**DIAGNOSTIC SERVICE**

**Direct line:** 450 778-8151  
**Ph.:** 450 773-8521  
or 514 343-6111  
**Ext.:** 8243  
**Fax:** 450 778-8107

**Specimen Reception (room 1249)**  
3200, rue Sicotte, Saint-Hyacinthe  J2S 2M2

**www.medvet.umontreal.ca**

**Mission of the Diagnostic Service**
The pride and singularity of Diagnostic Service (SD) resides primarily in its affiliation with University of Montreal and the interaction between the SD and the numerous competent researchers and professors of this famous university. A concentration of such expertise within the Faculté de Médecine Vétérinaire benefits greatly both the SD and its clientele. The SD consists of 80 qualified employees working within 20 laboratories and units.

The SD is conscious of its unique role in veterinary diagnostics in Québec, as much for its neutrality proper to a scientific environment, as for its privileged situation of a close association between research and diagnostic. Therefore, the SD includes in its mission to be a centre of excellence and diagnostic reference recognized both nationally and internationally and also, to contribute to the improvement of animal health care.

Among the objectives of the SD, we must point out the implementation of a Kaizen process and the accreditation from the American Association of Veterinary Laboratory Diagnosticians (AAVLD) which assures that our facility can provide a full range of diagnostic services in compliance with the relevant national and international standards of quality such as: ISO 17025, OIE, CFIA, GLP.

It is with great pride that the SD offers you its services. Please contact us to let us know your needs and expectations.

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**Contact information**

**Direct line:** 450 778-8151

Contact us at 450 773-8521  
or at 514 343-6111 (from Montreal)

**Client Services and Technical Support**  
**Ext.** 8243  
**Email:** service-diagnostic@medvet.umontreal.ca

Ms Véronique Boyer, ext. 8534  
**Specimen Reception Manager**  
**Email:** v.boyer@umontreal.ca

Mr Jean-François Brodeur, ext. 8670  
**Laboratory coordinator**  
**Email:** jf.brodeur@umontreal.ca

**Billing Services**  
Ms Nadine Messier, ext. 8444  
**Email:** nadine.messier@umontreal.ca

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**Effective June 1st, 2012**

Tests offered  
Bovine, Ovine and Caprine
BACTERIOLOGY

Anaerobic culture
Blood culture
Campylobacter (culture)
Campylobacter detection (direct smear)
Coloncy count (RODAC plate)
Clostridium perfringens culture
Dermatophilus culture
Detection of Clostridium difficile toxins
E. coli culture
Gram stain
Histophilus somni culture
Methicillin-resistant Staphylococcus aureus culture (MRSA)
MIC (per antibiotic)
Milk culture
Mycoplasma culture
Necropsy routine culture
Routine culture
Salmonella culture
Salmonella serotyping
Sensitivity
Strain identification
Ziehl-Neelsen stain

Escherichia coli, Reference Laboratory (EcL)
Bovine
Isolated colonies
IMS Detection*
Magnetic beads and confirmation of serovirotyping by PCR
Serotyping

MOLECULAR DIAGNOSTIC

Panels
Abortion profile
BVDV, IBI, Leptospira, Neospora
Respiratory profile
BVDV, Coronavirus, IBI, Mycoplasma bovis, P3, BRSV
Adenovirus
Bovine respiratory syncytial virus (RSV)
BVDV (Bovine viral diarrhea virus)
BVDV – Type 1 and type 2 differentiation
BVDV pool of more than 50 individuals
Chlamydia pneumoniae spp. (Real-Time PCR)
Clostridium perfringens (toxins)
Coronavirus
Coxiella burnetii (Real-Time PCR)
Enterococcus faecalis/aeacium
Herpesvirus (BH-V-4)
Herpesvirus (CPV-2)
Infectious bovine Rhinotracheitis
Leptospira spp.
Listeria monocytogenes
Malignant Catarhal Fever
Mycobacterium paratuberculosis
Mycoplasma bovis
Mycoplasma spp.
Parainfluenza Type III
Salmonella spp.

CLINICAL PATHOLOGY

Prices include interpretation by a clinical pathologist.

