

EMPLOYEE:

CLAIM #



## Job Analysis Form

ALTERNATE FORMAT AVAILABLE

**JOB TITLE** Senior Microbiologist

**JOB CLASSIFICATION** Senior Microbiologist

**DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER** 041.061-058

**DOT TITLE** Microbiologist

**DEPARTMENT** Public Health, Prevention      **DIVISION** Public Health Laboratory

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 1

**CONTACT'S NAME & TITLE** Jean Pass, Assistant Lab Manager

**CONTACT'S PHONE (206)** 744-8950

**ADDRESS OF WORKSITE**

325 9th Ave, Box 359973  
Harborview Medical Center  
Seattle, WA, 98104

**VRC NAME** Jeff Casem, M.A., CRC

**DATE COMPLETED** 3/9/2007

**DATE REVIEWED** 6/24/2009

**WORK HOURS** This is a 40-hour workweek, Monday through Friday, with some rotating evenings and weekends.

**OVERTIME** Position is overtime eligible.

### JOB DESCRIPTION

Responsible for conducting and interpreting complex and/or hazardous microbiological and related tests for diagnosis of communicable diseases, environmental sanitation and related research in the Seattle/King County Department of Public Health Library Laboratory. This is the second level within a three-level classification series. The Senior Microbiologist conducts and interprets more advanced analyses than that conducted by the Microbiologist. Assists in training Microbiologists, identifies microorganisms that clinics and hospitals cannot identify, and identifies and solves problems with laboratory materials and equipment.

### ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS

1. Ability to demonstrate predictable, reliable, and timely attendance.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Ability to read, write and communicate in English and understand basic math.
4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgment.

5. Ability to work independently or part of a team; ability to interact appropriately with others.
6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

### **JOB SPECIFIC REQUIREMENTS**

Demonstrated knowledge of relevant principles and bench-level practices of microbiology and serology. Knowledge of procedures, principles, and protocols for detection and identification of disease agents. Knowledge of common causes of disease and methods of transmission and control of communicable diseases. Knowledge of laboratory hazards and safety precautions. Knowledge of use and care of laboratory equipment and instruments. Knowledge of principles and applications of quality assurance and quality control (QA/QC). Communication skills (oral and written). Time management skills. Skill in using a keen sense of observation; leading, training, and monitoring the work of others; and maintaining confidentiality of laboratory information.

Desired qualifications include a Bachelor's Degree in microbiology, medical technology, or chemical, physical, or biological science; and one year laboratory training/experience in microbiology.

Necessary special requirements include; passing a thorough background investigation process and adherence to OSHA/WISHA guidelines including but not limited to completing their mandatory trainings on time.

### **ESSENTIAL FUNCTIONS**

1. Perform and interpret microbiological and serological laboratory tests on clinical specimens and environmental samples and enter results into laboratory computer system. Laboratory tests include HIV antibody tests, syphilis serology, hepatitis serology, gonorrhea cultures, nucleic acid amplification tests for Chlamydia and gonorrhea, etc.
2. Assist in developing quality control procedures and test protocols.
3. Organize and test samples for clinical trials and research studies.
4. Log in and label specimens.
5. Calibrate instruments and check quality control of reagents and other solutions or materials used in tests; troubleshoot problems with reagents, media, materials and equipment.
6. Assist in training less experienced microbiologists.
7. Record results and maintain records.
8. Follow safety requirements and guidelines, recognize potential safety hazards and take corrective actions.
9. Perform other related tasks as assigned.

### **OTHER TOOLS & EQUIPMENT USED**

Nitrile gloves, protective masks, scissors, chair/stool, RPR charcoal suspension, virology bench, serology bench, GC bench, enterics bench, strep A/B bench, perteses bench, waters bench, pipettes (Gilson, automatic, Eppendorf, repeating, and 8 channel), vials, shell vials, lab coat, organism inoculating loops and needles, and antibody slides.

### **PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED**

Continuously = occurs 66-100% of the time

Frequently = occurs 33-66% of the time

Occasionally = occurs 1-33% of the time

Rarely = may occur less than 1% of the time

Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

### **This job is classified as**

Medium—exerting up to 20 to 50 pounds of force occasionally, or 10 to 20 pounds of force frequently, or greater than negligible up to 10 pounds of force constantly to move objects. The physical demands the Sr. Microbiologists are required to perform are essential in the virology bench, GC bench, and enterics bench. The worker may be required to perform the same functions in the serology bench, strep A/B bench, perteses bench, and waters bench upon completion of cross training in the various benches.

### **Standing**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently on flat linoleum surfaces for 30 minutes to 1 hour at a time for up to 4 hours total in a work shift. Most commonly occurs while calibrating instruments, preparing and organizing samples and materials or washing hands.

