Opportunity Title: Aeromedical Research - Postgraduate
Opportunity Reference Code: NAMRU-Dayton-2022-0005

Organization U.S. Department of Defense (DOD)

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How to Apply Click on *APPLY* now to start your application.

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.

What will I be doing?

Your research will involve aeromedical projects associated with physiological monitoring device testing and evaluation, cerebral and cognitive effects of varying breathing gas concentrations and dynamics, as well as the development of research devices, human computer interface systems, and questionnaires/cognitive tasks to support multifaceted projects. Under the guidance of a mentor, you will gain significant insight into research lab operations and data collection, applied psychology, engineering, and physiology based tasks for evaluation of warfighter performance, and clinical research applications and system troubleshooting. Additionally, you will experience in collaboration and coordination of multiple research projects, as well as allocation and execution of their associated resources and operations.

You will receive hands-on experience operating state-of-the-art sensors and exposure equipment, as well as supplementary exposure to MRI function, processes, and analysis. Daily tasks will consist of the set-up of equipment, maintenance of participant folders, interaction with research participants, executing data collection, organizing and analyzing data, report development, and other associated literature reviews. Supplementary experience will be associated with protocol, standard operating procedure, and proposal development, as well as interaction with Institutional Review Board requirements and procedures.

Finally, you will learn about multidisciplinary applied research and gain an understanding of the operational needs of the joint fleet, while supporting research in areas that are practicable and pertinent to the United States Navy. You may also have the opportunity to collaborate with various subject matter experts, attend conferences/scientific meetings, and/or receive training supplemental to your degree program.

Why should I apply?

This internship provides the opportunity to independently utilize your skills and engage with experts in innovative ideas to move the proposed research forward. There are multiple opportunities available to engage in your applied research and evaluation interests.

Where will I be located? Wright-Patterson Air Force Base, Dayton, Ohio

What is the anticipated start date?

NAMRU-Dayton is ready to make an appointment immediately. Exact start date will be determined at the time of selection and in coordination with the selected candidate.

What is the appointment length?

This ORISE appointment is for a full-time twelve month period. Appointment may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

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What are the benefits?

You 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

You will 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.

Qualifications

- Bachelor's Degree AND four years of applied research support in aeromedical associated field (e.g., engineering, psychology, physiology, mathematics).
- Ability to demonstrate knowledge associated with aviation and aeromedical stressors such as hypoxia, fatigue, gas sensing, cognitive performance, and physiologic monitoring.
- Experience with Institutional Review Board procedures, greater than minimal risk human subject research, test and evaluation procedures, data analysis, and report/presentation development.
- Experience operating equipment to support testing procedures such as: hypobaric chamber, physiologic monitoring devices (e.g., pulse oximeter, oxigraf), and i-STAT.
- Familiarity with aeromedical terminology and life support systems.
- Experience with various software programs, such as: MATLAB, LabVIEW, SPSS, and Microsoft Office.

Favorable skills:

- Certificate in CITI Training
- Ability to multitask and prioritize operations and responsibilities
- MRI/medical imaging familiarity
- Device development and engineering familiarity
- Cognitive performance and evaluation familiarity
- Ability to research in the laboratory majority of the time, but able to work on-line/independently/remotely as needed during COVID restriction period.

A complete application consists of:

- Zintellect profile
- Essay Questions - The application includes questions specific to the opportunity.
- Academic Records - For this opportunity, an official transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted.
- Current Resume/CV
- One (1) Recommendation - Applicants are required to provide contact information for at least

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one recommendation. You are encouraged to request a recommendation from a professional who can speak to your abilities and potential for success as well as your scientific capabilities and personal characteristics. Recommendation requests must be sent through the Zintellect application system. Recommenders will be asked to complete a recommendation in Zintellect. Letters of recommendation submitted via email will not be accepted.

Submitted documents must have all social security numbers, student identification numbers, and/or dates of birth removed (blanked out, blackened out, made illegible, etc.) prior to uploading into the application system. All documents must be in English or include an official English translation. If you have questions, send an email to navy@orise.orau.gov. Please list the reference code of this opportunity NAMRU-Dayton-2022-0005 in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the “Apply” button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

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 month(s).
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Communications and Graphics Design** (6 👁)
  - **Computer, Information, and Data Sciences** (17 👁)
  - **Earth and Geosciences** (21 👁)
  - **Engineering** (27 👁)
  - **Environmental and Marine Sciences** (14 👁)
  - **Life Health and Medical Sciences** (46 👁)
  - **Mathematics and Statistics** (10 👁)
  - **Physics** (16 👁)
  - **Science & Engineering-related** (1 👁)
  - **Social and Behavioral Sciences** (29 👁)
- **Age:** Must be 18 years of age