University Classification: Environmental Lab Manager
Job Code: PHB5
Pay Level: 6A
Position #: NEW
Org/Dept/Sub-dept #: 90-9050
Position Reports to: Wade Aldous
Name: 00012935

Position Specific Summary:
The State Hygienic Laboratory (Iowa’s Environmental and Public Health Laboratory), at the University of Iowa has an exciting full-time opportunity for an Environmental Microbiology Lab Manager. The individual will provide technical oversight to the environmental microbiology laboratory activities at all three SHL locations and supervise the Coralville section. Technical areas of expertise will include both culture and qPCR methods for the following programs: cannabidiol product testing, microbial source tracking, Legionella in water, food and waterborne outbreak investigation testing support, bacterial indicator water testing (drinking, surface, wastewater), and coronavirus in wastewater. The individual will lead SHL’s participation in the Iowa Rapid Response Team for foodborne outbreak response and oversee SHL’s Food Emergency Response Network (FERN) Microbiology grant programs (USDA/FSIS and FDA Laboratory Flexible Funding Model (LFFM). Additionally, this individual will assure compliance with federal and state regulations and accrediting bodies (TNI and ISO 17025), oversee verification and validation of testing protocols, coordinate analytical testing for food and waterborne outbreaks, seek grant and contract opportunities, publish and present at state and national meetings, and pursue academic collaborations with University of Iowa faculty and staff. FBI clearance will be applied for this individual.

Key Areas of Responsibilities and Specific Job Tasks

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<tr>
<th>Classification Key Areas of Responsibility</th>
<th>Specific Job Duties and Tasks</th>
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| **Sample / Specimen Preparation and Analysis** |  • Apply advanced knowledge of environmental laboratory processes.  
• Responsible for all technical aspects for the Environmental Microbiology program at all three SHL locations ensuring that all methods are performed accurately and within prescribed limits; assure compliance with regulations; oversee verification and validation of testing protocols; coordinates analytical testing for food and waterborne outbreaks.  
• Responsible for the SHL Food Emergency Response Network Microbiology program which includes responsibility for all deliverables for the FSIS/USDA and FDA LFFM FERN Microbiology Cooperative Agreements; surveillance activities, budget; validation studies; proficiency testing studies; primary microbiology contact for SW Regional coordinator and National Program Office communications; coordinate various surveillance studies and reports that may include chemistry and radiochemistry.  
• Completes environmental microbiology annual risk assessment |
| **Instrumentation and Technology** |  • Responsible for all equipment utilized in the Environmental Microbiology program which includes directing evaluation, validation, maintenance, replacement.  
• Evaluate and recommend new equipment and instruments for Environmental Microbiology program.  
• Direct validation of new technology and performance of new instrumentation.  
• Direct translational research in the Environmental Microbiology program area as appropriate and sustainable. |
| **Data Analysis, Reporting and Documentation.** |  • Oversee all documentation of Environmental Microbiology program.  
• Analyze data for trends and significance and prepare reports.  
• Review and approve standard operating procedures and test validation reports.  
• Oversee implementation of new projects, verification and validation plans. |
### Quality Control / Quality Assurance / Quality Improvement / Quality Assessment

- Responsible for implementation and maintenance of a quality system for Environmental Microbiology which includes the following: annual review of all SOP and QASPs; oversee all quality control and quality assurance procedures as prescribed; direct procurement or preparation of all PTs, review and report results; prepare and coordinate monthly QA reports; review, initiate, recommend appropriate corrective actions and implement process improvement measures.
- Responsible for reviewing all emerging QA trends with all quantitative analyses in the section.
- Responsible for and directs procedures and programs in the organization to ensure employee safety and health in environmental microbiology program.

### Outreach and Communication

- Responsible for the outreach activities of the Environmental Microbiology program which includes the following: recommend staff for various activities; active participant on various staff and national external committees; give presentations on various technical aspects and topics (state and national venues); oversee the publication of various public service information and web content.
- Responsible for food and waterborne outbreak coordination and management with IDPH and IDIA; and making sure all internal and external partners are kept aware of various sample receipt, sample results, and interpretations.
- Represent SHL on various state and national committees which includes IDPH/DIA foodborne outbreak management team, Iowa Food Safety Task Force, IA RRT Coordinating Council.

