Opportunity Title: Research Kinesiologist/Engineer: Injury Biomechanics--Musculoskeletal Injury Prevention and Protect
Opportunity Reference Code: MRMC-AARL-2021-0004

Organization U.S. Department of Defense (DOD)

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

Description The Department of Defense (DoD) is offering recent graduates with a Bachelor's, Master's, or Postdoctoral degree internship opportunities at the U.S. Army Aeromedical Research Laboratory (USAARL).

What will I be doing?

As the selected candidate, you will gain experience in injury and performance biomechanics by engaging in specialized research described in grants, proposals, and other material in support of USAARL's Injury Biomechanics and Protection Group mission.

Why should I apply?

Under the guidance of a mentor, you will gain hands-on experience to complement your education and support your academic and professional goals. Along the way, you will engage in activities and research in several areas. These include, but are not limited to:

- Engaging in multiple aspects of research including, but not limited to: protocol development; testing equipment and apparatus design; testing setup/preparation; participant recruitment; data collection; and data analysis.
- Drafting and assisting in the preparation of reports, presentations, and other documentation on research progress and findings to be distributed, presented, and/or discussed within the laboratory and/or at scientific forums outside the laboratory.

Where will I be located?

Fort Rucker, Alabama

What is the anticipated start date?

The USAARL is ready to make appointments immediately. 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 internships will be filled as qualified candidates are identified.

What is the 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.

What are the benefits?

You will receive a stipend to be determined by USAARL. 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

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- Training and Travel Allowance

About U.S. Army Aeromedical Research Laboratory

The U.S. Army Aeromedical Research Laboratory (USAARL) located at Fort Rucker, Alabama, is a nationally recognized laboratory for research into safety, survival, impact tolerance, sustainability and performance effectiveness of aviators and Soldiers. The USAARL's research focuses on blunt, blast and accelerative injury and protection; crew survival in military helicopters and combat vehicles; the en route care environment; human operator health and performance in complex systems and sensory performance, injury and protection. Current USAARL work for the Army's modernization priorities includes research in the areas of future vertical lift, the next generation combat vehicle and directed-energy weapons. The Laboratory's highly skilled workforce consists of rated aviators, medical professionals, doctoral- and masters-level researchers, and research technicians. Visit https://www.usaarl.army.mil/ to learn more about USAARL.

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 will have a Bachelor's, Master's, or Doctoral degree or will have completed by December 31, 2021. Degree must have been received within two years of the appointment start date.

Highly competitive applicants will have education and/or experience in one or more of the following:

• M.S. in kinesiology, biomechanics, or related engineering (biomedical, mechanical, electrical) field plus at least 4 years of experience in research, engineering or clinical setting
• Ph.D in kinesiology, biomechanics, or related engineering (biomedical, mechanical, electrical) field with experience in research, engineering or clinical setting
• Knowledge of commonly-used concepts, practices, standards, and procedures within biomechanics and mathematics as demonstrated through a degree and coursework in a relevant STEM (Science, Technology, Engineering, and Mathematics) field from an accredited program.

• Certified athletic trainer (ATC) preferred, but not required
• Military experience (active duty, guard, reserve) or environment familiarity is a plus
• Experience with conducting human volunteer screening, assessments, and evaluations in research or clinical settings; experience working with military populations is a plus
• Demonstrated experience with human volunteer performance and kinematic motion tools, techniques, and methodology for data capture and analysis
• Ability integrate complex medical and engineering methodologies and equipment, including but not limited to motion capture systems, medical and physiological stimulation and measurement

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systems (e.g., EMG, dynamometer), and engineering instrumentation (e.g., accelerometers, load cells, force plates, IMUs), software (e.g., MATLAB, SAS), and data acquisition
• Mathematics and data analysis and acquisition experience, including scientific software packages and principles of data acquisition
• Good computer skills with advanced knowledge and experience in Microsoft Office Suite software
• Excellent communication and interpersonal skills
• Strong organizational skills and detail oriented

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.
- Two Recommendation

If you have questions, send an email to ARMY-MRMC@orise.orau.gov. Please list the reference code of this opportunity [<<reference code>>] 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, Master's Degree, or Doctoral Degree received within the last 60 months or anticipated to be received by 12/31/2021 11:59:00 PM.
- **Overall GPA:** 3.00
- **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** (47)
  - **Mathematics and Statistics** (10)
  - **Physics** (16)
  - **Science & Engineering-related** (1)
  - **Social and Behavioral Sciences** (28)
- **Age:** Must be 18 years of age