



Moving forward
for the future of our labs

OPTILAB and laboratories: a glossary



Accreditation Canada: Certified assessment organization providing a wide range of assessment programs. Québec's health and social service institutions have to be accredited by this organization.

(Source: <https://accreditation.ca/about/?acref=self>)

Bureau de normalisation du Québec (BNQ): Accreditation body from which all of the laboratories in Québec's health and social service system are required to receive accreditation. As an administrative unit of Investissement Québec, the BNQ is organized around four sectors: standards development, certification, laboratory assessment and verification of greenhouse gas emission statements. Serving the economic and social advancement of Québec, the BNQ identifies needs, develops normative strategies and relevant standards, sets up certification programs and acts as Québec's voice on the Standards Council of Canada (SCC).

(Source: <https://www.bnq.qc.ca/en/the-bnq-in-brief.html>)

Core or consolidated lab: A laboratory where the activities of specialists from different disciplines such as hematology, microbiology, biochemistry, and blood banking are combined in a single site.

Extra-territorial lab group: An extra-territorial lab group consists of one or more administrative regions belonging to a lab cluster that also includes another region; the regions in the extra-territorial group have been required to transfer the management of their labs to the other region, which is responsible for the hub lab.

The Gaspésie region, for example, is part of the same cluster as the Bas-Saint-Laurent region, and its hub lab is in Rimouski. The Gaspésie is an OPTILAB extra-territorial lab group because management of its labs has been transferred to the CISSS du Bas-Saint-Laurent, which has been the employer of people working in Gaspésie labs since April 1, 2017.

Hub lab: A lab which, as part of a lab cluster, carries out most of the analyses for the territory it serves. The hub lab also manages all of the cluster's resources, whether financial, human or material.

Lab cluster: A lab cluster is a group of health and social service system labs consisting of a hub lab and several partner labs. Lab clusters are not organized according to the same principles as health and social service institutions. In some cases, a cluster includes a single institution (for instance, the Estrie lab cluster and the CIUSSS de l'Estrie). A cluster can also include several institutions (for instance, the Montérégie lab cluster covers three CISSSs: Montérégie-Est, Montérégie-Centre and Montérégie-Ouest). Finally, a cluster can also cover more than one institution and more than one region (for instance, the Laval-Lanaudière-Laurentides cluster includes three CISSSs – Laval, Lanaudière and Laurentides – as well as the administrative regions served by these institutions).

Lab specialties: Five specialties are usually found in a core lab:

- **(Medical) microbiology:** A branch of microbiology concerned with the micro-organisms that affect human beings' health. Medical microbiology deals with their classification, nomenclature, metabolism, functions, growth, etc. The main objective is to produce specific diagnoses of infections. This is the lab specialty responsible for PCR analyses, which proved very important during the COVID-19 pandemic.
- **Biochemistry:** Among other things, biochemical analyses determine the dosage of molecules contained in various physiological fluids such as blood, urine, and puncture liquids. The results of these tests are indispensable for the diagnosis of many pathologies.
- **Hematology:** Hematology is the medical specialty concerned with elements of blood (red and white globules and blood platelets), lymph, the organs that secrete them (bone marrow, spleen, tonsils), and associated diseases.
- **Blood bank:** The blood bank specialty, associated with or belonging to hematology, ensures the permanent distribution of labile blood products: packed red blood cells, platelet concentrates, fresh frozen plasma. In centres where transplants are carried out by the hemato-oncology department, it also includes a bank of hematopoietic stem cells in support of this activity.
- **Pathology:** The pathology lab receives various types of samples from the human body, sent by specialists. The medical technologist is responsible for treating the samples, preparing them to ensure that the pathologist can diagnose the disease.

Regional labs can also include cytology.

- **Cytology:** A branch of biology that studies every aspect of cells both normal and pathological, including their structure, functions, formation, and physical, chemical and physiological properties. Exfoliative cytology involves the microscopic examination, for screening or diagnostic purposes, of cells that have been shed through the secretions of an organ or taken from the site of a lesion.

Laboratories in university hospital centres also include the following specialties.

- **Molecular biology:** A discipline at the intersection of genetics, biochemistry and physics that is concerned with understanding how cells work at the molecular level.
- **Genetics:** Genetic analyses, focusing on the genome, can be carried out on cells from any kind of organism. A variety of highly specialized diagnostic tests are performed by molecular genetics, biochemical genetics and cytogenetics labs.
- **Transfusion services:** These services assume clinical and administrative responsibility for the use of blood products and for planning, managing and monitoring transfusion activities.
- **Histocompatibility labs (HLA):** In university hospital centres, these labs verify the compatibility of organs for transplant, ensuring compatibility between the donor and the person receiving the transplant.



Partner lab: Within a lab cluster, a secondary laboratory managed by the hub lab. Partner labs carry out a limited number of tests, all other analyses being transferred to the hub lab.

SIL-P: Provincial laboratory information system (*Système d'information de laboratoire provincial*). A communication system for labs that makes it possible to follow specimen collection, analysis, and the result of the analysis. Before OPTILAB, over 80 different systems were used. The MSSS put out a call for bids and chose SoftLab as the one system to be used by all public system labs. SIL-P is currently being implemented.

Work bench: Analyses in a lab are distributed according to specialty (biochemistry, blood bank, microbiology, pathology, hematology). Each specialty has a work station to which an employee is assigned.

