



**State Hygienic Laboratory
Diagnostic and Clinical Division
Newborn Screening Research Specialist
Ankeny, Iowa Facility**

University Classification: **Research Specialist**

Job Code: **PRK3**

Pay Level: **5A**

Position #: **00238864**

Org/Dept/Sub-dept #: **90-9050-00020**

Position Reports to: **Stanton Berberich**
Name

00016908
Position #

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 Newborn Screening Research Specialist, in the Ankeny, Iowa facility. The primary function of the position is to lead the newborn screening tandem mass spectrometry laboratory quality improvement and quality assurance initiatives, that will evaluate practices and screening algorithms, and provide recommendations. The position also functions as a CLIA Technical Supervisor for tandem mass spectrometry result interpretation and is responsible for mentoring staff on advanced data analysis and specialized maintenance techniques.

Work Location: Ankeny, Iowa

Key Areas of Responsibilities and Specific Job Tasks

Classification Key Areas of Responsibility	Specific Job Duties and Tasks
Research	<ul style="list-style-type: none"> Identify needs and develop new research activities in newborn screening. Improve current research activities with established partners.
Experiments, Investigations, Evaluations	<ul style="list-style-type: none"> Analyze existing internal and external newborn screening data for possible improvements in screening algorithms and programmatic decisions. Generate data for possible improvements in screening algorithms and programmatic decisions. Lead newborn screening tandem mass spectrometry laboratory quality improvement and quality assurance initiatives that will evaluate current practices and screening algorithms and provide recommendations. Provide advanced analysis of tandem mass spectrometry newborn screening data for process improvement. To plan, organize, and monitor tandem mass spectrometry improvement projects, ensuring efficient utilization of technical and administrative resources, to achieve project objectives.
Collect, Analyze and Summarize Data; Prepare Reports; Contribute to Manuscripts, Publications	<ul style="list-style-type: none"> Generate and analyze tandem mass spectrometry data for possible improvements in screening algorithms and programmatic decisions. Present data at regional and national meetings and publish study results in peer reviewed journals. Write manuscripts.
Administrative and Project Management	<ul style="list-style-type: none"> Serve as project manager to implement needed changes in the tandem mass spectrometry newborn screening section. Collaborate with internal and external newborn screening partners for basic and applied research projects. Contribute to new and ongoing grant applications with internal and external partners. Develop, write, and submit grants. Function as a CLIA Technical Supervisor for tandem mass spectrometry test interpretation and corrective action needs.

	<ul style="list-style-type: none"> Identifies, documents, and resolves atypical quality issues for tandem mass spectrometry testing.
Facilities and Equipment Management	<ul style="list-style-type: none"> Provide data and assessment of facility and equipment needs for developing new research activities. Perform complex data analysis to determine acceptable tandem mass spectrometry instrument and method performance. Performs advanced tandem mass spectrometry instrument tuning and optimizations as necessary. Assists with the evaluation, optimization, validation and implementation of tandem mass spectrometry test methods to assist with screening neonatal specimens.
Supervision / Staffing	<ul style="list-style-type: none"> Provide direction for teams when advancing quality improvement initiatives. Provides tandem mass spectrometry training to ensure high quality analysis and analysis efficiency. In conjunction with clinical lab staff, trains employees on tandem mass spectrometry instrument maintenance and on performing analytic assays adhering to standard operating protocols as needed. Completes training records. Identifies discrepancies and recommends, implements and documents corrective actions and outcomes. Assists the Group Manager and Team Leads with special assignments such as workload unit studies and quality improvement projects.

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

Research (Expert/Leader)	<ul style="list-style-type: none"> Coaches others on the full spectrum of approaches and tools for conducting research. Establishes alternative theories and models for determining research approaches. Monitors major industry innovations and studies for research. Explains the impact of technology on research approaches and practices. Contributes to developing methodologies and approaches to conducting research. Develops new tools and techniques for interpreting and validating research.
Research Analysis (Expert/Leader)	<ul style="list-style-type: none"> Mentors others in research analysis for a range of situations. Plays leadership role in producing research results within the organization. Maintains and enhances current research analysis regulations and procedures. Promotes an organization's research analysis performance and validity. Develops and shapes new research analysis methodologies and technologies. Predicts future trends and directions of research analysis.
Research Documentation	<ul style="list-style-type: none"> Consults on documenting research findings.

(Expert/Leader)	<ul style="list-style-type: none"> • Updates internal standards and procedures for writing and publishing research studies. • Develops pro forma templates that could be used as a basis for creating research documents. • Leads discussions on the differences in research documentation styles for diverse fields of study. • Establishes case studies to understand the differences between well-written and poorly-written documentation. • Authors research studies; uses them as examples for others to follow.
Research Ethics / Compliance (Working)	<ul style="list-style-type: none"> • Applies policies and procedures designed to ensure compliance with ethical laws, regulations, and university code. • Describes several types of issues covered by IRB, WIRB, IACUC, etc. and organizational code for research ethics/compliance. • Documents the ethical considerations involved in carrying out research activities. • Follows procedures for reporting violations. • Participates in resolving issues involving research ethics/compliance.
Research Safety (Working)	<ul style="list-style-type: none"> • Ensures that all first-aid equipment is operational and supplies are current and fully stocked. • Participates in internal and external safety or health inspections. • Follows established safety guidelines in research procedures to prevent illness or injury to self or others. • Seeks and identifies potential or actual safety hazards in storing, handling, transporting, and using various hazardous materials. • Maintains health and safety records according to organizational and regulatory guidelines.
Performance Management (Working)	<ul style="list-style-type: none"> • Makes sure performance goals, checkpoints, and feedback focus on behaviors. • Uses formal and informal rewards and recognition programs for employees. • Identifies opportunities to enhance performance, e.g., practice assignments, training, shadowing. • Provides documented input to formal performance review conducted by manager. • Observes individual performance and provides fair and objective feedback.

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

Education or Equivalency Required	A Master's degree in Chemistry, Biochemistry, or related field or an equivalent combination of education and experience is required.
Required Qualification	<ul style="list-style-type: none"> • Typically, three to five years of clinical or public health laboratory experience. • Demonstrate previous experience with tandem mass spectrometry 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	<ul style="list-style-type: none"> • A PhD degree in Chemistry, Biochemistry, or related field. • Clinical training in biochemical genetics.
Desirable Qualification	<ul style="list-style-type: none"> • 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 # 21002102 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.