### Compliance / Administration

- Responsible for the direction of the Environmental Microbiology program and promotion of SHL which includes alignment with SHL Strategic Plan; recommend and implement new tests, methods and research initiatives; stay current with environmental microbiology procedures, concepts, and research areas.
- Assume overall responsibility for compliance with regulatory, licensing, accrediting requirements and statutes governing laboratory operations.
- Performs annual and new employee risk assessment training for all staff regarding biosafety level 1, 2, and 3 practices when working with potentially infectious and select agents and other physical and chemical hazards.
- Makes sure staff follow through with accident/exposure reporting (first report of injury)
- Inform lab management of illnesses/signs and symptoms of disease that any staff may be exhibiting related to their work.

### Leadership / Human Resources

- Responsible for the leadership for Environmental Microbiology program by providing direction, assignments, feedback, coaching and counseling to assure outcomes are achieved.
- Responsible for all HR activities in unit such as recruitment, promotion, and dismissal.
- Perform or directs performance evaluations of all employees under management responsibility.
- Promote a culture for staff enhancement and training opportunities.
- Makes sure staff and program comply with all safety regulations and protocols established by the laboratory and section (wears appropriate PPE as outlined in section risk assessment, appropriate disinfection of work areas, etc.)
- Takes the leadership role when appropriate and takes immediate actions in case of an emergency.

### Financial Responsibility

- Responsible for writing, reviewing and implementing grants and contracts for Environmental Microbiology program.
- Reconcile TDRs and evaluates discrepancies for program areas.
- Order large equipment purchases and service contracts.
- Helps administration develop budget for environmental microbiology section.
- Sets prices for new tests in coordination with client services and accounting.
### Universal Competencies

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<th>Competency</th>
<th>Description</th>
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<tr>
<td><strong>Collaboration/Positive Impact</strong></td>
<td>Ability to work with a variety of individuals and groups in a constructive and civil manner and utilize existing resources and learning to achieve or exceed desired outcomes of current and future organizational goals/needs.</td>
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<td><strong>Diversity, Equity and Inclusion</strong></td>
<td>Ability to work with a variety of individuals and groups in a constructive and respectful manner while appreciating the unique contribution of an inclusive workforce that brings together the talents of people across multiple identities, including: race, creed, color, religion, national origins, age, sex, pregnancy, disability, veteran or military status, sexual orientation, gender identity, or associational preferences.</td>
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<tr>
<td><strong>Service Excellence/Customer Focus</strong></td>
<td>Ability to meet or exceed customer service needs and expectations and provide excellent service in a direct or indirect manner. Ability to effectively transmit and interpret information through appropriate communication with internal and external customers.</td>
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### Technical Competencies