### **Walking**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently on flat carpeted surfaces for distances of up to 50 feet at a time for 15 minutes at a time, for up to 1 to 3 hours total in a work shift. Most commonly occurs while traversing between laboratory benches/stations and rooms.

### **Sitting**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to continuously for 30 minutes to 2 hours at a time for up to 2 to 7 hours total in a work shift. Most commonly occurs while conducting or interpreting microbiological and serological tests, organizing or testing samples, logging and labeling specimens, calibrating instruments and recording results and maintaining records on a laboratory computer system.

### **Climbing Stairs**

Health Care Provider initials if restricted\_\_\_\_\_

Rarely to occasionally for 1 minute at a time for up to 1 hour total in a work shift. Most commonly occurs while walking between floors in the laboratory.

### **Balancing**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while retrieving or placing objects on upper shelves/cabinets.

### **Bending neck up**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while retrieving or placing objects and laboratory items on upper shelves/cabinets and reviewing charts.

### **Bending neck down**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to continuously for 1 to 2 hours at a time for up to 2 to 7 hours total in a work shift. Most commonly occurs while conducting or interpreting microbiological and serological tests, organizing or

testing samples, logging and labeling specimens, calibrating instruments and recording results and maintaining records on a laboratory computer system.

### **Bending/Stooping**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely to occasionally on flat linoleum surfaces for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while manipulating samples as well as removing or placing items on lower shelves of a cart or cabinet. The employee may be able to reduce bending/stooping by alternating these activities with kneeling or crouching.

### **Kneeling**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely to occasionally on flat linoleum surfaces for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while manipulating samples as well as removing or placing items on lower shelves of a cart or cabinet. The employee may be able to reduce kneeling by alternating these activities with bending/stooping or crouching.

### **Crouching**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely to occasionally on flat linoleum surfaces for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while manipulating samples as well as removing or placing items on lower shelves of a cart or cabinet. The employee may be able to reduce kneeling by alternating these activities with bending/stooping or crouching.

### **Foot Controls**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely to occasionally for 1 to 5 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while pressing water controls to wash hands.

### **Reaching above shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while retrieving or placing objects and laboratory items on upper shelves/cabinets and reviewing charts.

### **Reaching at waist to shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently to continuously for 1 to 2 hours at a time for up to 4 to 7 hours total in a work shift while collecting and preparing samples, entering data into computer systems, calibrating lab instruments, performing HIV antibody tests, syphilis serology, hepatitis serology, gonorrhea cultures, nucleic acid amplification tests for Chlamydia or gonorrhea and other laboratory tests.

### **Reaching at knee to waist height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely to occasionally for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while placing or removing items on low shelves and carts and opening or closing drawers.

### **Reaching at floor to knee height**

Health Care Provider initials if restricted \_\_\_\_\_

Rarely to occasionally for 1 to 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while cleaning up spills and placing or removing items on lower shelves of a cart of cabinet.

**Lifting 1-10 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently for 3 to 15 minutes at a time for up to 1 to 4 hours total in a work shift. Most commonly occurs while picking up, collecting, and organizing samples to be tested.

**Carrying 1-10 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently for 3 to 15 minutes at a time for up to 1 to 4 hours total in a work shift. Most commonly occurs while transporting weights of 2-5 pounds containing samples, trays of plates and other laboratory equipment to different benches.

**Lifting 11-20 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently for 3 to 15 minutes at a time for up to 1 to 4 hours total in a work shift. Most commonly occurs with weights of 11 to 15 pounds while moving large pieces of glassware containing various liquids and other laboratory equipment.

**Carrying 11-20 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently for 3 to 15 minutes at a time for up to 1 to 4 hours total in a work shift. Most commonly occurs with weights of 11 to 15 pounds while moving large pieces of glassware containing various liquids/samples and other laboratory equipment.

**Lifting 21-50 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally for 3 to 5 minutes at a time for up to 30 minutes to 1 hour total in a work shift. Most commonly occurs with weights of 24 to 25 pounds while moving large pieces of glassware containing various liquids/samples and other laboratory equipment.

**Carrying 21-50 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally for 3 to 5 minutes at a time for up to 30 minutes to 1 hour total in a work shift. Most commonly occurs with weights of 24 to 25 pounds while moving large pieces of glassware containing various liquids/samples and other laboratory equipment.

**Pushing and Pulling**

Health Care Provider initials if restricted\_\_\_\_\_

Rare for distances of up to 30 to 50 feet for 1 minute at a time with a force of up to 10 pounds for up to 5 minutes total in a work shift. Most commonly occurs while moving a cart of samples between laboratory stations/benches and rooms. The employee also pushes with up to 40 pounds of force on rare occasion when opening and closing the entrance door.

