MICROBIOLOGIST 2

Nature of Work: Performs responsible, full performance professional microbiological examinations and research in a public health laboratory. Work is performed under the general supervision of a higher level microbiologist or other professional employee.

Distinguishing Characteristics: Differs from Microbiologist 1 in that incumbent performs more complex analyses under general supervision of a higher level professional employee. Differs from Microbiologist 3 by the absence of responsibility for more complex tasks or for serving as lead worker.

Examples of Work: (NOTE: The examples of work as listed in this class specification are not necessarily descriptive of any one position in the class. The omission of specific statements does not preclude management from assigning specific duties not listed herein if such duties are a logical assignment to the position.)

Performs difficult microbiological and other examinations to aid in the diagnosis, control, and treatment of communicable diseases.
Makes final identification of bacteria, animal parasites, fungi, viruses, and other infectious agents.
Performs serological tests for the diagnosis of infections; reports results of tests, and checks and titrates antigens prepared in the laboratory.
Performs stool examinations for enteric bacteria, isolates, selects, and performs tests on cultures such as mycobacteria and gonorrhea to be studied for drug sensitivity.
Isolates and identifies organisms causing food poisoning by using cultural, biochemical and microscopic analyses.
Makes qualitative and quantitative bacteriological analyses of drinking water and recreational water; makes special microbiological tests on food, beverages, water, milk, and other dairy products.
Prepares and maintains individual records of daily activities and prepares reports on results of tests. Uses computer for entry of lab results and quality control.
Provides technical assistance to lower level personnel performing standardized microbiological laboratory tests by reviewing methods and procedures, and verifying and recording test results.
Knowledge, Skills and Abilities
Knowledge of the principles and procedures of scientific analyses in the areas of bacteriology, parasitology, virology, serology, organic chemistry and related microbiological procedures.
Knowledge of the preparation of chemical reagents, culture media, stains, compounds, and solutions required in scientific testing.
Knowledge of the operation, calibration and maintenance of applicable laboratory equipment.
Skill in the performance of difficult microbiological analyses.
Ability to comprehend and execute oral and written directions, formulae and charts.

Minimum Qualifications:
Training: Graduation from an accredited four-year college or university with a minimum of twenty-five (25) semester hours in physical science courses including a course in microbiology and eight (8) semester hours in chemistry.

OR

A bachelor's degree from an accredited four-year college or university in medical technology with a minimum of fifteen (15) semester hours in microbiology.

Experience: One year of full-time or equivalent part-time paid experience as a microbiologist.
Substitution: Graduate training from an accredited college or university in microbiology may substitute for the required experience on a year-for-year basis.