

# HÉMA-QUÉBEC

BLOOD COMPONENTS

HUMAN TISSUES

SUSTAINABILITY



STEM CELLS TRUST EFFICIENCY

TRANSPLANTS

INITIATIVES

BLOOD DONATION

GLOBULE

KNOWLEDGE



QUALITY

PARTNERSHIPS

CORD BLOOD

CREDIBILITY

BLOOD DRIVES

RECIPIENTS

INNOVATIONS



2010–2011 ANNUAL REPORT



Blood Products  
Stem Cells  
Human Tissues

# MISSION

HÉMA-QUÉBEC'S MISSION IS TO EFFICIENTLY  
PROVIDE ADEQUATE QUANTITIES OF SAFE,  
OPTIMAL BLOOD COMPONENTS, SUBSTITUTES,  
HUMAN TISSUES AND CORD BLOOD TO MEET  
THE NEEDS OF ALL QUEBECERS; PROVIDE AND  
DEVELOP EXPERTISE ALONG WITH SPECIALIZED  
AND INNOVATIVE SERVICES AND PRODUCTS IN  
THE FIELDS OF TRANSFUSION MEDICINE AND  
HUMAN TISSUE TRANSPLANTATION.

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# MESSAGE FROM THE CHAIR OF THE BOARD OF DIRECTORS AND FROM THE PRESIDENTS AND CHIEF EXECUTIVE OFFICERS

BLOOD COMPONENTS  
HUMAN TISSUES  
TRANSPLANTS DONORS  
QUALITY KNOWLEDGE  
TRUST BLOOD DONATION  
PARTNERSHIPS SUSTAINABILITY  
INNOVATIONS BLOOD DRIVES  
STEM CELLS GLOBULE  
CORD BLOOD CREDIBILITY  
INITIATIVES RECIPIENTS  
BLOOD COMPONENTS

Ensuring a sufficient and safe supply of blood products, human tissues and stem cells for the entire population of Québec is an ongoing challenge.

The safety measures and standards that govern our activities are necessary and essential. The annual inspections conducted by Health Canada in our facilities and the GLOBULE Blood Donor Centres serve to evaluate our performance in this respect. For the first time, Héma-Québec was given a perfect grade during a regular Health Canada inspection. This excellent performance provides an incentive to set the bar even higher.

Safety is ensured not only through good practices, but also through proper planning. Numerous actions have been initiated and are being sustained in order to ensure a sufficient supply of blood products. The efforts put forth among the cultural communities, for example, are producing results, with thousands of new donors from these communities having contributed to the collective blood supply.

A new supply strategy will be guiding our work for the 2011–2014 period. This strategy is based on eight strategic choices. Close attention is given to the supply



*Jean-Pierre Allaire*  
**JEAN-PIERRE ALLAIRE, F.C.A., IAS.A**  
Chair of the board of Directors



*Francine Décary*  
**FRANCINE DÉCARY, M.D., PH.D., M.B.A., O.Q.**  
President and Chief Executive Officer



*Jean de Serres*  
**JEAN DE SERRES, M.D., M.SC., M.B.A.**  
President and Chief Executive Officer

of platelets, a blood product for which the demand is rapidly increasing and which presents particular challenges because it expires quickly. Results are encouraging, particularly those for multiple collections by apheresis, which jumped 400%.

Moreover, Héma-Québec is the first supplier of blood products in North America to use the latest CaridianBCT (Atreus®/Orbisac®) technology in its processing of blood products. As a result of this modernization, the staff enjoys increased flexibility that allows, among other things, for the preparation of three times more products within the same amount of time.

The human tissues sector is also experiencing rapid growth, as demonstrated by the 41% increase in the distribution of human tissues. This growth has been managed without compromise to quality or safety. The renewal of the ISO 13485 certification, as well as the audits conducted by the American Association of Tissue Banks and Health Canada, demonstrate that our practices in this field meet the highest standards.

