

The CHU Sainte-Justine:

A Knowledge Management Centre Serving the Network



About the CHU Sainte-Justine

The Sainte-Justine University Hospital Centre is the largest mother-child centre in Canada and one of the four most important pediatric centres in North America. Its team of 5 000 support staff and 500 doctors, dentists and pharmacists carry out their work in an environment that is both highly innovative, where knowledge is generated and transferred on a daily basis; and respectful of individuals, where patients and families are placed at the heart of every practice. Affiliated with the Université de Montréal, the CHU Sainte-Justine is the largest pediatric teaching centre in Quebec and one of the top in Canada. It hosts more than 4 000 students and interns every year.

The CHU Sainte-Justine Research Centre is composed of more than 200 researchers. It is recognized for its leadership, particularly in the areas of brain disease; musculoskeletal diseases and movement science; fetomaternal and neonatal disorders; metabolic health; viral diseases, immune disorders, and cancer; and for the advancement of health.

The CHU Sainte-Justine was created over 100 years ago by Justine Lacoste-Beaubien, a woman of prominence in the business community, to deliver quality medical care to children of Quebec who, according to her, were not receiving the needed care in general hospitals.

In 2007, the CHU Sainte-Justine was accredited by the World Health Organization (WHO) as a "Health Promoting Hospital." It is also a member of extensive network of excellence in health: Réseau Universitaire Intégré de Santé de l'Université de Montréal (RUIS). The CHU Sainte-Justine has integrated research and education into its hospital setting to ensure a synergetic approach to excellence in patient care, research and teaching.



Clinical Excellence in Maternal and Pediatric Health

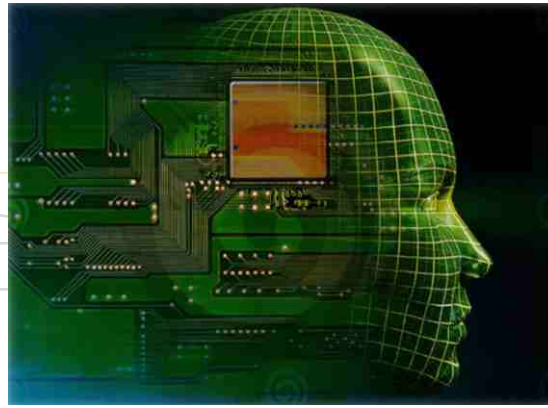
This excellence is demonstrated in all areas of care delivered to mothers and children. Each year, the CHU Sainte-Justine conducts 5 000 day surgeries and treats 200 000 outpatients, 62 000 emergency patients, and 18 000 hospitalized patients. Its tertiary and quaternary services in pediatric and obstetric medicine consist of all pediatric surgical specialties, including cardiac and vascular surgery and neurosurgery; and all pediatric medical specialties, including organ transplant, oncology, hematology, and child psychiatry.

The CHU Sainte-Justine is a level 1 trauma centre that receives children in critical condition from across Quebec. It is also a screening centre for hearing loss and a referral centre for chronic pain management and child developmental disorders. The CHU Sainte-Justine possesses a unique set of expertise in genetics, molecular biology and clinical pharmacology that enables mothers and children to have access to personalized medicine. But it is the establishment's approach to humanize care and services that gives its advanced expertise its true value – humanization that characterizes every intervention with mothers and children.



Canada's only health promotion centre

Accredited as a health-promoting establishment by the World Health Organization, the CHU Sainte-Justine has created a Health Promotion Centre that offers primary and secondary prevention programs for chronic illnesses, metabolic disorders, and cardiovascular diseases. These interventions are conducted during pregnancy, early childhood, and adolescence, and are concerned with environmental factors and genetic susceptibility. The Health Promotion Centre draws on the development of public policies that support good health in a context of sustainable development. All its interventions are targeted to both the general public and vulnerable population groups, such as cultural communities and marginalized families, for whom specific programs are developed with the aim of reducing inequalities in health.



An internationally recognized research centre

The CHU Sainte-Justine Research Centre strives to improve the health of mothers and children by generating new medical knowledge. Its research priorities were defined in 2007 following an external analysis conducted by a committee of experts presided by Janet Rossant, and was based on the establishment's existing strengths and the needs of the population. These priorities have been integrated into all its six established programs of both clinical and basic research, including neurosciences and neurodevelopment, immunology and oncology, musculoskeletal diseases and scoliosis, general health and prevention of chronic illnesses, neonatology and maternal disorders, and cardiovascular and metabolic diseases.

Its research activities have experienced significant growth in the last five years with a 10% increase in the number of researchers and a 20% increase in funding. There are about two hundred doctors and researchers currently working on both research sites (Rehabilitation Centre Marie Enfant and Sainte-Justine) with four hundred research assistants under their supervision.

