

PREP Research Associate

This position is part of the National Institute of Standards and Technology (NIST) Professional Research Experience Program (PREP). NIST recognizes that its research staff may want to collaborate with researchers at academic institutions on specific projects of mutual interest and, therefore, requires those institutions to be recipients of a PREP award. The PREP program involves staff from a wide range of backgrounds conducting scientific research across various fields. Individuals in this position will perform technical work supporting the collaboration's scientific research.

Research Title:

Viral Measurement Tools and Reference Materials

The work will entail:

The Material Measurement Laboratory of the National Institute of Standards and Technology is seeking qualified persons (U.S. Citizens preferred) to contribute to cutting-edge research projects aimed at developing viral measurement tools and reference materials in service of expanding the NIST portfolio of microbial measurement assurance to better serve stakeholder. A successful applicant will join a dynamic, multidisciplinary team working with cutting-edge technologies in the NIST Complex Microbial Systems Group. They will contribute to a growing program supporting technology development in the areas of biosurveillance and microbiome.

U.S. Citizen Preferred

Key responsibilities will include but are not limited to:

- Responsible for maintaining (onboarding, culturing, characterizing) a portfolio of diverse viruses (up to BSL-2) to meet varied stakeholder needs
- Perform viral and eukaryotic cell culture, plaque assays, optimization and develop of viral culture protocols
- Consult and work with stakeholders in the microbiome and pathogen detection communities
- Keep accurate and organized electronic records
- Present results of the work in the form of reports, manuscripts, oral presentations

Qualifications

- Ph.D. degree in Molecular Biology, Virology, Microbiology or a related field.
- A minimum of 5 years of relevant laboratory experience.
- Experience measuring cytopathic effect using plaque assays.
- Experience developing viral infectivity assays.
- Experience measuring the infectivity of non-cytopathic viruses.
- Strong oral and written communication skills.

Privacy Act Statement

Authority: 15 U.S.C. § 278g-1(e)(1) and (e)(3) and 15 U.S.C. § 272(b) and (c)

Purpose: The National Institute for Standards and Technology (NIST) hosts the [Professional Research Experience Program \(PREP\)](#) which is designed to provide valuable laboratory experience and financial

assistance to undergraduates, post-bachelor's degree holders, graduate students, master's degree holders, postdocs, and faculty.

PREP is a 5-year cooperative agreement between NIST laboratories and participating PREP Universities to establish a collaborative research relationship between NIST and U.S. institutions of higher education in the following disciplines including (but may not be limited to) biochemistry, biological sciences, chemistry, computer science, engineering, electronics, materials science, mathematics, nanoscale science, neutron science, physical science, physics, and statistics. This collection of information is needed to facilitate administrative functions of the PREP Program.

Routine Uses: NIST will use the information collected to perform the requisite reviews of the applications to determine eligibility, and to meet programmatic requirements. Disclosure of this information is also subject to all the published routine uses as identified in the Privacy Act System of Records Notices: NIST-1: NIST Associates.

Disclosure: Furnishing this information is voluntary. When you submit the form, you are indicating your voluntary consent for NIST to use of the information you submit for the purpose stated.