University Classification: **Clinical Laboratory Supervisor**

Job Code: **PHA3**  
Pay Level: **5A**

Position #: **00012951**  
Org/Dept/Sub-dept #: **90-9050-00070**

Position Reports to: **Wade Aldous**  
Position #: **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 a Serology/Maternal Screening Supervisor, in the Coralville, Iowa facility. This position supervises the laboratory testing of clinical specimens or isolates, for the purpose of disease diagnosis and treatment or surveillance. Ensures assigned sections are functioning under best laboratory practice and in compliance with CLIA regulations or other regulatory agency requirements as appropriate. Ensures assigned staff adhere to all laboratory safety and security policies.

**Key Areas of Responsibilities and Specific Job Tasks**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Specific Job Duties and Tasks</th>
</tr>
</thead>
</table>
| **Technical Laboratory Capability** | • Internally train, provide direction, feedback, coaching and counseling of Maternal Screening and serology section staff to assure achievement of positive outcomes.  
• Coordinate and approve modification and adaptations to established methods as the need arises to assure, we can meet our turnaround times.  
• Develop procedures and validate new tests needed for the maternal screening program as well as develop protocol, set up and operate instruments needed for research projects.  
• Research and aid in the development of new procedures as well as validations and setting up protocol for new tests needed in the serology section at SHL.  
• Ability to troubleshoot test methods such as EIA, MEIA, IFA, agglutination testing, and instrumentation such as the Beckman Dxi 600/800, Abbott Architect, DiaSorin Liaison, Roche COBAS C111, and Dynex DSX.  
• Assist in grant writing and reporting for grants such as ELC and IDPH General Agreement |
| **Instrumentation and Technology** | • Responsible for assessing instrument needs, analyzing available instruments, bringing in new instrumentation and procedures needed to modify our test menu for clients or start new projects such as for IDPH.  
• Research, contact, meet, review, and negotiate new instrument options with sales reps from different companies.  
• Justify and submit request for instrument purchases to SHL Workflow, send appropriate quotes/justifications to UI Purchasing, and submit Validation Plan to QA Manager/Associate Director.  
• Responsible for coordinating installation, as well as the verification/validation of new instruments and/or tests.  
• Modify Dxi 600/800, DiaSorin Liaison, and COBAS C111 instrument procedures as needed when we receive product updates or corrections from the respective company to comply with technical bulletins.  
• Set up yearly shipping contract with Beckman for maternal screening supplies to autoship.  
• Interact with instrument manufacturers to order supplies as needed using a blanket PO number. |
<table>
<thead>
<tr>
<th><strong>Data Analysis, Reporting and Documentation</strong></th>
<th><strong>Quality Control / Quality Assurance / Quality Improvement / Quality Assessment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Renew preventive maintenance service agreements for instruments by gathering quotes and submitting for purchasing.</td>
<td>• Monitor QC for problems- upward or downward trends within expected QC ranges on the instruments, and investigate why it may be occurring, and what significance it may have on the maternal screening program.</td>
</tr>
<tr>
<td>• Responsible for assuring that the staff review, document, and report results accurately and timely.</td>
<td>• Order supply of Maternal Screening controls as needed. Establish new reference ranges using the Manufacturer's tab in the BioRad Unity website and update Beckman instrument reference ranges.</td>
</tr>
<tr>
<td>• Verify and release test results for the complex Iowa Integrated Maternal Screen that involves five clinical markers along with patient information to calculate the risk factors of having a baby born with Down syndrome, Trisomy 18, or a neural tube defect such as spina bifida.</td>
<td>• Perform monthly reports that compile and analyze the patient results/risks generated, and to calculate the percentage of positives being reported for quality assurance, improvement, and assessment of the Iowa Integrated Maternal Screening Program. This insures the proper adjustments to the median values for of any of the five markers we test. This in turn keeps our program in compliance with our set standards of a minimal false positive rate and high detection rate.</td>
</tr>
<tr>
<td>• Verify and release test results for serology section.</td>
<td>• Compile monthly QA reports for the section. When problems occur, initiate and follow up on assessments to resolve issues and prevent future problems.</td>
</tr>
<tr>
<td>• Prepare monthly data reports for IDPH for tests included in the general agreement, such as HIV, hepatitis C, hepatitis B, and creatinine.</td>
<td>• Responsible for calculating risks, reviewing and verifying results, and then submitting CAP survey results.</td>
</tr>
<tr>
<td>• Responsible for developing verification and validation for new and modified test procedures, and overseeing that the task is accomplished.</td>
<td>• Review and sign monthly reports for the serology section.</td>
</tr>
<tr>
<td>• Approve and review of standard operating procedures</td>
<td>• Outreach and Communication</td>
</tr>
<tr>
<td>• Write and oversee ELC related components</td>
<td>• Provide technical advice and consultation about my areas to administration as needed for outside ventures.</td>
</tr>
<tr>
<td>• Process and submit results for proficiency testing</td>
<td>• Discuss clinical significance of multiple tests as they relate to maternal screening and give advice on testing strategies when indicated to physicians, nurse practitioners, and nurses.</td>
</tr>
<tr>
<td><strong>Outreach and Communication</strong></td>
<td>• Educate potential clients that are interested in sending specimens to us by explaining the significance of the Iowa Integrated Maternal Screening Program, how the state of Iowa has mandated us the central testing laboratory and explain the advantages of having us be a state program.</td>
</tr>
<tr>
<td>• Provide technical advice and consultation about my areas to administration as needed for outside ventures.</td>
<td>• Provide information on how to interpret the screening results, as well as explain the complexity of screening and how risks are calculated.</td>
</tr>
<tr>
<td>• Discuss clinical significance of multiple tests as they relate to maternal screening and give advice on testing strategies when indicated to physicians, nurse practitioners, and nurses.</td>
<td>• Communicate with IDPH epidemiologist on a weekly basis, as well as being a member of the HIV/Hepatitis Community Planning Group for the State of Iowa.</td>
</tr>
<tr>
<td>• Educate potential clients that are interested in sending specimens to us by explaining the significance of the Iowa Integrated Maternal Screening Program, how the state of Iowa has mandated us the central testing laboratory and explain the advantages of having us be a state program.</td>
<td>• Give presentations to technical and non-technical groups (medical residents, college/high school students, public) about the Iowa Maternal Screening Program and Serology testing.</td>
</tr>
<tr>
<td>• Meet and exceed CLIA requirements for high complexity testing and is responsible to practice within the scope of CLIA regulations in accordance with approved policies, procedures and protocols when testing specimens from human origin.</td>
<td>• Participate as a member of the Open ELC protocol committee.</td>
</tr>
</tbody>
</table>
• Assist in performing test cost analysis to evaluate current fees charged and the development of the income budget.
• Conduct formal yearly evaluations and competencies for section staff.
• When problems occur, initiate and follow up on assessments to resolve issues and prevent future problems.

