

Opportunity Title: FDA Research Opportunity for Bacteriophage Therapy:

Staphylococcus Aureus

Opportunity Reference Code: FDA-CBER-2023-17



Organization U.S. Food and Drug Administration (FDA)

Reference Code FDA-CBER-2023-17

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

All documents must be in English or include an official English translation.

If you have questions, send an email to ORISE.FDA.CBER@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 12/31/2023 3:00:00 PM Eastern Time Zone

Description **Applications will be reviewed on a rolling-basis, and this opportunity will remain open until filled.**

Three research opportunities are currently available in the Office of Vaccines Research and Review (OVRR) at the Center for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA) in Silver Spring, Maryland.

The participants project is aimed at evaluating the use of bacteriophage to treat Staphylococcus aureus colonization and/or disease in order to better combat multi-antibiotic-resistant bacterial pathogens. A major goal of this project is to establish and utilize animal models to investigate the potential of phage treatment against S. aureus to decolonize the upper respiratory tract and/or to treat S. aureus infections. However, other aspects will delve into aspects of the genetics of bacteriophage that are relevant to their deployment in these contexts. These include genetic mechanisms of bacterial resistance to phage and mechanisms of phage adaptation to infect different or new hosts. Research on this project will proceed on multiple fronts including mouse models of infection and phage treatment, isolation of mutant bacterial and bacteriophage strains, genetic engineering of bacterial and bacteriophage strains, isolation of bacteriophage from natural sources, next generation DNA sequence analysis.

Anticipated Appointment Start Date: June 1, 2023; start date is flexible

Participants will receive a stipend commensurate with education and experience. For candidates with no additional experience post-degree the amounts are:

Post-Baccalaureate: \$54,875 per year

Post-Masters: \$60,772 per year

Stipend increases above these figures are based on years of experience post degree. An additional increase to defray costs of health insurance can be added if the fellow is responsible for paying for their own health insurance.

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 FDA. **The initial appointment is for one year, but may be renewed upon recommendation of FDA 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 FDA in the Silver Spring, Maryland, area. Participants do not become employees of FDA, DOE or the program administrator, and there are no employment-related benefits.

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Completion of a successful background investigation by the Office of Personnel Management is required for an applicant to be on-boarded at FDA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for a total of three of the past five years.

FDA Ethics Requirements

If an ORISE Fellow, to include their spouse and minor children, reports what is identified as a Significantly Regulated Organization (SRO) or prohibited investment fund financial interest in any amount, or a relationship with an SRO, except for spousal employment with an SRO, and the individual will not voluntarily divest the financial interest or terminate the relationship, then the individual is not placed at FDA. For additional requirements, see FDA Ethics for Nonemployee Scientists.

FDA requires ORISE participants to read and sign their FDA Education and Training Agreement within 30 days of his/her start date, setting forth the conditions and expectations for his/her educational appointment at the agency. This agreement covers such topics as the following:

- Non-employee nature of the ORISE appointment;
- Prohibition on ORISE Fellows performing inherently governmental functions;
- Obligation of ORISE Fellows to convey all necessary rights to the FDA regarding intellectual property conceived or first reduced to practice during their fellowship;
- The fact that research materials and laboratory notebooks are the property of the FDA;
- ORISE fellow's obligation to protect and not to further disclose or use non-public information.


Qualifications

The qualified candidate should have received a bachelor's or master's degree in one of the relevant fields (Biological Sciences), or be currently pursuing the degree with completion before June 1, 2023. The degree must have been received within 5 years of the appointment start date.

Preferred skills/ knowledge:

- Basic microbiological techniques - preparation of growth media and propagation of bacterial strains and bacteriophage
- Basic DNA cloning techniques - preparation of plasmid DNA, PCR, restriction and ligation, and transformation
- Basic electrophoresis techniques - agarose gels for DNA and acrylamide gels for proteins.
- Experience working with laboratory animals.
- Lab experience is desirable but not absolutely required.
- An interest in Microbiology is desirable but not required.
- It is expected that candidates will be pursuing higher education in graduate school or medical school following this traineeship.

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree or Master's Degree received within the last 60 months or anticipated to be received by 6/1/2023 11:59:00 PM.
- **Discipline(s):**
 - **Life Health and Medical Sciences** (48 )

Affirmation

I have lived in the United States for at least 36 out of the past 60 months. (36 months do not have to be consecutive.)

I have read the FDA Ethics Requirements.