Class Code: 04424

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE

MICROBIOLOGIST SUPERVISOR

DEFINITION

Administers and supervises a staff of microbiologists, chemists, and laboratory assistants in a biology laboratory; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Supervises and evaluates the work of technical/professional staff; effectively recommends personnel actions related to selection, performance, leaves of absence, grievances, work schedules and assignments, disciplinary procedures, and administers personnel and related policies and procedures.

Maintains work area and equipment free of chemical and microbiological contamination through established laboratory procedures to insure valid test results and safety of the work environment.

Keeps acquainted with current developments in the field of microbiology by reviewing literature and attending staff meetings, conferences, and classes.

Maintains accurate records in order to document analysis by recording samples analyzed, procedures used, and results obtained.

Performs mathematical calculations throughout analysis procedures in order to determine concentrations and evaluate results.

Tests food, water, dairy samples and environmental specimens in order to isolate and identify pathogenic micro-organisms by performing qualitative analysis procedures such as plating, incubation, slide preparation, etc. as described in Department's policies and procedures.

Tests water samples in order to determine the total coliform and nitrate content.

Prepares samples for analysis in order to facilitate test procedures by weighing samples, preparing standard dilutions of reagents, setting up flasks and other equipment, etc.

Examines specimens from suspect cows/cattle, hogs, sheep and other livestock in order to identify brucellosis antibodies, acid-fast bacilli, or scabies mites.

Maintains the growth and regeneration of bacterial cultures in order to provide a supply for future analyses.

Tests dairy samples in order to identify proper pasteurization methods or unlawful content proportions by performing qualitative analysis procedures.

COMPETENCIES REQUIRED

Knowledge of the principles and practices of supervisory methods.

Knowledge of agency laboratory safety practices for handling equipment, chemicals and glassware.

Knowledge of laboratory clean-up procedures used to prevent chemical and microbiological contamination.

Knowledge of various methods and procedures used to perform quantitative analysis of microorganisms in dairy samples, environmental specimens, food samples and water.

Knowledge of the methods and procedures used to identify pathogenic organisms in water, other environmental specimens, food samples, animals, and dairy products.

Knowledge of the correct methods for operating and maintaining laboratory equipment such as

chromatographs, microscopes, etc.

Knowledge of the scientific principles of microbiology.

Knowledge of current laboratory practices and procedures used in microbiological analysis.

Ability to read and comprehend laboratory and scientific procedures and literature.

Ability to isolate pathogens in samples of diseased animal tissues, dairy products, food samples, water and

Ability to perform statistical calculations such as frequency distribution, standard deviation, etc.

Ability to perform basic algebraic calculations necessary to determine proportions/concentrations of chemicals, vitamins, drugs, etc.

Ability to prepare and maintain culture media used for analysis.

Ability to communicate effectively, both orally and in writing, in order to relate technical information regarding results of test analyses.

Ability to plan and review the work of laboratory personnel to ensure efficient operations and accurate results.

Manual dexterity sufficient to handle delicate glassware without excessive breakage.

Visual acuity sufficient to read fine markings on instruments and equipment.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Makes an effort to follow policy and cooperate with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited four-year college or university with a degree in microbiology or any closely related biological science (i.e. virology, bacteriology, immunology, serology, etc.) and four years experience as a professional microbiologist;

OR

a combination of education and experience substituting thirty semester hours of graduate course work in microbiology or a closely related biological science for each year of the required experience with a maximum substitution of two years;

OR

a combination of education and experience substituting one year of experience as a professional microbiologist for thirty semester hours of the required education with a maximum substitution of four years;

OR

certification by the F.D.A. as a Laboratory Survey Officer may be substituted for one year of the required work experience;

OR

employees with current continuous experience in the state executive branch that includes experience equal to

eighteen months of full time work as a Microbiologist.

Effective Date: 4/98 BW