

Position Number: **Benchmark Job #363**

Ministry: Agriculture, Fisheries and Food

Branch: Animal Industry

Location: Abbotsford

Working Title: **Virology Technician**

Level: Range 21

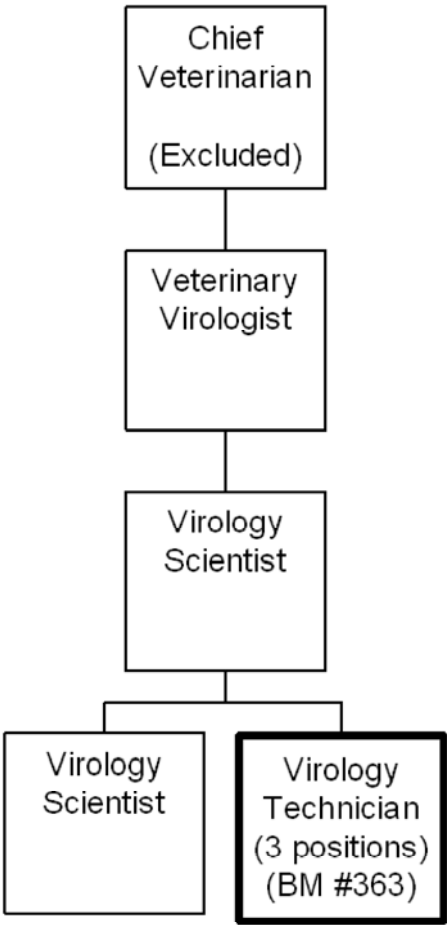
NOC Code: 3213

PRIMARY FUNCTION

To perform required procedures for virus isolation and serology; maintain a variety of primary and continuous cell cultures; produce special media for tissue culture purposes; care for laboratory animals; prepare sterile glassware and utensils.

JOB DUTIES AND TASKS

1. Prepares and conducts serological tests and identifies and isolates viruses
 - a. prepares suspect virus and chlamydia samples for inoculation into tissue cultures, chicken embryos, and for electron microscopy
 - b. inoculates and treats embryonated eggs and tissue cultures
 - c. harvests and examines embryonic fluid and membranes
 - d. determines the presence of specific viral antibodies by conducting serological tests such as micro serum neutralization test (SN), micro hemagglutination inhibition test (HI), agar gel diffusion, radial immunodiffusion, counter electrophoresis, indirect fluorescent antibody (IFA), and Enzyme Linked Immunosorbent Assay (ELISA)
 - e. interprets and validates test results
 - f. produces and maintains a variety of primary and continuous cell cultures (10-12 tissue cultures maintained at any one time)
 - g. sections frozen virus infected tissues using a cryostat and staining sections by direct or indirect FA
 - h. explains laboratory test results with farmers, processors and veterinarians
2. Performs other related duties
 - a. produces special medias, buffers, immunochemicals, agars, and other solutions for tissue culture, serological and other immunological procedures
 - b. washes, packages and sterilizes glassware
 - c. handles and cares for infected laboratory animals as required
 - d. inoculates laboratory animals
 - e. uses laboratory equipment to precise tolerances
 - f. orders materials for the laboratory such as consumable supplies
 - g. provides orientation to the laboratory to other staff
 - h. works in awkward positions while leaning over lab counters, under fume hoods and over microscopes



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p>JOB KNOWLEDGE</p> <p>Understand the principles of microbiology to analyze and interpret tests to isolate and identify viruses and chlamydia and to perform various serological tests.</p>	G	250
2	<p>MENTAL DEMANDS</p> <p>Judgement to apply structured study and analysis to choose and apply appropriate serological tests to check for the presence of viral antibodies, complete testing, assess results for validity and interpret findings, by the precise review and manipulation of serological and virological data.</p>	F	175
3	<p>INTERPERSONAL COMMUNICATIONS SKILL</p> <p>Discretion required to exchange information needing explanation of laboratory test results with farmers, processors and veterinarians.</p>	C	30
4	<p>PHYSICAL COORDINATION AND DEXTERITY</p> <p>Significant coordination and dexterity is required to inoculate laboratory animals and to use lab instruments to precise tolerances.</p>	D	22.5
5	<p>RESPONSIBILITY FOR WORK ASSIGNMENTS</p> <p>Guided by general laboratory standards applies accepted work methods in a different way to test biological samples where the bacteria or virus that is being detected may not be readily identified.</p>	E	120
6	<p>RESPONSIBILITY FOR FINANCIAL RESOURCES</p> <p>Financial responsibility to order consumable materials used in the laboratory.</p>	A	5

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7	RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION Considerable responsibility to control the processes which ensure the quality of information and data identified in laboratory testing.	E	33
8	RESPONSIBILITY FOR HUMAN RESOURCES Limited responsibility for human resources to orientate others to the workplace.	A	5
9	RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS Significant care and attention for others to identify viruses and chlamydia in food animals, to aid proper diagnosis by veterinarians.	D	25
10	SENSORY EFFORT/MULTIPLE DEMANDS Intense attention to detail to almost always prepare slides and cultures and to visually observe minor changes to test specimens.	D	18
11	PHYSICAL EFFORT Heavy physical effort to frequently work in awkward positions that involve leaning over lab counters, under fume hoods, and over microscopes.	E	24
12	SURROUNDINGS Exposure to viruses and bacteria which are grown in the lab, almost always.	D	9
13	HAZARDS Significant exposure to hazards from frequently working with potentially infectious substances.	D	9

Total Points: 726

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