Opportunity Title: CDC NEDSS Base System Public Health Informatics Internship
Opportunity Reference Code: CDC-CSELS-2021-0212

Organization	Centers for Disease Control and Prevention (CDC)
Reference Code	CDC-CSELS-2021-0212
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.

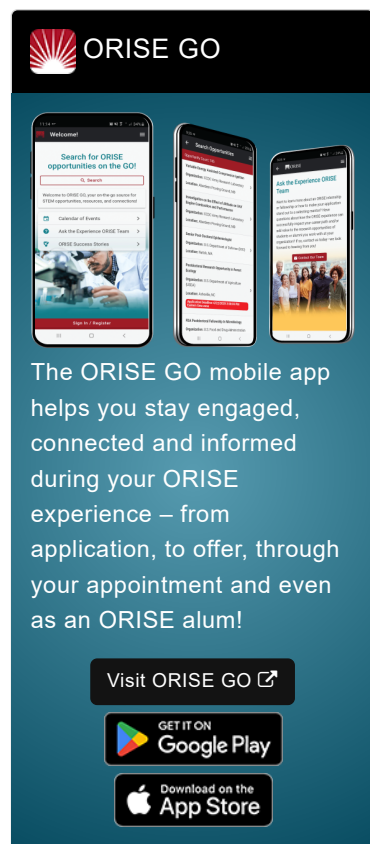|	
Application Deadline	8/17/2021 3:00:00 PM Eastern Time Zone
Description	***Applications will be reviewed on a rolling-basis.**

CDC Office and Location: Three internship opportunities are available for the National Electronic Disease Surveillance System (NEDSS) Base System (NBS) for the Division of Health Informatics and Surveillance (DHIS), Information Systems Branch (ISB), in the Center for Surveillance, Epidemiology and Laboratory Services (CSELS) 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.

Research Project: NBS is an application developed and supported by the CDC to provide State, Tribal, Local and Territorial Public Health Departments with a cost effective disease surveillance system for facilitating the collection, monitoring and reporting of disease data to support effective response to public health threats. NBS allows integration of epidemiological lab and clinical information from various sources into one system to help increase data standardization and consistency throughout the surveillance workflow. The system is currently being used 28 jurisdictions as their integrated disease surveillance system.

Jurisdictions need technical support with the implementation of the disease Page and going through the CDC onboarding process. While the current NBS team is providing support to jurisdictions, we need at least two additional resources to meet demand.

Under guidance of a mentor, the selected participant may be involved in the following activities:

- Development of Page Builder templates in NBS based on Message Mapping Guides (MMGs) provided by the CDC
- Disease Page implementation by jurisdictions
- Data porting/migration from legacy data formats to HL7 based database structures
- Creating SQL queries to extract, analyze and report data from NBS
- Conducting data management activities using Structured Query Language (SQL)
- Designing and implementing relational databases for optimal performance and data integrity
- Contributing to management large databases and complex metadata
- Jurisdictions' MMG onboarding process with CDC
- MMG implementation piloting efforts with the Technical Assistance Team at CDC
- Creating documentation and training materials on NBS

Learning Objectives:

- Requirements gathering and interpretation from scientific and research users
- Public Health data standards and international messaging formats (SNOMED, LOINC, HL7, FHIR, etc.)
- Database Design and Architecture
- Data Analysis and Reporting
- Public Health data exchange tools and processes
- Data quality validation and clean up

Mentor(s): The mentor for this opportunity is Indira Srinivasan (ibs4@cdc.gov). If you have questions about the nature of the research please contact the mentor(s).

Anticipated Appointment Start Date: **July 30, 2021**. Start date is flexible and will depend on a variety of factors.

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) only.

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.

Questions: Please visit our [Program Website](#). After reading, if you have additional questions about the application process please email ORISE.CDC.CSELS@orau.org and include the reference code for this opportunity.

Qualifications

The qualified candidate should have received a bachelor's or master's (preferred) degree in one of the relevant fields, or be currently pursuing the degree with completion by the anticipated appointment start date. Degree must have been received within the past five years.

Preferred skills:

- Knowledge in public health informatics
- Experience in system development and design using Java
- Experience in creating SQL queries to extract, modify and analyze data
- Knowledge of concepts of database design, management, and data analysis
- Experience with communicating information and working on the maintenance and development of informatics tools
- Strong oral and written communication skills

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 7/30/2021 12:00:00 AM.
- **Discipline(s):**
  - **Computer, Information, and Data Sciences** (7 👁)
  - **Life Health and Medical Sciences** (4 👁)
  - **Mathematics and Statistics** (1 👁)