**Leadership**

• Actively demonstrate teamwork skills through effective communication using peer-to-peer accountability feedback.
• Review and guide the professional development of maternal screening and serology staff.
• Participate in the planning and setting of goals within the hygienic laboratory.
• Maintain effective working relationships with faculty, staff, students and the public.

**Human Resources**

• Provide functional &/or administrative supervision of staff.
• Provide direction, assignments, feedback, coaching & counseling to assure outcomes are achieved.

**Financial Responsibility**

• Utilize laboratory resources appropriately to ensure financial sustainability.
• Develop, monitor, and meet budget targets.
• Explain variances that may occur and monthly in the section budget.
• Review transaction detail reports (TDRs) for all sectional funding accounts and make corrections when necessary.
• Close out P.O. numbers and encumbrances that are no longer needed.
• Oversee spending in each of the sections and approve purchases.

**Universal Competencies**

- **Collaboration/Positive Impact**
  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.

- **Diversity, Equity and Inclusion**
  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.

- **Service Excellence/Customer Focus**
  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.

**Technical Competencies**

- **Clinical Laboratory Testing (Extensive)**
  • Supervises clinical specimen collection and processing for various test requests.
  • Trains others on the appropriate operation of medical laboratory equipment.
  • Oversees the testing/examination of clinical specimens per physicians' requests.
  • Evaluates the accuracy of results obtained from clinical laboratory tests.
  • Recommends solutions to improve existing procedures of clinical laboratory tests.
  • Directs relevant policy and ethics compliance for all clinical laboratory tests.

- **Laboratory Equipment Operation (Extensive)**
  • Operates and calibrates equipment in diverse laboratory environments.
  • Advises on diagnosing and resolving laboratory equipment malfunctions.
  • Oversees laboratory equipment quality recordkeeping.
  • Establishes risk-based criteria to evaluate laboratory equipment performance.
  • Establishes laboratory emergency response protocols and their rationale.
  • Supervises the safe purging of waste from laboratory equipment.
### Laboratory Practice

#### Quality Assurance (Extensive)

- Oversees and prepares contingency plans for potential problems in standard LPQA procedures.
- Designs data auditing criteria to evaluate the validity of collected data.
- Directs the selection of LPQA techniques in complex laboratory environments.
- Optimizes key stages (e.g. analytical stage) in the LPQA process to improve efficiency.
- Evaluates LPQA precautionary measures; prevents the practice of faulty laboratory processes.
- Coordinates interdepartmental and external LPQA procedures.

#### Laboratory Results Reporting (Working)

- Selects from a variety of LRR technologies, e.g. Electronic Data Interchange (EDI).
- Analyzes information exchange related problems (e.g. confidentiality and accuracy) in LRR.
- Follows LRR policies and ethics, e.g. Health Insurance Portability and Accountability Act (HIPAA).
- Explains how LRR supports the interoperability between health records and laboratory systems.
- Creates secure access to laboratory results and their interpretations in a patient-focused manner.

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

<table>
<thead>
<tr>
<th>Education or Equivalency Required</th>
<th>A Master's degree in Molecular Biology, Biology, Chemistry, Biochemistry, or related field or an equivalent combination of education and experience is required.</th>
</tr>
</thead>
</table>
| Required Qualification            | • Typically, three to five years of clinical or public health laboratory experience.  
• Previous experience with serology and maternal screening method validation and/or development  
• Demonstrate at least one-year experience providing project oversight and ability to prepare successful grants and manuscripts in a professional setting.  
• Demonstrate at least one-year experience with laboratory research and data analysis in a professional setting. |
| Highly Desirable Qualification    | • A PhD degree in Molecular Biology, Biology, Chemistry, Biochemistry, or related field. |

---

State Hygienic Laboratory  
UNIVERSITY OF IOWA  
Page 4 of 5  
Clinical Lab Supervisor, Serology  
LOCAL JOB DESCRIPTION July 2021
<table>
<thead>
<tr>
<th>Desired Qualification</th>
</tr>
</thead>
</table>
| - Demonstrate at least one-year experience in molecular test validation and quality control  
| - Demonstrated experience with presentations of data at national meetings, meetings related to newborn screening is preferred.  
| - Demonstrated training or teaching experience.  
| - Demonstrated experience leading teams.  
| - Familiarity with Microsoft Office, LIS, and preparation of fiscal and operational reports is desirable.  

See requisition # 21003717 at 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.