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| **Interpersonal Relationships** (Expert/Leader) | * Encourages others to build partnerships with other functions or departments.  
* Coaches others in developing and maintaining cooperative and satisfying relationships.  
* Sets the tone for interacting with other business functions or units.  
* Creates initiatives that foster communication, directness and spirit of cooperation.  
* Intervenes with highly difficult people and situations.  
* Arbitrates difficult situations with high stakes. |
| **Laboratory Testing** (Extensive)              | * Supervises specimen/sample collection and processing for various test requests consistent with standard operating procedures, cGLP or other regulations.  
* Trains others on the appropriate operation of laboratory equipment; addresses safety issues.  
* Oversees the testing/examination of specimens/samples per testing SOP, cGLP or other regulations.  
* Evaluates the accuracy of results obtained from laboratory tests.  
* Recommends solutions to improve existing procedures of laboratory tests.  
* Directs relevant policy, regulatory and ethics compliance for all laboratory tests. |
| **Laboratory Equipment Operation** (Expert/Leader) | * Designs laboratory equipment to better conduct quantitative and qualitative analyses.  
* Contributes to laboratory equipment performance improvement standards.  
* Leads in developing strategies for safe, reliable, and effective laboratory equipment operation.  
* Constructs improved policies and procedures for near-miss reporting.  
* Prepares reports that champion the value and use of more effective laboratory equipment to financial decision-makers.  
* Monitors laboratory equipment trends and developments in diverse environments. |
| **Laboratory Practice Quality Assurance (LPQA)** (Expert/Leader) | * Designs LPQA processes in line with laboratory practice strategies.  
* Champions the use of new technologies to improve the quality of lab practices and reduce organizational costs.  
* Establishes industry norms, standards and guidelines for LPQA.  
* Discusses future developments in LPQA qualification protocols, assessment and specifications.  
* Stays abreast of LPQA trends and makes recommendations to the organization accordingly.  
* Develops a theoretical understanding of LPQA and mentors on issues and considerations. |
| Laboratory Results Analysis and Reporting (Expert/Leader) | • Knowledgeable of all aspects of Open Elis utilized by Environmental Microbiology program including worksheet creation, completion, and release in Open Elis following approved procedures.  
• Establishes OE standard comments and QA events for Environmental Microbiology program  
• Oversees or establishes method specific QC/QA, holding times, TAT expectations.  
• Contributes to and publishes, distributes documents on the results of the analyzed data.  
• Leads evaluation of errors in data results and data reports; assesses their impact on the organization and industry.  
• Establishes standards and best practices for organizational report analysis and presentation.  
• Predicts industry trends and future developments in lab results analysis and reporting.  
• Promotes the use of new report technologies, justifying their benefits to the organization.  
• Mentors others on issues and considerations in report preparation and analysis. |
|---|---|
| Safety, Injury Prevention and Emergency Procedures (Extensive) | • Reinforces the use of safety rules and emergency procedures for injury prevention.  
• Designs a checklist of safety labels and features in terms of health and safety requirements.  
• Develops safety plans and procedures in compliance with relevant laws and ethics.  
• Interpret connections between accidents and injuries; recommends emergency treatments.  
• Evaluates different safety conditions and adjusts any possible significant hazards.  
• Recommends safety measures based on hazard identification and accident investigations. |
| Employee Health and Safety (Working) | • Ensures that all first-aid equipment is operational and supplies are current and fully stocked.  
• Participates in internal safety or health inspections.  
• Assists OSHA inspectors during their visits.  
• Seeks and identifies potential or actual safety hazards.  
• Maintains health and safety records according to OSHA guidelines. |

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 Master’s degree in Microbiology, Clinical Lab Science, Biology, or closely related field, or an equivalent combination of education and experience is required.</th>
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<td>Required Qualification</td>
<td>• Minimum 3 years closely related laboratory experience in a professional appointment.</td>
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<td>• At least three years direct supervisory experience of staff in a professional setting.</td>
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<td>• Excellent communication, interpersonal, and relationship management skills.</td>
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<td>• Demonstrated experience with, or commitment to diversity in the work, academic, or laboratory environment.</td>
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<td>• The ability to work with a variety of individuals and groups in a constructive and respectful manner, while appreciating the unique contribution of an inclusive workforce that brings together the talents of people across multiple identities.</td>
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<td>• Must meet CLIA requirements for high complexity testing.</td>
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| Highly Desirable Qualification    | A PhD degree in Microbiology, Clinical Lab Science, Biology, or closely related field.                                              |
|                                   | • More than three years of closely relevant laboratory experience in a professional appointment.                                   |
|                                   | • Previous public health laboratory experience.                                                                                    |
|                                   | • Certification by ASCP or NCA is highly desirable.                                                                                 |
|                                   | • Real time or digital PCR technical experience.                                                                                  |
|                                   | • Microbiology culture and microscope (brightfield, fluorescent, and phase contrast) expertise.                                    |

| Desirable Qualification           | • Extensive experience in environmental microbiology or clinical laboratory testing.                                                |
|                                   | • Extensive familiarity with QA/QC, lab safety and Windows based computer operations.                                               |
|                                   | • Extensive experience in a high-volume, fast paced lab environment.                                                               |

See requisition # 21002163 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, national origin, age, sex, pregnancy, sexual orientation, gender identity, genetic information, religion, associational preference, status as a qualified individual with a disability, or status as a protected veteran.