

Opportunity Title: Applied Synthetic Biology / Safe Drinking Water - Graduate Fellowship

Opportunity Reference Code: DEVCOM-CBC-2026-0006

Organization U.S. Department of Defense (DOD)

Reference Code DEVCOM-CBC-2026-0006

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

Description The U.S. Army Combat Capabilities Development Command - Chemical Biological Center (DEVCOM-CBC) is offering a graduate fellowship.

What will I be doing?

Clean drinking water is an essential resource for human survival and the ability to detect harmful contaminants in drinking water is critical for human health and safety. An emerging concern in water contamination is the presence of small molecule toxins, often caused by algal blooms. DEVCOM-CBC has been applying synthetic biology to the development of biosensors against water contaminants, using engineered genetic circuits containing protein-based transcription factors that transduce a signal via promoter regulation in response to the presence of the target analyte.

As an Oak Ridge Institute for Science and Education (ORISE) participant, you will join a community of scientists and researchers in an effort to research transcription factor-based sensors for waterborne toxins of interest. High-throughput cell-based and cell-free screening approaches, along with computational methods, will be used to identify and validate promising candidates. Further design and engineering efforts will be utilized to optimize and port successful sensors into sensing platforms being developed at DEVCOM-CBC.

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,

- Gaining an understanding of synthetic biology
- Developing skills in biosensor discovery and validation
- Learning about protein design and engineering
- Exploring cell-based and cell-free screening
- Applying high-throughput screening
- Utilizing bioinformatics, machine learning, and other computational approaches

Throughout your participation, you will have the opportunity to advance your skills in laboratory techniques, methods development, data analysis, and scientific communication. In addition, you will participate with a diverse team of researchers with the common goal of harnessing synthetic biology to discover and create new sensors to address current and future Army needs.

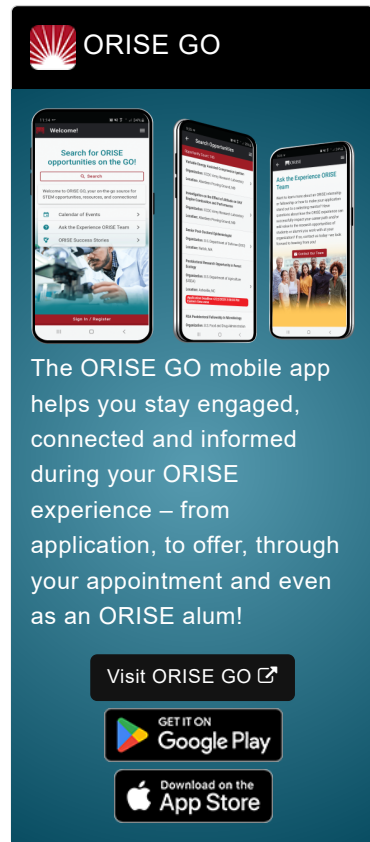
Where will I be located?

Location varies

What is the anticipated start date?


02/27/2026


DEVCOM-CBC 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




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: Applied Synthetic Biology / Safe Drinking Water - Graduate Fellowship

Opportunity Reference Code: DEVCOM-CBC-2026-0006

an ongoing basis and fellowships 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 provisions?

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 provisions may include the following:

- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE*)
- Relocation Allowance
- Training and Travel Allowance

About DEVCOM-CBC

The U.S. Army Combat Capabilities Development Command - 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.

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 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 is a U.S. citizen who will have completed a Bachelor's degree and be currently enrolled in a graduate school program while pursuing an advanced degree in biology, synthetic biology, biochemical engineering, or related discipline.

Qualified applicants should have at least 2 years of laboratory experience and/or education. Highly competitive applicants will have 3 to 5 years of laboratory experience.

Candidates must pass a background check in order to access U.S. Army facilities.

Opportunity Title: Applied Synthetic Biology / Safe Drinking Water - Graduate Fellowship

Opportunity Reference Code: DEVCOM-CBC-2026-0006

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 - Please upload a copy of a transcript for your current or most recent degree program that meets the disciplinary qualifications of the opportunity. [Click here for detailed information about acceptable transcripts.](#)
- 1 Recommendation. We encourage you to contact your recommender 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-2026-0006] 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!

Stipend \$38,500.00 – \$50,000.00 Yearly

Point of Contact [Richard](#)

- Eligibility Requirements**
- **Citizenship:** U.S. Citizen Only
 - **Degree:** Currently pursuing a Master's Degree or Doctoral Degree.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#) 👁)
 - **Computer, Information, and Data Sciences** ([17](#) 👁)
 - **Earth and Geosciences** ([19](#) 👁)
 - **Engineering** ([29](#) 👁)
 - **Environmental and Marine Sciences** ([14](#) 👁)
 - **Life Health and Medical Sciences** ([44](#) 👁)
 - **Mathematics and Statistics** ([3](#) 👁)
 - **Physics** ([3](#) 👁)
 - **Science & Engineering-related** ([1](#) 👁)