

Opportunity Title: Biochemistry Research

Opportunity Reference Code: MRMC-WRAIR-2019-0022

Organization U.S. Department of Defense (DOD)

Reference Code MRMC-WRAIR-2019-0022

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](#)
- 1 Recommendations

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 ARMY-MRMC@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 Walter Reed Army Institute of Research (WRAIR) aims to conduct biomedical research that is responsive to Department of Defense and U.S. Army requirements and delivers lifesaving products including knowledge, technology and medical material that sustain the combat effectiveness of the warfighter.

As an ORISE participant and under the guidance of a mentor, you will help support the WRAIR mission through your active engagement in onsite research projects. During this opportunity, your focus will be to support projects centered to evaluate parasitic enzymes and bacterial enzymes as targets for antimalarial and antibacterial development. The hypothesis is enzymes involved in redox balance such as thioredoxin reductase, thioredoxin peroxidase, superoxide dismutase, glutathione reductase, or glutathione S-transferase and MEP pathway proteins are targets for therapeutic development. You will learn and perform in-vitro screening methods to include protein expression and purification, enzyme assays, and x-ray crystallography methods for antimalarial and antibacterial development. You will also in-vitro studies by maintaining laboratory supplies and keeping an accurate laboratory notebook. As WRAIR prepares you for the labor force, you will gain valuable insights to become a professional scientist and federal laboratory protocols. In addition, your mentor will develop learning objects to fit your personal career development goals, while providing guidance and education that will prepare you for your future.

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.



ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON
 **Google Play**

Download on the
 **App Store**

Opportunity Title: Biochemistry Research
Opportunity Reference Code: MPMC-WRAIR-2019-0022

Participant Benefits

Participants will receive a stipend to be determined by WRAIR. 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 An ideal candidate will have a Bachelor or Master's degree in biochemistry, chemistry, biology, biophysics, or a related discipline within the past five years.

- Eligibility Requirements**

- **Citizenship:** U.S. Citizen Only
 - **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or currently pursuing.
 - **Overall GPA:** 2.50
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#) )
 - **Communications and Graphics Design** ([2](#) )
 - **Computer, Information, and Data Sciences** ([16](#) )
 - **Earth and Geosciences** ([21](#) )
 - **Engineering** ([27](#) )
 - **Environmental and Marine Sciences** ([14](#) )
 - **Life Health and Medical Sciences** ([45](#) )
 - **Mathematics and Statistics** ([10](#) )
 - **Other Non-Science & Engineering** ([2](#) )
 - **Physics** ([16](#) )
 - **Science & Engineering-related** ([1](#) )
 - **Social and Behavioral Sciences** ([27](#) )