Panels
Bovine Panel
Bovine chemistry profile and Complete CBC

Metabolic profiles
Complete composite metabolic profile
(GLUC, CHOL, MG, CARO, CU, ZN, UREA, AST, BHB, GGT, T. PROT., ALB, GLOB, ALB/GLOB, CA, PHOSP, K, NA, CL, CO2, ANION GAP)
Surveillance metabolic profile
(GLUC, MG, UREA, GGT, T. PROT., ALB, GLOB, ALB/GLOB, CA, PHOSP, K, NA, CL, CO2, ANION GAP)
Metabolic profile interpretation

Chemistry Profiles
Bovine profile
(GLUC, UREA, CREAT, T.BILI, AST, GLDH, BHB, CK, GGT, T. PROT., ALB, GLOB, ALB/GLOB, CA, PHOSP, K, NA, CL, CO2, ANION GAP)
Pancreatic profile
(GLUC, UREA, CREAT, AST, ALP, ALT, T. PROT., ALB, GLOB, ALB/GLOB, CA, PHOSP, K, NA, CL, CO2, ANION GAP)
Peripartum profile
(CA, PHOSP, MG, CK, GGT, ALB, K, NA, CL, CO2, ANION GAP)
Renal profile
(GLUC, UREA, CREAT, T. PROT., ALB, GLOB, ALB/GLOB, CA, PHOSP, K, NA, CL, CO2, ANION GAP)
Down cow profile
(CREAT, T.BILI, AST, CK, CA, PHOSP, K, NA, CL, CO2, ANION GAP)

Mycotoxins, Selenium and vitamins
Deoxynivalenol (DON) (vomitoxin)
Ochratoxin A
Zearalenone
β-Carotene
Selenium
Vitamine A
Vitamine E
2 vitamins
3 vitamins

Rumen
Buffering capacity
Chloride
pH
Potassium
Rumen profile
(pH, Buffering capacity, NA, K, CL)
Sodium

Hematology
Blood smear exam
Complete Large Animal CBC
Large Animal CBC, without differential

Chemistry
Albumin
ALP (Alkaline phosphatase)
ALT (Alanine transaminase)
Ammonia
Amylase
AST (Aspartate aminotransferase)
**Tests offered – Bovine, Ovine et Caprine**

**Bence-Jones Proteins** (semi-quantitative)  
BHB (β-hydroxy-butyrate)  
Bile acids  
Bilirubin (total)  
Calcium  
Chloride  
Cholesterol  
CK (creatinine kinase)  
CO₂ (total)  
Copper (serum)  
Creatinine  
Electrolytes (Na/K/Cl/Co₂)  
Fructosamine  
GGT (Gamma Glutamyl Transferase)  
GLDH (Glutamate dehydrogenase)  
Glucose  
Iron  
LDH (Lactate dehydrogenase)  
Lipase  
Magnesium  
Microproteins  
  - Urine MP/creat. ratio  
Non-esterified fatty acids (NEFA)  
Osmolality  
Phosphorus  
Potassium  
Protein electrophoresis  
Proteins (tot.), albumin, globulines, A/G  
Sodium  
Total proteins  
Triglycerides  
Urea  
Uric acid  
Zinc (serum)  

**Cytology**  
Buffy coat  
**Cerebrospinal fluid (CSF)**  
Complete CSF exam (includes microproteins)  
Fluids /washes (abdominal, thoracic, pericardic, articular, BAL, tracheal wash, prostatic wash, not including CSF)  
  - 1 fluid: proteins only  
  - 1 fluid: leukocyte count only  
  - 1 fluid: proteins and leukocyte count  
Complete fluid exam with cell count  
Smear Exam  
Rivalta test  

**Cytologie**  
Bone marrow  
External mass (cutaneous, subcutaneous)  
Internal organ  
Lymph nodes (aspiration)  

**Hematology**  
Hematocrit  
Hematocrit and Total proteins  
Reticulocyte count  

**Coagulation**  
Fibrinogen degradation products (FDP)  

**Urology**  
Chemical & macroscopic exam  
Complete urinalysis  
Microscopic exam  

**PARASITOLOGY**  
Baerman exam  
Fecal centrifugation – Zinc sulphate  
KOH Digestion  
Larvae count from grass extraction  
Neospora PCR  
Parasite(s) identification  
Sedimentation  
Strongyle egg count by McMaster slide*  
Toxoplasma - PCR  
Wisconsin  
* This test is not very sensitive. Used to verify treatment effectiveness.  

