The State Hygienic Laboratory in Coralville is looking for an Environmental Laboratory Analyst. This position will perform routine and non-routine environmental microbiology testing on water and wastewater using approved methods, including appropriate quality control measures and documentation. Answer general inquiries from various individuals and county health department personnel regarding water test results, sample collection procedures, etc.

Schedule: Possible rotating weekends and holidays.
Position Status: 1 Year Specified Term

Key Areas of Responsibilities and Specific Job Tasks

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<th>Classification</th>
<th>Key Areas of Responsibility</th>
<th>Specific Job Duties and Tasks</th>
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| Sample / Specimen Preparation and Analysis | | • Perform sample accessioning within established holding times and evaluate samples for acceptability  
• Perform testing of wastewater for infectious diseases  
• Prepare and analyze routine bacteriology testing on environmental microbiology samples using various standardized procedures, principles, concepts and theories including quality control.  
• Operate as primary analyst for testing on a variety of matrices.  
• Operate as backup analyst for the methods for which IDOC/DOC are acquired or maintained which include at this time the following: SM9223B (QT and PA), SM9221 B/E/F, SM9215, SM9222D, EPA 1603, TAYM/TYMC USP 61; EPA 1623.1 elution/concentration; |
| Instrumentation and Technology | | • Perform daily operation and direct maintenance, training, troubleshooting and calibration of general laboratory instruments and equipment.  
• Perform complex molecular based testing using the ABI 7500 RT-PCR, BioRad QXOne droplet digital PCR instruments and other miscellaneous equipment. |
| Data Analysis, Reporting and Documentation | | • Prepare and review technical reports and communicate results to relevant personnel.  
• Document and review complex analytical procedures, results and reports; interpret, process and report results in laboratory information management system (LIMS).  
• Provide secondary data review and confirmation of others’ analytical work.  
• Document and review routine data analysis, procedures, and results.  
• May prepare documentation for test validation reports. |
| Quality Control, Quality Assurance and Quality Systems | | • Document and review data analysis, procedures, and results.  
• Release data and reports after review of results and analysis of quality control. |
| Outreach and Communication | • Engage in routine interaction with clients and local agencies and provide clarification of test results as necessary. |
|-----------------------------|-------------------------------------------------------------------------------------------------

| Universal Competencies |
|-------------------------|---------------------------------------------------------------------------------------------------|
| **Collaboration/Positive Impact (Basic)** | • Grasps the inevitability and challenges of change and adapts accordingly; utilizes learning opportunities to prepare for changing work, methods and work environment.  
• Demonstrates civil and respectful behaviors valued within the organization.  
• Provides and accepts ideas and suggestions in a constructive and helpful manner.  
• Exhibits good teamwork: is approachable, cooperative, and contributes to an overall positive and productive work/team environment. |
| **Diversity, Equity and Inclusion (Basic)** | • Articulates the University’s commitment to diversity, equity and inclusion as it relates to their role at the university.  
• Demonstrates civil and respectful behaviors in support of the UI Human Rights policy that prohibits any differences in treatment that deprives the person of consideration as an individual.  
• Demonstrates a willingness to examine one’s own biases, assumptions, and attitudes.  
• Knows where to find diversity-related organizational policies, procedures, and resources |
| **Service Excellence/Customer Focus (Basic)** | • Consistently provides excellent service.  
• Manages customer expectations and takes responsibility to enhance service excellence.  
• Communicates understandably; uses appropriate words, grammar and mannerisms in all mediums.  
• Seeks feedback on communication style and effectiveness. |

