

**Animal Health Laboratory (AHL), Laboratory Services Division (LS), University of Guelph,**

**List of methods falling under flexible scope**

The Animal Health Laboratory (AHL) of Laboratory Services (LS), University of Guelph is accredited for veterinary laboratory testing test methods (fixed scope) and techniques under test method development and evaluation and non-routine testing specialty area (flexible scope) as listed on LS' SCC ISO/IEC 17025 scope of accreditation

<https://www.scc.ca/en/search/laboratories/ahl>.

The test methods listed below are accredited and fall under the flexible scope mentioned above. If the test method you are seeking is not on this controlled list, contact the Quality Assurance unit at [qamail@uoguelph.ca](mailto:qamail@uoguelph.ca).

The Animal Health Laboratory identifies unknown hazards in a range of matrices, for example, animal samples, feed, soil, and plants. Hazards include infectious agents (bacteria, mycoplasmas, yeast, molds, viruses, and parasites), organic and inorganic elements and compounds. Infectious agents are detected directly or indirectly through various technologies listed under LS' SCC scope of accreditation.

Techniques for which the laboratory is accredited are listed below:

1. Culture detection of microorganisms

Method code	Method name	Agent and sample types
MYC-100	<i>Mycoplasma</i> and <i>Ureaplasma</i> isolation	<ul style="list-style-type: none"><li>• <i>Mycoplasma</i>, <i>Ureaplasma</i>, <i>Acholeplasma</i> spp. for fluids and tissues</li></ul>

2. Inorganic analysis by inductively coupled plasma spectroscopy (ICP)

Method code	Method name	Elements and sample types
CHEM-162	ICP-MS analysis of trace metals in serum, plasma and blood	<ul style="list-style-type: none"><li>• manganese, iron, cobalt, copper, zinc, selenium, molybdenum, lead for serum, plasma and blood</li></ul>

3. Enzyme linked immunosorbent assay (ELISA)

Method code	Method name	Agent and sample types
V-002	ELISA	<ul style="list-style-type: none"><li>• <i>Coxiella burnetii</i> (Q fever) for detection of antibodies in serum</li><li>• Transmissible gastroenteritis virus (TGEV) and porcine respiratory coronavirus (PRCV) for detection of antibodies in serum</li></ul>

4. Agglutination

Method code	Method name	Agent and sample types
V-007	Agglutination - <i>Brucella</i> , <i>Mycoplasma</i> , <i>Salmonella</i>	<ul style="list-style-type: none"><li>• <i>Salmonella Pullorum/Salmonella Gallinarum</i> for detection of antibodies in serum</li></ul>
V-008	<i>Leptospira</i> microscopic agglutination test (MAT)	<ul style="list-style-type: none"><li>• <i>Leptospira</i> spp. for detection of antibodies in serum</li></ul>

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5. Polymerase chain reaction (PCR)

Method code	Method name	Agent and sample types
MOL-181	<i>Mycoplasma bovis</i> real-time PCR	<ul style="list-style-type: none"> <li>• <i>Mycoplasma bovis</i> for embryo collection fluid/embryo transportation fluid (ETF), lung, semen, and swabs.</li> </ul>
MOL-197	PCR detection of avian mycoplasmas	<ul style="list-style-type: none"> <li>• <i>Mycoplasma gallisepticum</i></li> <li>• <i>Mycoplasma iowae</i></li> <li>• <i>Mycoplasma synoviae</i> for fluids, tissue and swabs</li> </ul>
MOL-208	<i>Coxiella burnetii</i> real-time PCR	<ul style="list-style-type: none"> <li>• <i>Coxiella burnetii</i> for fluids including milk, tissues, and swabs</li> </ul>
MOL-218	<i>Chlamydia</i> PCR	<ul style="list-style-type: none"> <li>• <i>Chlamydia abortus</i></li> <li>• <i>Chlamydia psittaci</i></li> </ul> For fluids, tissue and swabs
MOL-235	Real-time PCR detection of <i>Pseudogymnoascus destructans</i> (formerly <i>Geomyces destructans</i> )	<ul style="list-style-type: none"> <li>• <i>Pseudogymnoascus destructans</i> (formerly <i>Geomyces destructans</i>) for fluids, guano, tissue, soil and swabs</li> </ul>
MOL-249	PCR detection of fish viruses	<ul style="list-style-type: none"> <li>• Infectious pancreatic necrosis virus (IPNV) for fluids and tissue</li> </ul>
MOL-251	Honey bee molecular testing	<ul style="list-style-type: none"> <li>• Acute bee paralysis virus (ABPV)</li> <li>• Black queen cell virus (BQCV)</li> <li>• Chronic bee paralysis virus (CBPV)</li> <li>• Deformed wing virus (DWV)</li> <li>• Israeli acute paralysis virus (IAPV)</li> <li>• Kashmir bee virus (KBV)</li> <li>• Sacbrood virus (SBV)</li> </ul> all for bees and bee tissues
MOL-257	Chytrid PCR (Batrachochytrium dendrobatidis & B. salamandrivorans)	<ul style="list-style-type: none"> <li>• <i>Batrachochytrium dendrobatidis</i></li> <li>• <i>B. salamandrivorans</i></li> </ul> for swabs and tissue
MOL-262	<i>Echinococcus</i> species PCR	<ul style="list-style-type: none"> <li>• <i>Echinococcus multilocularis</i> for feces, fluids and tissue</li> </ul>
MOL-267	<i>Myxobolus cerebralis</i> (whirling disease pathogen) PCR	<ul style="list-style-type: none"> <li>• <i>Myxobolus cerebralis</i> for fluids, fish and fish tissue</li> </ul>
MOL-282	PCR detection of fish bacterial pathogens	<ul style="list-style-type: none"> <li>• <i>Aeromonas salmonicida ssp salmonicida</i></li> <li>• <i>Flavobacterium psychrophilum</i>.</li> <li>• <i>Lactococcus garvieae</i></li> <li>• <i>Renibacterium salmoninarum</i></li> </ul> for fluids, fish and fish tissue

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5. Polymerase chain reaction (PCR) continued

Method code	Method name	Agent and sample types
V-005	Polymerase chain reaction (PCR)	<ul style="list-style-type: none"> <li>• Bluetongue virus (BTV) /Epizootic hemorrhagic disease virus (EHDV) for fluids and tissues</li> <li>• Bovine viral diarrhea virus (BVDV) type I and type II for fluids and tissues</li> <li>• Infectious bovine rhinotracheitis virus, bovine herpesvirus 1) (IBRV) for fluids and tissues</li> <li>• Infectious laryngotracheitis virus (ILTV gallid herpesvirus 1 [GaHV-1]) for fluids and tissues</li> <li>• Porcine circovirus 2 (PCV-2) for fluids and tissues</li> <li>• Porcine parvovirus (PPV) for fluids and tissues</li> <li>• Porcine respiratory coronavirus (PRCV) for fluids and tissues</li> <li>• Severe acute respiratory syndrome virus 2 (SARS-CoV-2) – E gene and (SARS-CoV-2) – RdRp gene for fluids and tissues</li> </ul>

6. Whole genome sequencing

Method code	Method name	Agent and sample types
BAC-041	Whole genome sequencing (WGS) of bacterial isolates	<ul style="list-style-type: none"> <li>• Bacterial isolates for bacterial culture</li> </ul>