As a result of the numerous efforts made to raise the awareness of future mothers and the obstetrical staff at the participating hospitals, the Public Cord Blood Bank continues to grow quickly. A new stem cell processing method has also been implemented. This optimization has enabled Héma-Québec to bring its practices into line with those of most cord blood banks around the world.

In terms of labour relations, the past few months have been marked by the renewal of seven of the nine collective agreements, representing some 600 unionized employees in Montréal and 140 others in Québec City. These agreements were reached, to the satisfaction of the parties, after extensive work.

Another long-term matter also came to a positive conclusion: that of the reinstatement of certain donors. A result of a decade of hard work, this initiative supported by Health Canada makes it possible for eligible donors to be reinstated under certain conditions and contributes to maintaining the confidence and satisfaction of blood donors.

In terms of research and development, the Cellular Engineering Program is continuing its activities to develop methods that will allow for in-laboratory preparation of blood substitutes, particularly for immunoglobulin therapy, as well as replacement therapy for transfusion of platelets. The visibility of research, which is intensifying in this area, is proof of the progress made.

More than 16,000 volunteers take part in activities related to the cause of blood donation every year. The aging of the members of the groups that have traditionally been Héma-Québec's most important partners is a matter of concern. As a result, the Centre Urbanisation, Culture et Société of the Institut national de recherche scientifique (INRS) has been mandated to conduct a study of these volunteers, who are at the heart of our organization.

The issue of the future generation at Héma-Québec affects not only the heart, but also the head. Last year was marked by a departure and arrival at the head of the organization, at the end of the fiscal year.

The year 2010-2011 therefore marks a turning point in Héma-Québec's brief history. After 12 years at the helm of an organization that is considered to be innovative and to have a human face, Dr. Francine Décary passed the torch to Dr. Jean De Serres.

This transition took place at a time when the organization has acquired an exceptional degree of credibility and confidence among the people and the government of Québec.

This new period, which will be an opportunity to review the major strategic directions that will enable Héma-Québec to face the challenges of the coming years, is starting on an enthusiastic note.

All of these projects, all of these accomplishments, would not be possible without our staff. We would like to express to them our deep gratitude for the trust they place in us, their excellent work and their dedication to our mission for life.



VALÉRIE, BLOOD DONOR



# FIRST GOAL

## A SAFE AND SUFFICIENT SUPPLY OF BLOOD, BLOOD PRODUCTS, HUMAN TISSUES, CORD BLOOD AND STEM CELLS

### LABILE BLOOD PRODUCTS

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#### ENSURING A SAFE SUPPLY OF LABILE BLOOD PRODUCTS

##### IMPLEMENTATION OF THE NEW TAN MULTIPLEX KIT

In order to optimize its screening processes, Héma-Québec implemented TAN multiplex tests (TAN MPX) in 2010. This new technology from Roche Diagnostics was introduced in May. It has made it possible to add HBV (Hepatitis B) to the list of detectable viruses through nucleic acid tests and to group together the various tests for HCV, HIV-AIDS and HBV in the same analysis, among other things. These tests are now done simultaneously and are entirely automated. All of the operations can now be performed in a single laboratory, whereas they previously had to be done in four different rooms. These improvements notably help to reduce the silent period during which the virus is undetectable.

##### IMPLEMENTATION OF NEW BLOOD GROUP ANALYZERS

During the last fiscal year, Héma-Québec implemented two new, completely automated blood group analyzers. This equipment can analyze up to 300 samples per hour, namely 60 more than the previous equipment.

Like its predecessor, this new equipment is used to analyze blood groups as well as to screen for syphilis and cytomegalovirus; however, the new model operates more efficiently.

##### STUDY OF THE PATHOGEN REDUCTION PROCESS

Héma-Québec implements various measures to reduce the risk of transmitting infectious agents through transfusion. One of the measures under consideration for plasma and platelets involves the use of pathogen reduction technologies. Such technologies are now available elsewhere in the world and involve destroying microbial agents by means of a light source with or without exposure to riboflavin or a

psoralen. These technologies are intended to protect people who are given transfusions against potential emerging pathogens that are not currently detected by screening tests. However, none of these technologies are currently approved by Health Canada.

