

## POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.	
<b>2. Employee's Name (Last, First, M.I.)</b>	<b>8. Department/Agency</b> MDHHS-COM HEALTH CENTRAL OFF
<b>3. Employee Identification Number</b>	<b>9. Bureau (Institution, Board, or Commission)</b> Bureau of Laboratories
<b>4. Civil Service Position Code Description</b> Microbiologist-E	<b>10. Division</b> Infectious Diseases
<b>5. Working Title (What the agency calls the position)</b> Microbiologist	<b>11. Section</b> Microbiology Section
<b>6. Name and Position Code Description of Direct Supervisor</b> SCHOOLEY, ANGIE M; LABORATORY SCIENTIST MANAGER-3	<b>12. Unit</b> Mycobacteriology /Mycology Unit
<b>7. Name and Position Code Description of Second Level Supervisor</b> MCCULLOR, KIMBERLY A; STATE ADMINISTRATIVE MANAGER-1	<b>13. Work Location (City and Address)/Hours of Work</b> 3350 N. MLK. Jr. Blvd., Lansing, MI 48906 / Monday-Friday, 8 Hours/day-40 Hrs./Week
<b>14. General Summary of Function/Purpose of Position</b> This position performs diagnostic testing of human, animal, and environmental specimens for the presence of Mycobacteria and fungi. This includes mycobacterial specimen processing, microscopic examination and culture testing of processed specimen material, as well as identification and susceptibility testing of culture isolates. Identification testing includes staining, biochemical testing, real time PCR, and other molecular testing. This position performs tasks including handling of Mycobacterium tuberculosis isolates, performing DNA extractions, and highly complex Whole Genome Sequencing (WGS). This position is responsible for maintenance of instrumentation, autoclaving, and proper handling dangerous pathogens and chemicals.	

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

**Duty 1**

**General Summary:** **Percentage: 40**

Performs clinical specimen processing and culture isolation to identify Mycobacterium tuberculosis (TB).

**Individual tasks related to the duty:**

- Reviews specimens for acceptability prior to specimen processing.
- Process clinical specimens for the isolation of Mycobacterium tuberculosis (TB).
- Inoculates broth and solid media for phenotypic and genotypic testing.
- Inoculates and prepares media for identification and susceptibility testing.
- Prepares and maintains working and frozen stock cultures.

**Duty 2**

**General Summary:** **Percentage: 30**

Performs nucleic acid amplified testing (NAAT) for the detection of Mycobacterium tuberculosis complex and Candida auris. Performs DNA extractions and Library prep for Whole Genome Sequence (WGS) analysis.

**Individual tasks related to the duty:**

- Performs instrument maintenance.
- Review specimens for acceptability prior to testing.
- Prepares clinical samples and reagents for NAAT testing.
- Results specimens in LIMS and validates results of other staff.
- Performs DNA extraction using the "Fast Prep Method" for WGS
- Performs library prep for WGS
- Freeze isolates at -70°C for long term storage
- Analyze and interpret test result data to determine acceptability of sequencing based on run metrics.
- Upload files into Basespace for analysis by CDC

**Duty 3**

**General Summary:** **Percentage: 10**

Performs Mycobacterial and fungal identification testing on cultural isolates.

**Individual tasks related to the duty:**

- Receive Mycobacterial and fungal cultures from laboratories throughout Michigan and other states for identification.
- Perform biochemical identification testing when necessary.
- Perform protein analysis and utilize results to generate preliminary or final patient reports.
- Results specimens in LIMS and validates results of other staff.

**Duty 4**

**General Summary:** **Percentage: 10**

Performs microscopic examination testing on specimens and culture isolates.

**Individual tasks related to the duty:**

- Prepares stains and slides for staining.
- Examination of slides under visible light microscope.
- Examination of slides using fluorescent ultraviolet illumination microscope.
- Results slide results in LIMS and validates results of other staff.

**Duty 5**

**General Summary:** **Percentage: 5**

Performs Quality Control and Quality Assurance.

**Individual tasks related to the duty:**

- Participates in proficiency testing and competency testing on peers.
- Maintains records of reagent and media production.
- Reports non-conforming events (NCE) and accident reports to management.
- Performs, and documents quality control testing for all testing platforms including media.
- Monitors, maintains, and analyzes quality assurance data.
- Participates in continuing education activities.

**Duty 6**

Perform other work-related duties as required by management.

