Opportunity Title: Postdoctoral Research Fellowship: Host-Viral Interactions and Antiviral Mechanism
Opportunity Reference Code: USAMRDC-MRIID-2026-0005

Organization U.S. Department of Defense (DOD)

Reference Code USAMRDC-MRIID-2026-0005

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 post-doctoral fellowship at the U.S. Army Medical Research and Development Command - Medical Research Institute of Infectious Diseases (USAMRDC MRIID).

What will I be doing?

As an ORISE participant, you will join a community of scientists studying host-virus interactions and the mechanisms of action for identified therapeutic candidates. Using our high-content, high-throughput *in vitro* imaging capabilities, we have screened and identified several small molecules that target the host to modulate viral infection. A primary goal for this project is to identify which stages of the virus life cycle are interrupted by these compounds. Standard tools (e.g., pseudotypes, minigenomes, VLPs, time-of-treatment assays) and various reporter assays will be utilized to achieve this goal. Additionally, research activities will include leveraging omics technologies (transcriptomics, proteomics, and imageomics) to understand the antiviral mechanisms at a molecular level.

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:

- Master Core Virology and Therapeutic Concepts: Gain a deep understanding of the viral life cycle, host-virus interactions, and the mechanisms by which small molecule drugs inhibit viral infection.
- Develop Proficiency in Advanced Laboratory Techniques: Become skilled in a range of standard and high-throughput assays, including pseudotype and minigenome systems, virus-like particles (VLPs), and time-of-treatment studies to identify how antiviral compounds work.
- Apply 'Omic' Technologies for Data-Driven Insights: Learn to utilize and integrate cutting-edge transcriptomic, proteomic, and "imageomic" data to build a comprehensive, systems-level understanding of antiviral mechanisms.
- Enhance Scientific Research and Communication Skills: Develop the ability to design experiments, analyze results, and effectively communicate complex scientific findings within a collaborative research community.

Where will I be located?

Fort Detrick, Maryland

What is the anticipated start date?

The anticipated start date is projected to be May 4, 2026. An exact start date 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 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 USAMRIID. 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

Security Clearance

While participants will not enter an employment relationship with DoD or any other agency, this opportunity will require a suitability investigation/background investigation. Any offer made is considered tentative pending favorable outcome of the investigation, which may include federal drug screening.

About USAMRIID

USAMRIID's reputation has been built over the years by numerous scientists and technical staff striving to protect both military personnel and civilians from the threat of infectious diseases. The Institute participates in support of emerging disease investigations, working alongside colleagues from the Centers for Disease Control and Prevention and the World Health Organization. As a reference laboratory for the Department of Defense, USAMRIID sets the standard for identification of biological agents. The Institute's workforce represents some of the top infectious disease and biological defense experts in the Nation—indeed, in the world. For more information about USAMRIID, please visit https://usamriid.health.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 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 have a post-doctoral degree in the area of virology, molecular biology, cell biology, immunology or related biological/medical sciences. Degree must have been received within 48 months of the appointment start date.

Opportunity Title: Postdoctoral Research Fellowship: Host-Viral Interactions and Antiviral Mechanism
Opportunity Reference Code: USAMRDC-MRIID-2026-0005

Preferred skills:

- Experience with virus infection models and the study of host-pathogen interactions
- Familiarity with basic concepts of drug discovery and research in target or drug discovery
- Knowledgeable in the basic principles of chemistry and siRNA-Crispr screens

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.
- Two Recommendations. We encourage you to contact your recommenders 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-MRMC@orise.orau.gov. Please list the reference code of this opportunity [USAMRDC-MRIID-2026-0005] 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!

Point of Contact Kimberly

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Doctoral Degree received within the last 48 month(s).
- **Discipline(s):**
  - **Life Health and Medical Sciences** (4 👁)