In fall 2010, the Medical Affairs division conducted a survey on the processes for reducing pathogens in order to assess the knowledge and interest of the various stakeholders (hospital administrators, blood bank managers, transfusion physicians, past, current and potential recipients).

The results identified an interest in favour of Héma-Québec introducing a pathogen reducing process. Prior to this survey, most of the participants were not familiar with these processes. They therefore feel that an intense information campaign is needed in order to implement such a process. Based on this survey, Héma-Québec will continue to evaluate the feasibility of implementing a pathogen reduction process.

##### CHAGAS DISEASE

Chagas disease is an infection that is widespread in Latin America, but rare in Canada. It is caused by a parasite that is transmitted by a biting insect that feeds off blood, called *Triatoma infestans*.

Donations from individuals that present a risk for Chagas disease\* undergo a specific laboratory test for this disease. Through this procedure, more than 5,145 blood samples were tested this year. Of that number, two were confirmed positive. These donations were withdrawn and destroyed and the donors were directed to an external medical resource for follow-up.

## RETENTION OF IGA DEFICIENT DONORS

In order to ensure an adequate supply of blood products that are immunoglobulin A (IgA) deficient, the planning, supply and marketing teams reviewed the strategy for recruiting and retaining donors with this deficiency at the beginning of the year.

The IgA deficiency is primarily transmitted through heredity and affects approximately 0.1% of the population. In most cases, the absence of IgA does not cause any health issues. However, those who carry this deficiency and who need a transfusion must receive blood products with an IgA deficiency in order to prevent severe allergic reactions.

## STUDIES OF DONOR IRON RESERVES CONTINUE

Following the implementation of double red blood cell collections and in response to a request from Health Canada, Héma-Québec implemented a project to evaluate iron reserves in double red blood cell donors by measuring ferritin (a protein that stores iron in the body). This study will help to better evaluate the impact of this procedure on the health of donors.

## QUALITY CONTROL OF LABILE BLOOD PRODUCTS

### Control tests

With a view to maintaining an optimal safety level for all labile blood products, many quality control and compliance tests are performed regularly to guarantee that products comply with regulatory requirements and meet the highest standards.



\* People born outside Canada or whose mother or maternal grandmother was born outside Canada or people who have travelled or spent more than 30 consecutive days in Latin America, including Mexico, present a risk for Chagas disease.



