Opportunity Title: CDC Influenza Vaccine Emergence and Viral Evolution Fellowship
Opportunity Reference Code: CDC-ID-2019-0187

Organization Centers for Disease Control and Prevention (CDC)

Reference Code CDC-ID-2019-0187

How to Apply 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. Please include the reference code for this opportunity in your email.

Application Deadline 9/4/2019 3:00:00 PM Eastern Time Zone

Description Two research opportunities are currently available with the Virology, Surveillance and Diagnosis Branch (VSDB) of the Influenza Division (ID), National Center for Immunization and Respiratory Diseases (NCIRD), at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia.

The Influenza Division's Live Attenuated Influenza Vaccine Activity conducts evidence-based analytical research studies on the mechanisms of attenuation of seasonal and zoonotic influenza viruses as they relate to public health areas of vaccine composition, attenuation, host-specificity, pathogenicity, and transmissibility, as well as antigenicity, and antiviral susceptibility, using a multidisciplinary approach of genetics, virology, molecular biology, biochemistry, epidemiology and bioinformatics.

The selected participant will be involved with research and development efforts to understand host specific attenuation of influenza A and B viruses using genomic sequence, biochemical, antigenic and other metadata to understand and predict the evolutionary and host-adaptive mechanisms of seasonal and zoonotic influenza viruses and improve upon public health countermeasures to the viruses.

Under the guidance of a mentor, the participant will be trained in the following activities:

- Molecular biological, and biochemical analyses designed to understand mechanisms of cold-adaption and temperature-sensitive attenuating mutations which lead to a loss of influenza A or B infectivity, replication, or transmission
- Conduct research with animal models of influenza replication, pathogenicity, and transmission (mouse, guinea pig, ferret), with the aim of understanding in vivo mechanisms of attenuation and protection
- Contribute to preparing summaries, presentations and manuscripts of complex data and results
- Enhance professional growth and development by reviewing current literature and by participating in educational programs, workshops, conferences, and in-service meetings
- Contribute to preparing and drafting manuscripts for peer-reviewed publication
- Present scientific findings at meetings and conferences both within and external to the Influenza Division and NCIRD

zintellect
climb higher

Opportunity Title: CDC Influenza Vaccine Emergence and Viral Evolution Fellowship
Opportunity Reference Code: CDC-ID-2019-0187

Anticipated Appointment Start Date: November 1, 2019

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 doctoral degree in one of the relevant fields, with an emphasis in virology, molecular biology or biochemistry, or be currently pursuing the degree and will reach completion by the start date of the appointment. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Isolation and propagation of influenza viruses in cell culture and embryonated chicken eggs
- Virologic assays to determine levels of viral infectivity, and/or nucleic acid concentrations in diverse sample types (e.g. virus titration; quantitative RT-PCR)
- Experience with bioinformatics, phylogenetics and evolutionary analysis software
- Statistical analysis packages
- Experience with biological datasets, preferably large scale genotyping and/or sequencing data
- Strong communication skills with previous experience drafting peer-reviewed publications

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 months or anticipated to be received by 11/1/2019 11:59:00 PM.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (1 👁)
  - **Life Health and Medical Sciences** (6 👁)