**SEROLOGY**  
BHM (Bovine herpes mammillitis)  
BHV4 (Bovine herpesvirus type 4) – IFA  
Bovine Adenovirus – IFA  
Bovine leukemia virus - ELISA (Antibody detection)  
BRSV - FA (antigen detection)  
BRSV, BVDV, IBR, Pi3 (4 viruses) – FA (Antigen detection)  
BRSV (Bovine respiratory syncytial virus) – IFA  
BVDV (Bovine viral diarrhea virus) – IFA  
BVDV – IFA (antigene detection)  
BVDV type I and II – VN  
BVDV type I or II – VN  
BVDV - ELISA  
Chlamidophila abortus - ELISA  
Coxiella - ELISA  
IBRV (Infectious bovine rhinotracheitis virus) – IFA  
IBRV (Infectious bovine rhinotracheitis virus) – VN  
IBRV (Infectious bovine rhinotracheitis virus) – ELISA  
Influenza type A - ELISA  
Neospora - ELISA  
Pi3 (Bovine parainfluenza 3) – HI  
Rotavirus – ELISA (Antigen detection)
Tests offered – Bovine, Ovine et Caprine

**VIROLOGIE**

**VIROLOGY**

**Complete profile – 7 viruses**
Herpesvirus (Type 1 ; IBR Type 2 ; Bovine herpes mamillitis), Paramyxoviridae (PI3 or BRSV), BVDV, Parvovirus, Enterovirus
- Isolation only
- Isolation & identification

**Digestive system profile – 3 viruses**
Parvovirus, Enterovirus and BVDV
- Isolation only
- Isolation & identification

**Respiratory profile – 4 viruses**
Paramyxoviridae, PI3 (Parainfluenza 3, paramyxovirus) or BRSV (Bovine respiratory syncytial virus), IBRV (Infectious bovine rhinotracheitis virus, herpesvirus type 1), BVDV (Bovine viral diarrhea virus, pestivirus)
- Isolation only
- Isolation & identification

**Virus isolation and identification in cell culture**
Adenovirus
- Isolation & identification
BVDV (Bovine viral diarrhea virus)
- Isolation & identification
Coronavirus
- Isolation & identification
Rotavirus (electronic microscopy)

**VETERINARY GENETICS LABORATORY**

- Bovine Freemartin
- Bovine Red Factor
- Wyagu Race (all tests)
- Band 3 deficiency
- Factor 11 deficiency

Pathology (Necropsy)

**Animals submitted for necropsy:** The animals can be submitted directly to the Faculty of Veterinary Medicine. In front of the Faculty’s main building there are directions indicating where to find door #3: NÉCROPSIE (AUTOPSIE) / (NECROPSY (AUTOPSY)).

For genotyping (parenting) and karyotyping (chromosome analysis), please contact the Veterinary Genetics Lab.

Ms Isabelle Daneau
450 773-8521 Ext. 8226
Email: isabelle.daneau@umontreal.ca

**Specimen submission**

**SPECIMENRECEPTION:** available 24 hours a day, 7 days a week.
In order to improve our services for sample reception, a refrigerator is available for you to drop off your samples when Specimen Reception is closed. This refrigerator is locked and has an opening of 10 x 20cm for you to place your samples. It is located in the corridor facing the entrance at 1425, des Vétérinaires (Security Guard entrance). If the box is too large for the opening of the fridge you can leave it with the security guard and kindly remind him to refrigerate the sample.

**Business hours:**
Specimen reception is open Monday through Friday from 8h30 to 18h.

**Laboratories**
Monday through Friday: Bacteriology, molecular diagnostics, parasitology, virology, pathology and Genomic DNA diagnostic labs are open Monday through Friday from 8h to 17h. Clinical pathology laboratories are open Monday through Friday from 9h to 19h30.
Weekends: Clinical pathology laboratories are open on Saturday and Sunday from 9h to 14h. Bacteriology lab is open for emergencies on Saturdays and Sundays from 9h to 12h.

For more information please contact Customer Service at 450 778-8151.