The Research Centre combines the production of basic research with the dynamism of clinical research, organized in six clinical programs. This continuity truly enables the development of translational research that allows for constant and permanent exchange between the clinical and basic research teams. This translational research has been implemented in the areas of oncology and hematology, scoliosis and back disorders, perinatal care and intensive care in order to foster collaboration between basic and clinical researchers and to accelerate the application of research-generated knowledge for the greater benefit of mothers and children.

A world-class knowledge centre

The CHU Sainte-Justine is one of the most important health establishments and one of the top in Canada. Students of pediatric medicine trained at the CHU Sainte-Justine from the Université de Montréal have ranked among the top scoring students in the Royal College exam for the past five years. The CHU Sainte-Justine's Education Centre provides training not only to students in medical programs, but also to students in the nursing, respiratory therapy, physiotherapy, pediatric and obstetric programs across the province.

Its continuing assessment and knowledge-sharing programs are developed thanks to the close collaboration between the research and teaching teams in order to integrate new knowledge into clinical practice internally at the CHU Sainte-Justine and externally in other health care establishments across the province by way of telemedicine. The transfer of knowledge generated in its research centre and through literature reviews is overseen by the Mother-Child Knowledge Centre that combines theoretical, simulation-based and hands-on clinical training. This centre features a telemedicine centre dedicated to mother-child health to ensure the quality of transmitted information and to participate in the training of health care workers.



A rigorous technology assessment

Evaluating the impact of new knowledge is conducted on a continued basis thanks to a structured quality improvement and technology assessment process. The CHU Sainte-Justine is part of an evolving technological transformation guided by a common vision developed by its researchers, clinicians, administrators, and educators. This vision of the use of technology for research and development objectives introduces a new dimension to the CHU Sainte-Justine and presents new opportunities in such areas as medically-tailored nanotechnology and artificial intelligence.

An organizational model supporting synergy

In order to ensure continued synergy between the medical care, teaching, research, administrative and assessment teams, physical proximity to one another is not sufficient. The CHU Sainte-Justine has, therefore, implemented an appropriate organizational model structure that fosters creativity, innovation, and interactivity with all its partners.

The program organizational model adopted in the late 1990s has enabled the establishment to deliver all the required services to mothers and children and to create a favorable environment for producing, transferring and evaluating new knowledge by placing the teams at the bedside of patients and their families. This organizational model transformation regarding patient care requires a participative management approach and the development of a culture of change, supported by the creation of a school of contextualized health management specifically for the establishment. This approach, at the heart of which are the administrators and clinicians, enables them to access continued training and demonstrate their shared dedication to improving the health of mothers and children.

A partner of the health care network

Aware of its responsibility to all Quebecers, the CHU Sainte-Justine is also a partner of the health care network. For many years, the CHU Sainte-Justine has played a key role in the transformation of the Quebec health care system, primarily because of its role as a teaching hospital for doctors and health care workers in pediatric and obstetric care.

The CHU Sainte-Justine also participates in initiatives and committees with government agencies, universities, research organizations and educational establishments at the national and international levels. Its role in the network is facilitated thanks to the creation of the Networking Activities Centre, developed by the CHU Sainte-Justine to foster the collaboration of all partners in the areas of health care, ultraspecialized services, rehabilitation, health promotion, teaching, research, and technology assessment.

The CHU Sainte-Justine is also a partner of choice for the private sector for the development of new products; results of the collaboration with all its teams in all its areas of expertise. This is exemplified by the construction of new hospital buildings, research, technological innovations, education that applies architectural concepts guided by findings that respect the criteria for sustainable development.

Other areas, such as the development of new communication, information and biomedical engineering technology, enable new partnerships with specialized companies. Clinical pharmacology approaches based on personalized medicine and the particularities of the mother-child pharmacodynamics enable collaborations with the pharmaceutical industry to enhance our knowledge in this field and to improve the care delivered to this particular segment of the population, often forgotten in traditional studies.

At the international level, the CHU Sainte-Justine is a reputable Quebec health enterprise. Its international relations activities are carried out under three main axes: institutional, humanitarian and trade. In the Francophone milieu, the creation of the Réseau mère-enfant de la Francophonie in 2002 has allowed for the CHU Sainte-Justine to build a practice- and knowledge-sharing community composed of twenty university hospital centres specialized in delivering health care to mothers and children around the world. In non-Francophone countries, the CHU Sainte-Justine collaborates with hospital centres and humanitarian organizations on five continents.



All of these accomplishments enable Quebec to offer other countries a health establishment model that integrates service excellence and the values of its system: equity and universality.