

**Opportunity Title:** CDC Fellowship in Molecular Epidemiology

**Opportunity Reference Code:** CDC-NCEZID-2023-0269

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

**Reference Code** CDC-NCEZID-2023-0269

**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** 12/31/2023 11:00:00 PM Eastern Time Zone

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

**CDC Office and Location:** A research opportunity is currently available with the One Health Office within the National Center for Zoonotic and Emerging Infectious Diseases (NCEZID) 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:** Cyclosporiasis is a foodborne diarrheal illness caused by the parasite *Cyclospora cayetanensis*. People become infected with this parasite through the consumption of contaminated food or water, with fresh imported produce the most common source of infection. In the United States, cyclosporiasis outbreaks occur regularly during the summer months. LSDB is responsible for conducting molecular surveillance on this parasite to identify genetic links in support of epidemiologic investigations of cyclosporiasis outbreaks. The role of the LSDB cyclosporiasis molecular surveillance team is to generate *C. cayetanensis* sequence data from clinical specimens, and then analyze this data to detect any potential genetic clusters. This data is then reported to CDC epidemiologists for follow-up, in support of their epidemiologic investigations.

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

- Advanced molecular detection methods to identify *Cyclospora cayetanensis*



**ORISE GO**

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON  
**Google Play**

Download on the  
**App Store**

**Opportunity Title:** CDC Fellowship in Molecular Epidemiology

**Opportunity Reference Code:** CDC-NCEZID-2023-0269

- Process clinical samples to purify and detect *C. cayetanensis* oocysts
- Perform DNA extraction from various samples
- Design and optimize PCR primers/assays
- Prepare libraries for next generation sequencing
- Generation, analysis, and interpretation of research data for data management
- Oral or written presentations
- Standard operating procedures and safety measures for the laboratory
- Coordination and collaboration activities with internal and external partners

**Mentor(s):** The mentors for this opportunity are Joel Barratt ([nsk9@cdc.gov](mailto:nsk9@cdc.gov)), Anna Peterson ([yyi6@cdc.gov](mailto:yyi6@cdc.gov)), and Theresa Benedict ([tgd5@cdc.gov](mailto:tgd5@cdc.gov)). If you have questions about the nature of the research please contact the mentor(s).

**Anticipated Appointment Start Date: February 20, 2024.** 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, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details page](#) of the program website for information about the valid immigration statuses that are acceptable for program participation.

**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.NCEZID@orau.org](mailto:ORISE.CDC.NCEZID@orau.org) and include the reference code for this opportunity.

**Opportunity Title:** CDC Fellowship in Molecular Epidemiology

**Opportunity Reference Code:** CDC-NCEZID-2023-0269

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

**Preferred skills:**

- Strong ability to collaborate as part of a team as the project is multisectoral.
- Prior experience with molecular biology methods such as DNA extraction and PCR is beneficial.
- Additional skills that are favorable include: familiarity with the different Next Generation Sequencing technologies and common library preparation methods;
  - experience in bioinformatic analysis of next generation sequencing data;
  - and proven good oral and written communication skills.

- Eligibility Requirements**
- **Degree:** Master's Degree received within the last 60 month(s).
  - **Discipline(s):**
    - **Computer, Information, and Data Sciences** ([17](#)👁)
    - **Life Health and Medical Sciences** ([51](#)👁)
    - **Social and Behavioral Sciences** ([2](#)👁)

**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.)