

Opportunity Title: MRICD Medical Countermeasures involving Organophosphorus Nerve Agents (OPNA) Research - Post-doctoral
Opportunity Reference Code: MRDC-MRICD-2022-0009

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 U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) is offering a Post-Doctoral opportunity at the Aberdeen Proving Ground in Gunpowder, MD. The U.S. Army Medical Research Institute of Chemical Defense (USAMRICD) is the Department of Defense's lead laboratory for medical chemical defense research. As a subordinate element of the U.S. Army Medical Research and Development Command (USAMRDC), the institute conducts research for development of medical countermeasures to treat exposure to various chemical threat agents for protection of soldiers and civilians. Scientific disciplines at USAMRICD include, but are not limited to, chemistry, biology, biochemistry, pharmacology, molecular biology, neuroscience, toxicology, physiology, psychology, and immunology Visit us on Facebook at: <http://www.facebook.com/USAMRICD>

Why Should I apply?

The research project involves *in vivo* pharmacology and toxicology experiments to determine age and sex differences in chemical-induced seizure, epileptogenesis, neuroinflammation, and neurodegeneration and response to medical countermeasures in rodents. In addition, *in vitro* studies will be conducted in collaboration with academia to identify novel medical countermeasures for a variety of chemical threat agents.

What will I be doing?

Under the guidance of neuroscientists at the USAMRICD and the United States Military Academy at West Point, you will gain hands-on experience to complement your education and support your academic and professional goals. This includes, but is not limited to:

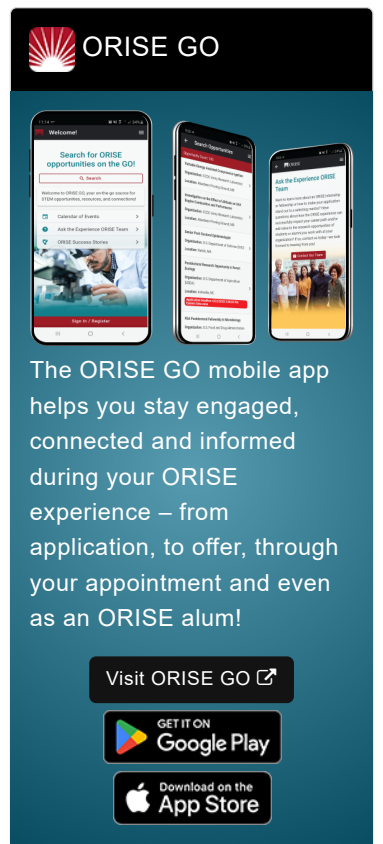
- Participate in planning research experiments on the evaluation of medical countermeasures against organophosphorus nerve agents (OPNA) across age and sex in rodents.
- Assist with studies analysis of EEG activity to quantify seizure, EEG power, and epileptogenesis in rodents exposed to OPNA.
- Perform behavioral tests of animal subjects and learn to use state-of-the-art automated imaging programs for behavioral assessment.
- Conduct quantitative neuropathological assessments to determine neuronal loss and gliosis.
- Utilize tissue culture and biophysical experiments to investigate medical countermeasures for a range of chemical threat agents *in vitro*.
- Prepare data for publication in scientific journals, presentation to scientific societies, and annual reports.
- Assist with protocol preparation and grant writing.

Where will I be located?

Aberdeen Proving Ground, Maryland

What is the appointment length?

USAMRICD is prepared to begin this appointment as soon as possible and will review applications on an ongoing basis until a candidate is selected. This appointment is a ten month research appointment, with the possibility to be renewed for additional research periods. Appointments may



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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 USAMRICD. 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 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 possess a Doctoral Degree in Neuroscience, Physiology, Pharmacology, Biopsychology, Biology, Chemistry or similar disciplines, with a GPA of 3.0 or higher. Degree must have been received within five years of the appointment start date. Research experience preferred, special consideration will be given to applicants with previous experience with rodent experimentation including analysis of EEG, gliosis and brain pathology. U.S. Citizenship is required. Other applicants will be considered on a case-by-case basis.

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.](#)

The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination(s)).

If you have questions, send an email to army-mrmc@orise.orau.gov.

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- Eligibility**
- Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Currently pursuing a Doctoral Degree to be received by 5/31/2022 11:59:00 PM.
 - **Overall GPA:** 3.00
 - **Discipline(s):**
 - **Life Health and Medical Sciences** ([9](#) 👁)
 - **Social and Behavioral Sciences** ([1](#) 👁)
 - **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).