QUALITY CONTROL FOR LABILE BLOOD PRODUCTS					
PRODUCTS	TESTS PERFORMED	NUMBER OF PRODUCTS TESTED	PERCENTAGE OF COMPLIANCE	ACCEPTABLE VALUES	ACCEPTABLE PERCENTAGE OF TESTED BAGS
PACKED RED BLOOD CELLS*	Residual leucocytes	2,729	99.96% <sup>1</sup>	< 5 x 10 <sup>6</sup> /bag	100%
	Hemoglobin (total packed red blood cells)	2,334	99.9%	40 g/bag	90%
			100%	35 g/bag	100%
	Hemoglobin (packed apheresis red blood cells)	395	100%	> 42.5 g/bag	95%
			100%	Average ≥ 51 g/bag	–
	Hematocrit	2,729	100%	≤ 0.8 L/L	90%
WASHED PACKED RED BLOOD CELLS	Hemolysis	3,050	99% <sup>2</sup>	< 0.8%	100%
	Sterility	3,044	99.97% <sup>3</sup>	No contamination	100%
	Hemoglobin	47	100%	35 g/bag	90%
	Hematocrit	47	100%	≤ 0.8 L/L	90%
DEGLYCEROLIZED PACKED RED BLOOD CELLS	Hemolysis	47	96%	< 0.8%	90%
	Sterility	47	100%	No contamination	100%
	Hemoglobin	47	100%	35 g/bag	90%
	Hematocrit	47	100%	≤ 0.8 L/L	90%
PLATELET CONCENTRATES	Hemolysis	47	83% <sup>2</sup>	< 0.8%	90%
	Sterility	48	100%	No contamination	100%
	Residual leucocytes (platelet concentrate)	265	100%	≤ 8.3 x 10 <sup>5</sup> /bag	100%
	Residual leucocytes (platelet pool)	271	100%	< 5 x 10 <sup>6</sup> /bag	100%
	Platelet count (platelet concentrate)	265	94%	5.5 x 10 <sup>10</sup> /bag	75%
	Platelet count (platelet pool)	270	99%	≥ 2.4 x 10 <sup>11</sup> et ≤ 5.1 x 10 <sup>11</sup> /bag	75%
APHERESIS PLATELETS	pH	520	99.6%	6.4–7.8	95%
	Sterility	520	99.6% <sup>3</sup>	No contamination	100%
	Residual leucocytes	422	100%	< 5 x 10 <sup>6</sup> /bag	100%
	Platelet count	4,558	93%	≥ 3 et ≤ 5.1 x 10 <sup>11</sup> /bag	90%
APHERESIS GRANULOCYTES	pH	450	99%	6.4–7.8	95%
	Sterility	452	100%	No contamination	100%
FRESH FROZEN PLASMAS BY APHERESIS	Granulocyte count	79	77%	≥ 1.0 x 10 <sup>10</sup> /bag	75%
	Sterility	89	100%	No contamination	100%
FROZEN PLASMAS	Factor VIII	156	99%	≥ 0.7 U.I./ml	75%
	Sterility	158	99% <sup>3</sup>	No contamination	100%
CRYOPRECIPITATES	Factor VIII	1,375	93%	≥ 0.52 U.I./ml	75%
	Fibrinogen	240	100%	≥ 150 mg/bag	75%

\* Including packed red blood cells from whole blood and those collected by apheresis.

<sup>1</sup> One non-compliant result with no obvious explanation.

<sup>2</sup> This parameter (hemolysis is the destruction of red blood cells) is under investigation.

<sup>3</sup> One unit of packed red blood cells, two platelet concentrates and one fresh frozen plasma by apheresis were non-compliant without any obvious explanation.

Quality control conducts certain tests on labile blood products to check the quality and compliance of the processing methods.

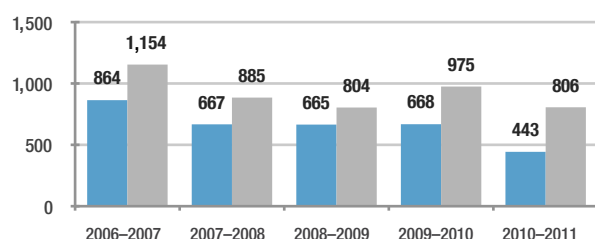
## Post-donation information

In terms of quality assurance, information provided post-donation is crucial, as it may identify situations or conditions likely to affect the safety of recipients. It may pertain to infections, the use of certain medications or risky behaviour that could compromise the safety of blood products. A withdrawal process resulting in the destruction of the products is applied systematically if information that could compromise the quality of the products is provided post-donation.

A modification to the eligibility criteria related to malaria resulted in an average reduction in withdrawals of 33% compared to the previous year, with no impact on the level of safety. Withdrawals are made in the six months following the return from the zone where malaria is endemic.