| Technical Competencies |
|------------------------|----------------------------------------------------------------------------------|
| **Interpersonal Relationships (Basic)** | • Explains the benefits of maintaining positive working relationships with associates.  
• States the basic characteristics of good working relationships.  
• Describes the organizational culture for interacting with others.  
• Provides examples of individuals with good interpersonal skills and their specific skills. |
| **Laboratory Equipment Operation (Working)** | • Operates and calibrates laboratory equipment.  
• Examines equipment to detect signs of disrepair.  
• Helps others understand laboratory equipment safety and operating policies and procedures.  
• Documents defective equipment and reports it to an appropriate supervisor.  
• Utilizes quality control techniques to monitor and maintain laboratory equipment. |
| **Laboratory Practice Quality Assurance (LPQA) (Basic)** | • Identifies the major concepts and stages of laboratory practice quality assurance.  
• Describes regulations and ethical standards governing the LPQA process.  
• Lists the basic technologies and equipment required for an effective LPQA program.  
• Demonstrates awareness of the regulations affecting laboratory practice. |
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<tr>
<th><strong>Laboratory Results Analysis and Reporting</strong>&lt;br&gt;(Basic)</th>
<th>• Identifies the basic concepts, principles and types of laboratory results reporting.&lt;br&gt;• Identifies key objectives in reviewing and analyzing lab data.&lt;br&gt;• Names specific tools or techniques that can be used to support the analytical thinking process.&lt;br&gt;• Collects updated laboratory results for review and analysis.</th>
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<td><strong>Laboratory Testing</strong>&lt;br&gt;(Working)</td>
<td>• Participates in collecting and processing specimens and samples according to test requests, standard operating procedures, and/or cGLP or comparable regulations.&lt;br&gt;• Operates laboratory equipment required to examine specimens.&lt;br&gt;• Produces reports based on laboratory test results to help in further diagnosis, treatment, research, surveillance, disease/contamination prevention, or determine quality of manufacturing process.&lt;br&gt;• Adheres to relevant policies and ethics for laboratory testing.&lt;br&gt;• Discusses major factors that can affect the accuracy of laboratory test results.</td>
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This description is intended to indicate the kinds of tasks and levels of work difficulty that will be required of positions that will be given this title and shall not be construed as declaring what the specific duties and responsibilities of any particular position shall be. It is not intended to limit or in any way modify the right of any supervisor to assign, direct, and control the work of employees under his or her supervision. The use of a particular expression or illustration describing duties shall not be held to exclude other duties not mentioned that are of similar kind or level of difficulty.

As part of performing the key areas of responsibility and competencies described above, staff members are expected to meet reasonable standards of work quality and quantity, as well as expectations for attendance established by their supervisor. Staff members are also expected to comply with policies governing employee responsibilities and conduct, including those contained in the [University Operations Manual](#).

**Proficiency levels are defined as:**

**Basic Application** - Uses basic understanding of the field to perform job duties; may need some guidance on job duties; applies learning to recommend options to address unusual situations.

**Working Experience** - Successfully completes diverse tasks of the job; applies and enhances knowledge and skill in both usual and unusual issues; needs minimal guidance in addressing unusual situations.

**Extensive Experience** - Performs without assistance; recognized as a resource to others; able to translate complex nuances to others; able to improve processes; focus on broad issues.

**Expert/Leader** - Seen as an expert and/or leader; guides, troubleshoots; has strategic focus; applies knowledge and skill across or in leading multiple projects/orgs; demonstrates knowledge of trends in field; leads in developing new processes.

### Position Qualifications

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<th>Education or Equivalency Required</th>
<th>A bachelor’s degree in Microbiology, Medical Technology or related biological science field or an equivalent combination of education and experience is required.</th>
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<tr>
<td>Required Qualification</td>
<td>• Experience (typically six months to one year) preparing and analyzing routine bacteriology testing on water or food samples using various standardized procedures, principles, concepts and theories including quality control; or applicable laboratory experience.&lt;br&gt;• Experience (typically 6 months to one year) of documenting, review and release of routine data and reports, after a review of results and of quality control.&lt;br&gt;• Demonstrate good teamwork and interpersonal skills, including relationship management within the unit and outside the immediate work unit.&lt;br&gt;• Ability to work in a high-volume, fast-paced environment.&lt;br&gt;• Demonstrate excellent verbal and written communication skills.&lt;br&gt;• Demonstrate basic math, computer, and Microsoft Excel skills.&lt;br&gt;• Experience pipetting in a laboratory setting.</td>
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<td>Highly Desirable Qualification</td>
<td>• Demonstrate an understanding of Environmental Microbiology sample testing (coliform bacteria in water; food pathogen analysis) and interpretations which include acceptance and holding times, dilution schemes, test performance characteristics, appropriate quality control, completion, and release of results.</td>
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| Desirable Qualification       | • Experience in bacterial culture and isolation techniques.  
                                 • Experience using molecular techniques such as RT-PCR and/or DNA sequencing  
                                 • Experience in microscopy. |

See requisition # 22005385 at [https://jobs.uiowa.edu](https://jobs.uiowa.edu)  
Applicable background checks will be conducted.

The University of Iowa is an equal opportunity/affirmative action employer. All qualified applicants are encouraged to apply and will receive consideration for employment free from discrimination on the basis of race, creed, color, religion, national origin, age, sex, pregnancy (including childbirth and related conditions), disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, or associational preferences.