



INVENTORY OF RESOURCES AND FACILITIES WITHIN THE CBMRN

◆ UNIVERSITY OF SASKATCHEWAN, REGINA

VACCINE AND INFECTION DISEASE ORGANIZATION (VIDO)

- Animal care facilities – 22 level II SPF isolation rooms
- Mouse facility (including transgenics)
- Intervac – Level III Research Centre
- Immunology equipment: FACS, MACS, fluorescence microscopes, automated ELISA readers, chemiluminometer, cell sorters, ELISPOT readers, laser microdissection
- Biochemistry equipment: peptide synthesizer, protein sequencer, protein purification, robotic liquid handling
- Proteomics equipment: 2D-Gel, imaging
- Genomics equipment: microarray printer and readers, kinomearray capabilities, qRT-PCR, Bioanalyzer, automated DNA sequencers, functional genomics informatics

Contact Persons:

Andrew Potter: Andrew.potter@usask.ca

Jose Perez-Casal: jose.perez-casal@usask.ca

Philip Griebel: Philip.griebel@usask.ca

PRAIRIE DIAGNOSTIC SERVICES INC.

- Bacteriology laboratory

Contact Persons:

Musangu Ngeleka: musangu.ngeleka@pds.usask.ca

Maggie Schwab: Maggie.schwab@pds.usask.ca

◆ UNIVERSITY OF PRINCE EDWARD ISLAND

ATLANTIC VETERINARY COLLEGE, CHARLOTTETOWN

CENTRE FOR VETERINARY EPIDEMIOLOGIC RESEARCH (CVER)

- Research Centre for epidemiology studies
- World-recognized professional capacity in study design and analysis

MARITIME QUALITY MILK

- Mastitis Research Laboratory: milk bacteriological culture, ancillary identification testing
- BactroScan50 automated milk quality bacteria counting technology
- MOA with Province of PEI to allow access to FOSS 4000 and FOSS 6000 high volume SCC analysis
- Real-time PCR
- Trek Mycobacterium culture
- Milk microbiologist for full PCR diagnostic suite
- Sensititre MIC determination capacity
- Highly-qualified and well-trained laboratory and field staff
- ELISA with integrated plate washing technology
- Spiral platter
- Lactocorder

Contact Persons:

Ian Dohoo: dohoo@upei.ca

Greg Keefe: gkeefe@upei.ca

John VanLeeuwen: jvanleeuwen@upei.ca

Henrik Stryhn: hstryhn@upei.ca

◆ MCGILL UNIVERSITY

MACDONALD CAMPUS, SAINTE-ANNE-DE-BELLEVUE, QUÉBEC

- Dairy cows: 88 tie-stall barn with growing areas
- LARU: housing transgenic sheep
- Transgenic animal model systems
- The McGill University Genomics Centre: the Centre is a unique state-of-the-art facility. The equipment and technical assistance are available to all in a partnership arrangement
- Embryology, in-vitro maturation and fertilization, embryo cell culture and somatic cell nuclear transfer laboratories
- Valacta database

Contact Person:

Xin Zhao: xin.zhao@mcgill.ca

◆ UNIVERSITY OF GUELPH

ONTARIO VETERINARY COLLEGE

- Functional and equipped immunogenetics laboratory: immune and endocrine response testing and BoLA genotyping
- Bovine cDNA immune-endocrine microarray
- SELDI-TOF-mass spectrometry, gene expression profiling, and SNP identification, genotyping, and haplotype analysis

Contact Persons:

Bonnie Mallard: bmallard@uoguelph.ca

Niel Karrow: nkarrow@uoguelph.ca

- Animal Health Laboratory: milk bacteriological diagnostic, automated plate streaker, high volume lab throughput, PCR technologies, Sensititre MIC determinations – Fee for service from anywhere
- DeLaval Direct Cell Count (DCC)
- Two dairy research herds (Elora Dairy Research Centre and Ponsonby Dairy Research Centre). « *Very busy research facilities with intense animal use in the areas of nutritional management, behaviour, pain management, and lameness. Currently, there are no udder health projects on-going* ».

Contact Persons:

Ken Leslie: keleslie@ovc.uoguelph.ca

David Kelton: dkelton@uoguelph.ca

◆ UNIVERSITÉ DE SHERBROOKE

- FACSCAN
- Microscopy: electron, confocal, fluorescence
- DNA array scanner (ScanArray) and printer (small scale), DNA chips for *S. aureus* and *E. coli*
- Reproducible model of *S. aureus* mastitis in mouse
- Real-time PCR apparatus
- 18 liters fermentor
- Level II small animal facility
- Microbiology and biosecurity laboratory level II

Contact Persons:

François Malouin: françois.malouin@usherbrooke.ca

Brian Talbot: brian.talbot@usherbrooke.ca

◆ AGRICULTURE AND AGRI-FOOD CANADA

DAIRY AND SWINE RESEARCH AND DEVELOPMENT CENTRE (DSRDC), SHERBROOKE, QUÉBEC

- Biosecurity level II laboratory
- Biosecurity level II dairy unit (20 cows)
- Dairy herd (150 cows)

Contact Person:

Pierre Lacasse: lacassep@agr.gc.ca

PACIFIC AGRI-FOOD RESEARCH CENTRE (PARC), AGASSIZ, BRITISH COLOMBIA

- Laboratory of microbiology level II
- Dairy herd of 225 lactating cows

Contact Person:

Moussa Sory Diarra: diarram@agr.gc.ca

◆ UNIVERSITÉ DE MONTRÉAL

FACULTÉ DE MÉDECINE VÉTÉRINAIRE, SAINT-HYACINTHE

- Bacteriology diagnostic laboratory and experienced laboratory personnel, mastitis microbiology laboratory
- Microplate reader and washer (ELISA)
- 2 ultra-low temperature freezers (- 80°C)
- MIDI system
- Molecular diagnostic laboratory: PCR, real-time PCR
- DS@HR databank: approximately 2,000 herds with individual cow records
- Veterinary epidemiology, modeling and geostatistical laboratory
- *Streptococcus* laboratory
- Mycoplasma PCR diagnostics
- National Cohort of Dairy Farms database
- CBMRN Mastitis Pathogen Culture Collection (16,915 isolates)

Contact Persons:

Émile Bouchard: emile.bouchard@umontreal.ca

Luc DesCôteaux: luc.descoteaux@umontreal.ca

Serge Messier: serge.messier@umontreal.ca

Jean-Philippe Roy: jean-philippe.roy@umontreal.ca

Daniel Scholl: daniel.scholl@umontreal.ca

Simon Dufour: simon.dufour@umontreal.ca

◆ UNIVERSITÉ LAVAL, QUÉBEC

- Laser capture microdissection system (PixCell Ile from Arcturus)
- Protein and nucleic acids analyser (bioAnalyzer from Agilent)
- Services accessible through Laval University Campus
 - DNA sequencing and synthesis
 - Protein sequencing
 - Peptide synthesis
 - Fluorescent cell sorter service (FACS)
- Equipment accessible through the *Centre de recherche en biologie de la reproduction*
 - Custom microarray printer (VersArray printer from BioRad)
 - High throughput PCR capacity (400 PCR per run)
 - Microarray hybridation station (ArrayBooster from Advantix instruments)
 - Microarray scanner (VersArray scanner from BioRad)
 - Real-time PCR (LightCycler from Roche)
- Equipment accessible through the *Institut des nutraceutiques et des aliments fonctionnels*
 - 2D gel system (up to 12 gels per run)

Contact Person:

Claude Robert: claire.robert@fsaa.ulaval.ca

Updated: June 2009