Opportunity Title: CDC Bioinformatics Fellowship
Opportunity Reference Code: CDC-NCEZID-2021-0144

Organization	Centers for Disease Control and Prevention (CDC)
Reference Code	CDC-NCEZID-2021-0144
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.NCEZID@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline	1/31/2022 3:00:00 PM Eastern Time Zone
Description	***Applications will be reviewed on a rolling-basis.***

A research opportunity is currently available with the Biotechnology Core Facility Branch (BCFB), Division of Scientific Resources at the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) in collaboration with the Immunology Laboratory Team (ILT), Immunology and Pathogenesis Branch (IPB), Influenza Division (ID), National Center for Immunization and Respiratory Diseases (NCIRD) at the Centers for Disease Control and Prevention (CDC) 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.

The selected participant will provide bioinformatics support for a collaborative project between ILT and BCFB whose aim is a comprehensive immunome, metabolome, microbiome, epigenetic and proteome analysis in response to influenza vaccination and infection.

During the fellowship, the participant will:

- Assemble genomes and transcriptomes (B-cell receptor (BCR) sequencing)
- Develop reference databases and platform for proteomics Ig-seq mining
- Provide proteomic informatics support, mining of databases for Ig-seq assembly
- Contribute to the exploration and development of diagnostic biomarkers

Anticipated Appointment Start Date: July 26, 2021; start date is flexible

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and CDC. The initial appointment can be up to one year, but

may be renewed upon recommendation of CDC contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is full-time at CDC in the Atlanta, Georgia, area. Participants do not become employees of CDC, DOE or the program administrator, and there are no employment-related benefits.

Qualifications The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields, or be currently pursuing the degree with completion by the end of December 2021. Degree must have been received within the past five years.

- Background in programming (eg. Python, Perl, BioPerl, Java, MySQL) in a UNIX environment
- Background in UNIX System Administration and Cluster Management
- Excellent interpersonal, verbal and written communication skills
- Ability to work well independently and with all levels of CDC scientists
- Machine learning experience

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or anticipated to be received by 12/31/2021 11:59:00 PM.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (3 👁)
  - **Life Health and Medical Sciences** (4 👁)