields of rehabilitation, collection of clinical outcome measures, clinical rehabilitation background or related fields is required. Proficiency databasing research data, IRB protocol design (or equivalent) is preferred. Specific research background in the area of extremity trauma is highly desired. A track record of publication and excellent technical writing skills are preferred.

Minimum Education/Training Requirements: PhD from an accredited institution in rehabilitation, or a related field.

Physical Capabilities: Long periods of standing, sitting, and walking.

Research Environment: The research environment is that of a multi-disciplinary rehabilitation center in a DoD research hospital.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 60 months or currently pursuing.
- **Discipline(s):**
 - **Communications and Graphics Design** (2 )
 - **Computer, Information, and Data Sciences** (16 )
 - **Earth and Geosciences** (20 )
 - **Engineering** (27 )
 - **Environmental and Marine Sciences** (15 )
 - **Life Health and Medical Sciences** (46 )
 - **Mathematics and Statistics** (11 )
 - **Nanotechnology** (1 )
 - **Other Non-S&E** (2 )
 - **Other Physical Sciences** (12 )
 - **Physics** (16 )
 - **Social and Behavioral Sciences** (27 )