Individual tasks related to the duty:

- Prepare chemical reagents and media.
- Inventory and place orders for supplies.
- Participate in studies and research activities.
- Assists and participates in training activities, workshops, conferences and classes.
- Assist, train, and orient new employees.
- Operates, adjusts, and maintains testing instruments and equipment.
- Perform cleaning, disinfection, decontamination, and housekeeping tasks as assigned.
- Assist in other areas of the laboratory as required by management.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

This position makes independent decisions with guidance as needed, regarding suitable testing and prioritizing of specimens arriving daily in the Mycobacteriology / Mycology Unit. Decisions affect the outcome of test results, which are important in diagnosis, treatment and control of diseases in the state of Michigan.

17. Describe the types of decisions that require the supervisor's review.

When policies, guidelines or instructions are not available for determining course of action required in a typical testing situation. Non-routine decisions that require policy interpretations or that impact the public's perception of departmental policy. Testing requested by health care professionals which does not fall within the realm of testing routinely offered according to program guidelines. Requests for assistance from personnel from a different unit.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Physical activities - Repetitive pipetting, walking, bending, sitting, standing, transporting, and lifting (limited to less than 25 pounds). Work assignments are completed either by standing or sitting at the laboratory bench, Bio-safety cabinet or computer desk. Testing requires extensive, repetitive manual pipetting. Frequent use of the computer is required to generate reports, analyze data, and document work. A small portion of time is required to carry supplies from the storage unit to the work site.

Environmental Conditions - Laboratory work involves frequent contact with potentially harmful chemicals, carcinogens, and neurotoxins. Requires working for extended periods of time in a Biosafety level III laboratory inside of Biological Safety Cabinet (BSC) while wearing a full-length gown, eye protection, N-95 respirator or CAPR and nitrile gloves. Required to perform testing on highly pathogenic Class III organisms such as Mycobacterium tuberculosis complex. Required to work with centrifuges, incubators, water baths, heat blocks, hotplates, steam autoclaves and other equipment as necessary.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- |   |  |
|---|--|
| <input type="checkbox"/> Complete and sign service ratings. | <input type="checkbox"/> Assign work.                      |
| <input type="checkbox"/> Provide formal written counseling. | <input type="checkbox"/> Approve work.                     |
| <input type="checkbox"/> Approve leave requests.            | <input type="checkbox"/> Review work.                      |
| <input type="checkbox"/> Approve time and attendance.       | <input type="checkbox"/> Provide guidance on work methods. |
| <input type="checkbox"/> Orally reprimand.                  | <input type="checkbox"/> Train employees in the work.      |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes.

23. What are the essential functions of this position?

As listed in duties 1,2,3,4 and 5. The position requires that the employee perform testing, reporting, and assisting in the implementation of new methods and procedures in the Mycobacteriology laboratory. These methods are utilized for rapid and accurate diagnosis and treatment of Mycobacterial diseases.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

New establishment.

25. What is the function of the work area and how does this position fit into that function?

The function of the work area is to aid in the diagnosis, treatment and control of diseases through the detection and identification of microorganisms found in the clinical and/or environmental specimens. The employee in this position functions at the beginner to intermediate level capacity. They perform techniques needed to examine specimens for microbial pathogens for the diagnosis of communicable disease.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

**EDUCATION:**

Possession of a bachelor's degree in microbiology, medical technology, clinical laboratory sciences, or a related field.

**EXPERIENCE:**

**Microbiologist 9**

No specific type or amount is required.

**Microbiologist 10**

One year of professional experience in carrying out microbiology activities to diagnose human disease, determine food purity, or produce and test biological products equivalent to a Microbiologist 9.

**Microbiologist P11**

Two years of professional experience in carrying out microbiology activities to diagnose human disease, determine food purity, or produce and test biological products equivalent to a Microbiologist, including one year equivalent to a Microbiologist 10.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

As listed on the Civil Service job specification. In addition:

Dependability, dexterity, analytical reasoning, reliability, good attendance and working knowledge of diagnostic techniques in microbiology.

The MDHHS mission is to provide opportunities, services, and programs that promote a healthy, safe, and stable environment for residents to be self-sufficient. We are committed to ensuring a diverse workforce and a work environment whereby all employees are treated with dignity, respect and fairness.

**CERTIFICATES, LICENSES, REGISTRATIONS:**

Must satisfy CLIA' 88 requirements for performing high complexity testing.

*NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.*

***I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.***

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Date

**TO BE FILLED OUT BY APPOINTING AUTHORITY**

Indicate any exceptions or additions to the statements of employee or supervisors.

None.

***I certify that the entries on these pages are accurate and complete.***

LIBERTY IRWIN

3/23/2026

Appointing Authority

Date

***I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.***

Employee

Date