

Opportunity Title: Applied Synthetic Biology High School Summer 2024 Research

Internship

Opportunity Reference Code: DEVCOM-CBC-2024-0005-HS

Organization U.S. Department of Defense (DOD)

Reference Code DEVCOM-CBC-2024-0005-HS

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

Description The Department of Defense (DoD) is offering a STEM-focused high school summer internship at the U.S. Army Combat Capabilities Development Chemical and Biological Center (DEVCOM CBC).

What will I be doing?

As an Oak Ridge Institute for Science and Education (ORISE) participant, you will join a community of scientists and researchers in an effort to learn and develop synthetic biology laboratory skills and perform research using tools and techniques such as Polymerase Chain Reaction (PCR), gel electrophoresis, cell-free protein synthesis, protein expression and purification, and research with early laboratory-fabricated prototype devices used to perform environmental sensing. You will use and develop communication skills to collaborate effectively with the team of scientists and researchers, and you will give a short presentation of your research at the end of the summer. In addition, you will learn laboratory safety rules and policies.

Why should I apply?

Under the guidance of a mentor, you will gain hands-on experience to 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:

- Conduct data analyzes from research findings
- · Learn and develop biology and wet chemistry skills
- Participant in experiments and processes such as bacterial cultivation and enumeration, dilution/standards preparation, and analyzing samples for presumptive identification
- Learn to safely assist with biological and chemical materials in a controlled laboratory environment

Where will I be located?

Gunpowder, Maryland

What is the anticipated start date?

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 or fellowships will be filled as qualified candidates are identified.

What is the appointment length?

This appointment is a three-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 DEVCOM CBC. 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

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• Training and Travel Allowance

About DEVCOM CBC

The DEVCOM Chemical Biological Center (DEVCOM-CBC) is the primary Department of Defense technical organization for non-medical chemical and biological defense. DEVCOM-CBC activities at the Edgewood portion of Aberdeen Proving Ground, Maryland, provide an extraordinary capability against emerging biological and chemical threats by merging intelligence assessments with its world-renowned chemistry, biology, physiology and engineering expertise at every stage of the acquisition life cycle. We provide a unique blend of distinguished scientists and engineers for the research and development of innovative technological solutions to solve chemical and biological defense threats to our nation—both abroad and on the homeland. For more information about the DEVCOM-CBC, please visit https://www.cbc.devcom.army.mil.

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 <u>ORISE Research Participation Program at the U.S.</u> Department of Defense.

Qualifications The qualified candidate will be at least 16 years of age and currently be pursuing a high school diploma/GED or graduating by May 31, 2024.

Highly competitive applicants will have one or more of the following:

- Strong interest in chemistry, biology or related fields
- Motivation to work in a laboratory
- General computer skills to include making presentations and analyzing data in spreadsheets or statistical/graphing software

Application Requirements

A complete application consists of:

- Zintellect Profile
- · Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records Please upload a copy of your high school transcript
- One Recommendation. We encourage you to contact your recommender(s) as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect. Recommenders will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.

If you have questions, send an email to ARMY-RDECOM@orise.orau.gov. Please list the reference code of this opportunity DEVCOM-CBC-2024-0005 in the subject line of the email. Please



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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 <u>Apple App</u> <u>Store</u> or <u>Google Play Store</u> to help you stay engaged, connected, and informed during your ORISE experience and beyond!

Eligibility Requirements

- Citizenship: U.S. Citizen Only
- Degree: Currently pursuing a High School Diploma/GED.
- Discipline(s):
 - Chemistry and Materials Sciences (12.)
 - Life Health and Medical Sciences (<u>51</u>)
- Age: Must be 16 years of age