**Handling**

Health Care Provider initials if restricted\_\_\_\_\_

Frequently to continuously for 2 to 3 hours at a time for up to 4 to 6 hours total in a work shift. Most commonly occurs while handling or manipulating laboratory samples and various pipettes, vials, slides and organism sticks in order to conduct, organize, and test samples for various bacteria, viruses, and parasites. Also occurs while calibrating instruments and checking quality control of reagents and other solutions/materials used in testing.

**Operating Controls with Hands**

Health Care Provider initials if restricted\_\_\_\_\_

Occasionally to frequently for 30 minutes to 1 hour at a time for up to 1 to 4 hours total in a work shift. Most commonly occurs while handling and manipulating laboratory samples and various pipettes, vials,

slides and organism sticks in order to conduct, organize, and test samples for various bacteria, viruses, and parasites. Also occurs while calibrating instruments and checking quality control of reagents and other solutions/materials used in tests.

### **Fingering/Gripping**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently to continuously for 2 to 3 hours at a time for up to 4 to 6 hours total in a work shift. Most commonly occurs while filtering samples, opening and closing plates, performing data entry, removing/gripping/placing of vial covers, and collecting and preparing samples on slides.

### **Pinch Gripping/Thumb Pressing**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently to continuously for 2 to 3 hours at a time for up to 4 to 6 hours total while removing covers of vials and lab plates, preparing cultures and batch analysis, pinching pipette bulbs and other pipette knobs/switches, pressing automatic pipette knobs/switches, and organism inoculating loops and needles. See below images:



### **Talking**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for 40 minutes at a time for up to 1 hour total in a work shift while conversing with coworkers and supervisors.

### **Hearing**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for 5 minutes at a time for up to 3 hours total in a work shift while conversing with coworkers and supervisors as well as listening for equipment times and warning alarms.

### **Seeing**

Health Care Provider initials if restricted \_\_\_\_\_

#### **Near acuity-clarity of vision at 20 inches or less**

Continuously for 2 hours at a time for up to 6 hours total in a work shift while filtering samples, opening and closing sample plates, and performing data entry.

#### **Depth perception-three dimensional vision**

Continuously for 2 hours at a time for up to 6 hours total in a work shift while handling and manipulating laboratory samples, various pipettes, vials, slides and organism sticks in order to conduct, organize, and test samples for various bacteria, viruses, and parasites. Also occurs while calibrating instruments and checking quality control of reagents or other solutions/materials used in tests.

#### **Color vision-ability to identify and distinguish colors**

Occasionally for 20 minutes at a time for up to 1.5 hours total in a work shift while using a microscope and counting colonies on plates.

## ENVIRONMENTAL FACTORS

Work is performed in a laboratory setting with exposure to various chemicals and odors.

### The noise level is

Approximately 60 decibels. The noise is caused by laboratory equipment.

HCP Initials if Restricted

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### Work environment may include the following exposure(s):

Non-weather related temperatures below 55 degrees: Rare

Non-weather related temperatures above 75 degrees: Rare

Toxic or caustic chemicals: Frequently to continuously

Gasses: Occasionally to frequently

Fumes: Occasionally to frequently

Odors: Occasionally to frequently

TB Lab: Rarely to occasionally

HCP Initials if Restricted


## POTENTIAL MODIFICATIONS TO JOB

Alternate sitting and standing to reduce static postures in bench areas where this is feasible. Using bottle opener, needle nose pliers or other similar devices (Ronguers) to open plates and remove vial covers. A cart to reduce carrying. Utilizing left hand for opening/closing of plate and vial covers as well as operating various pipettes. Using Gilman Microman pipette in place of standard pipettes currently being used in lab.

## SIGNATURES

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

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Printed name & title of VRC evaluator

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Signature of VRC evaluator

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Date

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Printed name & title of contact

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Signature of contact

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Date

---

Printed name & title of employee

---

Signature of employee

---

Date



### HEALTH CARE PROVIDER SECTION

Check all that apply

- ☐ The employee is released to perform the described duties without restrictions on performance or work hours as of \_\_\_\_\_.
- ☐ The employee is released to perform the described duties on a reduced schedule as of \_\_\_\_\_. The recommended schedule is: \_\_\_\_\_  
☐ Temporary until \_\_\_\_\_ ☐ Permanent as of \_\_\_\_\_
- ☐ The employee is released to perform the described job with the following modifications: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
☐ Temporary until \_\_\_\_\_ ☐ Permanent as of \_\_\_\_\_
- ☐ The employee is not released to perform the described duties due to the following job functions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
☐ Temporary until \_\_\_\_\_ ☐ Permanent effective \_\_\_\_\_
- ☐ The employee is unable to work in any capacity.  
A release to work is: ☐ anticipated by \_\_\_\_\_ ☐ Not expected

The limitations are due to the following objective medical findings:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Printed or typed name and phone number of Health Care Provider

\_\_\_\_\_  
Signature of Health Care Provider

\_\_\_\_\_  
Date