

**Opportunity Title:** CDC Influenza Informatics Fellowship  
**Opportunity Reference Code:** CDC-NCIRD-ID-2023-0073

**Organization** Centers for Disease Control and Prevention (CDC)

**Reference Code** CDC-NCIRD-ID-2023-0073

**How to Apply** *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!

A complete application consists of:

- An application
- Transcripts – [Click here for detailed information about acceptable transcripts](#)
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- One educational or professional recommendation. Your application will be considered incomplete, and will not be reviewed until one recommendation is submitted.

All documents must be in English or include an official English translation.

If you have questions, send an email to [ORISE.CDC.NCIRD@orau.org](mailto:ORISE.CDC.NCIRD@orau.org). Please include the reference code for this opportunity in your email.

**Application Deadline** 5/22/2023 3:00:00 PM Eastern Time Zone

**Description** **\*Applications will be reviewed on a rolling-basis.**

**CDC Office and Location:** A fellowship opportunity is currently available with the Influenza Division (ID) in the National Center for Immunization and Respiratory Diseases (NCIRD) at the Centers for Disease Control and Prevention (CDC) located in Atlanta, Georgia.

The Centers for Disease Control and Prevention (CDC) is one of the major operation components of the Department of Health and Human Services. CDC works to protect America from health, safety and security threats, both foreign and in the U.S. Whether diseases start at home or abroad, are chronic or acute, curable or preventable, human error or deliberate attack, CDC fights disease and supports communities and citizens to do the same.

ID performs domestic and international influenza surveillance, aids in influenza diagnosis, and is a leader in influenza virus characterization and control efforts.

**Research Project:** The selected fellow will be contributing research to the Informatics Group within the Influenza Division's Office of the Director (ID/OD). The ID/OD Informatics Group performs cross-cutting work spanning multiple areas, including the development of computational methods, data integration and enrichment, statistical analysis, laboratory automation, system management, special R&D projects, and technical consultation. The Informatics Group seeks to empower and strengthen informatics efforts throughout the division via innovation, collaboration, service, and the management of shared scientific and analytic resources. Additionally, the group serves as a forum for informatics knowledge exchange, helping to align division-wide computational efforts.



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As an ORISE fellow within the ID/OD informatics group, you will have opportunities to engage in a variety of projects on both the data analytic and scientific sides. This fellowship will likely focus on topics related to sequence classification, evolutionary taxonomy, next-generation sequence assembly, protein annotation, or anomaly detection. Special projects, based on aptitude or interest, might also include SIMD code acceleration, passage-mutation model refinement, probabilistic risk assessment, or machine-learning methodology as it relates to the main topic areas.

**Learning Objectives:** The fellow will gain experience in and have access to distributed computing and analytic resources such as Apache Impala, Spark or HUE and/or the use of Grid Engine for high-throughput computing (HPC). The fellow will also learn to use Git for collaborative scientific research and will receive training to enhance programming skills. Finally, the fellow will learn about influenza, its molecular classifications and antigenic characterization, as well as the data ecosystem necessary for a world-class influenza surveillance system.

**Mentor(s):** The mentor(s) for this opportunity is Samuel Shepard ([vfn4@cdc.gov](mailto:vfn4@cdc.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date:** July 10, 2023. Start date is flexible.

**Appointment Length:** The appointment will initially be for one year, but may be renewed upon recommendation of CDC and is contingent on the availability of funds.

**Level of Participation:** The appointment is full-time.

**Participant Stipend:** The participant will receive a monthly stipend commensurate with educational level and experience.

**Citizenship Requirements:** This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR).

**ORISE Information:** This program, administered by 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 CDC. Participants do not become employees of CDC, DOE or the program administrator, and there are no employment-related benefits. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE.

The successful applicant(s) will be required to comply with Environmental, Safety and Health (ES&H) requirements of the hosting facility, including but not limited to, COVID-19 requirements (e.g. facial covering, physical distancing, testing, vaccination).

**Questions:** Please visit our [Program Website](#). After reading, if you have additional questions about the application process please email [ORISE\\_CDC\\_NCIRD@ornl.gov](mailto:ORISE_CDC_NCIRD@ornl.gov) and include the reference code for this opportunity.

**Qualifications** The qualified candidate should have received a master's degree in one of the relevant fields, or be

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currently pursuing one of the degrees with completion before June 5, 2023. Degree must have been received within five years of the appointment start date.

Preferred Skills:

- Skill in at least one programming or scripting language (Rust, C/C++, Java, Perl, Python, R, Scala)
- Working knowledge of Linux command line (BASH, etc.) operations
- Basic exposure to Structured Query Language (SQL)

- Eligibility Requirements**
- **Citizenship:** LPR or U.S. Citizen
  - **Degree:** Master's Degree received within the last 60 months or anticipated to be received by 6/5/2023 12:00:00 AM.
  - **Overall GPA:** 3.00
  - **Discipline(s):**
    - **Computer, Information, and Data Sciences** ([7](#))
    - **Engineering** ([1](#))
    - **Life Health and Medical Sciences** ([8](#))
    - **Mathematics and Statistics** ([3](#))
    - **Physics** ([1](#))

**Affirmation** I certify that I have not previously been employed by CDC or by a contractor working directly for CDC. I understand that CDC does not permit individuals with a prior employment relationship with CDC or its contractors to participate as trainees in the ORISE program. (Exceptions may be granted for individuals who, since the previous CDC employment, have obtained a new STEM degree which necessitates training in a new field.)