

## COVID-19 Environmental Associate Lead Scientist

### Summary:

This position will be responsible for establishing a wastewater testing program for SARS-CoV2 using a TaqMan Kingfisher extraction and analysis by droplet digital PCR. A background in environmental microbiology, molecular diagnostics and/or chemistry is highly desirable. The employee will be involved in a larger departmental effort, with the Director and Assistant Director of the Environmental Division, to establish a wastewater-based epidemiology surveillance program for the State of Tennessee.

### Key Responsibilities:

- Development and validation of a quantitative SARS-CoV2 analytical method for wastewater and surface analysis.
- Construct a workflow to accommodate environmental specimens for SARS-CoV2 analysis.
- Structure and carryout pilot study analysis to test environmental specimens for SARS-CoV2.
- Analyze data from pilot study with an aim towards scientific publication.
- Write policies and protocols to support a statewide bio monitoring effort for SARS-CoV2 in environmental specimens in accordance with ISO17025 certification
- Maintains current knowledge of subject matter areas through participation in a variety of committees, conferences, and workshops.
- Independently perform highly complex analytical procedures to evaluate environmental samples for the presence of biological agents (SARS-CoV2). This testing involves isolation and identification of viral targets using droplet digital PCR.
- Train new staff for SARS-CoV2 wastewater isolation, extraction, and analysis.
- Present data to upper level laboratory management and departmental staff.
- Establish a proficiency testing program for SARS-CoV2 analysis in wastewater and surface testing.
- Performs quality control program on equipment and supplies to assure reliable test results; maintains laboratory equipment in proper operating order; maintains state laboratory certification.

### Minimum Qualifications

Master's degree within an area of discipline and four (4) years of related experience which includes two (2) years laboratory experience in a research setting and (1) years of supervisory experience; OR, Bachelor's degree within the area of the scientific discipline and six (6) years of related experience which includes two (1) years laboratory management experience in a research and teaching setting and (1) years of supervisory experience; OR, Any equivalent combination of experience and/or education from which comparable knowledge, skills, and abilities have been achieved.

### Desired Qualifications

Doctoral degree in the biological sciences and four (2) years of related experience which includes two (1) years laboratory management experience in a research or a research/teaching setting and (1) years of supervisory experience; OR, Any equivalent combination of experience and/or education which can be demonstrably equivalent to these qualifications from which comparable knowledge, skills, and abilities have been achieved. Successful applicants must be authorized to work in the US and pass background check and drug screening.

Self-motivation and good communication skills are required. Knowledge and prior hands-on experiences with environmental microbiology, molecular biology, genome/metagenomic, and bioinformatic tools are desirable.

Please visit the [APHL COVID-19 Laboratory Associate Program webpage](#) for more information or to apply.