Opportunity Title: DCPH-A Innovative Disease Prevention using Artificial Intelligence Fellowship/Internship
Opportunity Reference Code: DCPH-A-2025-0004

Organization	U.S. Department of Defense (DOD)
Reference Code	DCPH-A-2025-0004
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 bachelor's, master's level internship or doctoral fellowship at the Defense Health Agency's Defense Centers for Public Health - Aberdeen (DHA's-DCPH-A).

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What will I be doing and Why should I apply?

As an Oak Ridge Institute for Science and Education (ORISE) participant, you will join a community of scientists and researchers in an effort to participate at the forefront of applying artificial intelligence to public health challenges. The focus is on developing a cutting-edge natural language query system to revolutionize how entomologists and epidemiologists at the Defense Health Agency (DHA) Public Health access and interact with critical data. By leveraging the power of large language models (LLMs), this system will translate user queries into executable code, eliminating the need for complex database programming and empowering users to effortlessly extract insights.

As the selected participant, and under the guidance of a mentor, you will gain hands-on experience in the full development lifecycle of this innovative system, from design and implementation to testing and deployment. In addition to LLM integration, the project incorporates the development and application of machine learning models to enhance predictive capabilities related to disease outbreaks. You will be immersed in a dynamic research environment, contributing directly to the fight against vector-borne diseases while gaining invaluable skills in AI, machine learning, and public health. This project offers a unique opportunity to bridge the gap between cutting-edge technology and real-world impact, shaping the future of disease prevention. In addition to the research activities described above, this opportunity will also provide:

- Hands-on experience with large language models (LLMs) and their application in data science.
- Practical experience in Python programming and database management.
- Exposure to cloud computing environments and API integration.
- Development of skills in machine learning and data analysis.
- Opportunity to contribute to a real-world public health project.
- Mentorship and collaboration with experienced researchers.
- Networking opportunities within the DoD public health enterprise.
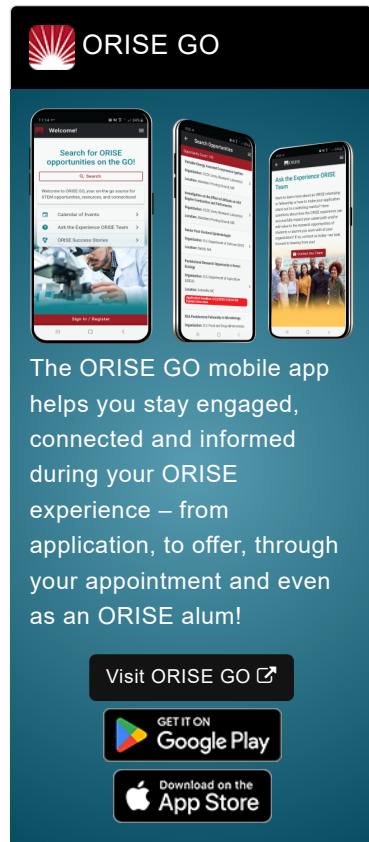
Where will I be located?

Aberdeen Proving Ground, Maryland (Edgewood Area)

What is the anticipated start date?

The DCPH-A 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 an ongoing basis and internships or fellowships will be filled as qualified candidates are identified.

What is the appointment length?

An ORISE appointment period can be a short-term (less than 2 weeks), summer (10-12 weeks), or

yearlong appointment. 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 DCPH-A. 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 into 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.

About DCPH-A

The Defense Health Agency supports our Nation by improving health and building readiness — making extraordinary experiences ordinary and exceptional outcomes routine. DHA-Public Health's goals aligned with the Agency's priorities are: Protect the Force, Promote Health, and Ready to Respond. For more information about the DCPHj-A, please visit https://ph.health.mil/Pages/About.aspx.

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 have a bachelor's, master's or doctoral degree in Artificial Intelligence, Computer Science, Data Science, Biometrics and Biostatistics, Computational Mathematics or other eligible discipline. Degree must have been received within five years of the appointment start date. U.S. military veterans who have been honorably discharged (or who have been medically discharged because of a service-connected disability) and who received a bachelor's, master's or doctoral degree within ten years of the desired start date are also eligible.

Highly competitive applicants will have education and/or experience in one or more of the following:

- Proficiency in Python programming language
- Experience using large language models

- Familiarity with structured and unstructured database management systems
- Knowledge of AWS cloud services and data integration using APIs
- Knowledge of supervised machine learning tools including feature engineering
- Strong analytical and problem-solving skills
- Ability to work with complex datasets and navigate data complexities

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-PHC@orise.orau.gov. Please list the reference code of this opportunity [DCPH-A-2025-0004] 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.

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Point of Contact	Kimberly

Eligibility Requirements	- **Citizenship:** U.S. Citizen Only
	- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 60 month(s).
	- **Minimum Overall GPA:** 3.50
	- **Discipline(s):**
	  - **Computer, Information, and Data Sciences** (6 👁)
	  - **Earth and Geosciences** (2 👁)
	  - **Mathematics and Statistics** (4 👁)
	- **Veteran Status:** Veterans Preference, degree received within the last 120 month(s).