Opportunity Title: CDC Bioinformatics Fellowship
Opportunity Reference Code: CDC-NCHHSTP-2019-0081

Organization Centers for Disease Control and Prevention (CDC)

Reference Code CDC-NCHHSTP-2019-0081

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 CDCrpp@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 8/8/2019 3:00:00 PM Eastern Time Zone

Description A fellowship opportunity is available with the Laboratory Reference and Research Branch (LRRB), Division of Sexually Transmitted Disease Prevention (DSTDP), within the National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP) at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia.

This project is focused on developing tools and performing novel computational analysis of whole genome data of Neisseria gonorrhoeae. Specific bioinformatics applications include: (1) detailed genomic characterization of the pathogen, (2) integrating genotyping of organism with annual surveillance of infections, and/or (3) identification of statistical correlations of genotypes with phenotypic, epidemiologic and antimicrobial susceptibility data. The selected participant will support the growth of a laboratory program located at the Centers for Disease Control and Prevention (CDC) integrating bacterial genomics and public health through successful and timely execution of microbiological and/or bioinformatics projects.

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

- Providing customized or guided computational support for bacterial genomics projects within a team environment
- Supporting the development of new applications for genomic data analysis, co-evaluating existing methods, and supporting the development of databases to store such data
- Performing bioinformatics analyses of large scale genomics data and processing data through genomic data analysis pipelines
- Supporting various research projects as assigned by mentor
- Integrating statistical analysis to project design and data interpretations
- Contributing to the preparation of summaries, presentations, manuscripts and figures of complex data and results
- Enhancing professional growth and development by reviewing current literature and by participating in trainings, workshops, conferences, and in-service meetings

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

Opportunity Title: CDC Bioinformatics Fellowship
Opportunity Reference Code: CDC-NCHHSTP-2019-0081

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 the relevant fields. Degree must have been received within five years of the appointment start date.

Preferred skills:

- Knowledge of next generation sequencing technology and concrete skills in bioinformatics analysis for Illumina sequence data
- Knowledge of microbial genomics is highly desired
- Interest in antibiotic susceptibility and resistance mechanisms
- Familiarity with computational biology tools (e.g. at least one programming/scripting language (e.g. Perl, Python, or R), Linux, cluster computing, and/or database design (e.g. SQL-based))
- Knowledge of statistical or mathematical analysis packages is a plus
- Strong oral and written communication skills and strong interpersonal skills
- Demonstrate initiative in evaluating and experimenting with new computational tools

Eligibility Requirements

- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (1 👁)
  - **Environmental and Marine Sciences** (1 👁)
  - **Life Health and Medical Sciences** (45 👁)