

**Opportunity Title:** Engineering Intern - Biomechanics  
**Opportunity Reference Code:** NAMRU-DAYTON-2019-0006

**Organization** U.S. Department of Defense (DOD)

**Reference Code** NAMRU-DAYTON-2019-0006

**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 - [Click here for detailed information about acceptable transcripts](#)
- References

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 [navy@orise.ora.gov](mailto:navy@orise.ora.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** Naval Medical Research Unit Dayton conducts research on environmental health effects and aerospace medicine, addressing health and performance challenges faced by service members in operational military environments.

This opportunity supports STEM initiatives within the Spine Health Improvement Program (SHIP) at the Naval Medical Research Unit Dayton. The participant will be studying neck and back pain in aviators and aircrew, biomechanical systems integration/evaluation, and assessment of exoskeletons. This opportunity provides hands-on, educational experience with biomechanics/ergonomics research, providing knowledge and understanding in biomechanical measurement technologies such as motion capture/tracking, electromyography, and force transducers, and interventions for the warfighter. Under the guidance of the mentor, the participant will also have the opportunity to collect and analyze biomechanical data as well as gain exposure to collaborations with the Air Force and Army.

#### Appointment Length

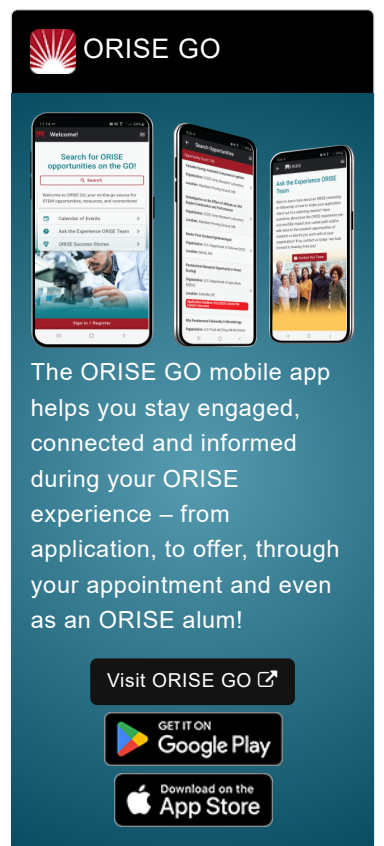
This ORISE appointment is for a 3 month period. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

#### Participant Benefits

Participants will receive a stipend to be determined by NAMRU-D. 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



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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** Current undergraduate student in engineering in mechanical, biomedical/bioengineering, aerospace, electrical, or kinesiology/movement sciences. Coursework completed (minimum) in statics and dynamics, and experience with programming in MATLAB / LabVIEW are highly favorable. Arbiomechanical measurement tools such as motion capture,electromyography, force transducers, and physiologic sensors are desired but not required.

- Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
  - **Degree:** Currently pursuing a Bachelor's Degree.
  - **Discipline(s):**
    - **Computer, Information, and Data Sciences** ([16](#) 👁)
    - **Engineering** ([27](#) 👁)
    - **Mathematics and Statistics** ([10](#) 👁)
    - **Physics** ([16](#) 👁)
  - **Age:** Must be 18 years of age