### WITHDRAWALS MADE BASED ON ALL THE INFORMATION RECEIVED POST-DONATION AND HANDLED BY QUALITY CONTROL

Withdrawals



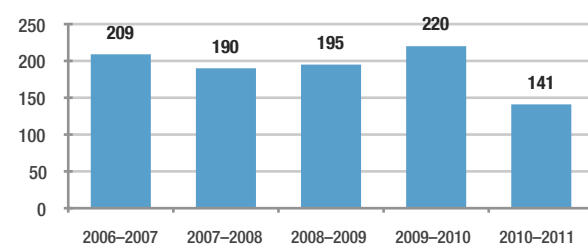
■ Including travel to regions endemic for malaria  
■ Other reasons - Excluding travel to regions endemic for malaria

## Declaration of errors and accidents

All activities related to the collection, processing, analysis and delivery of products are regulated by strictly documented standards and procedures. Any unplanned deviation, whether due to human error or another source, is recorded and analyzed in order to evaluate the risk for product safety and efficacy. Such deviations are considered errors and the products in question are immediately withdrawn from the inventory and destroyed. In this case, "accidents" are defined as situations that can occur at any time during the process despite compliance with procedures.

### TOTAL ERRORS AND ACCIDENTS

Declarations



This year, there was a 36% reduction in the total number of errors and accidents. This decrease is primarily due to the fact that transitory traceability losses are no longer considered errors and accidents since the products are relocated without consequence.

## Percentage of donations that tested positive for viral markers

There were no statistically significant variations in the number of infections recorded between 2006 and 2011, as indicated in the following table.

PERCENTAGE OF DONATIONS THAT WERE POSITIVE FOR EACH MARKER					
	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
HUMAN IMMUNODEFICIENCY VIRUS (HIV)	0.001	0.0004	0.0004	0.001	0.0004
HEPATITIS C VIRUS (HCV)	0.007	0.006	0.005	0.005	0.007
HEPATITIS B VIRUS (HBV)	0.007	0.006	0.004	0.008*	0.009 **
HUMAN T-CELL LYMPHOTROPIC VIRUS (HTLV)	0.002	0.001	0.001	0.002	0.001
SYPHILIS	0.009	0.006	0.008	0.007	0.004
<b>TOTAL DONATIONS</b>	<b>259,376</b>	<b>270,388</b>	<b>274,237</b>	<b>275,890</b>	<b>275,717</b>

\* Four donors and \*\*two donors who tested positive for HBsAg made donations a few days after having received a vaccination for Hepatitis B, which strongly suggests a false positive confirmation test caused by the vaccine protein.

## Bacterial culture

PLATELET TYPE	PRODUCTS COLLECTED	NUMBER OF CULTURES	CULTURES TESTING POSITIVE
PLATELETS FROM APHERESIS <sup>1</sup>	32,430	21,932	3
PLATELETS FROM WHOLE BLOOD <sup>2</sup> AND BUFFY COATS <sup>3</sup>	49,741	29,018	5
<b>TOTAL</b>	<b>82,171</b>	<b>50,950</b>	<b>8</b>

The number of platelet products collected by Héma-Québec increased from 70,471 to 82,171 in four years. The number of positive cultures has remained constant, despite the use of a new technology (for more details about this technology, see the section entitled “Improvements in processing methods” on page 13).

<sup>1</sup> A bacterial culture is done on platelets collected through apheresis. During a double donation, the sample is analyzed in its entirety before being divided in two.

<sup>2</sup> A bacterial culture is performed on each product.

<sup>3</sup> A bacterial culture is performed on each pool (a pool is equivalent to five buffy coats).

Products with positive results were withdrawn and destroyed.

## AUDITS

### Internal and supplier audits

The Audit department helps to ensure the safety of the supply of blood products by monitoring the compliance of the various activity sectors during internal audits. Auditing suppliers of critical materials and services also ensures that this objective is met. Depending on the level of risk of the products and services provided, the Héma-Québec team either conducts an on-site supplier audit or evaluates them through detailed questionnaires.

In 2010-2011, the Audit department conducted 49 internal audits, eight supplier audits and sent out 46 detailed questionnaires. All suppliers obtained or maintained their “approved supplier” status.

### Health Canada audit results

Every year, Health Canada representatives conduct inspections of the Montréal and Québec City facilities. The three GLOBULE Blood Donor Centres are inspected every two years. The purpose of these inspections is to verify that Québec’s supplier of blood products complies with the strictest quality and safety standards and meets its licensing requirements.

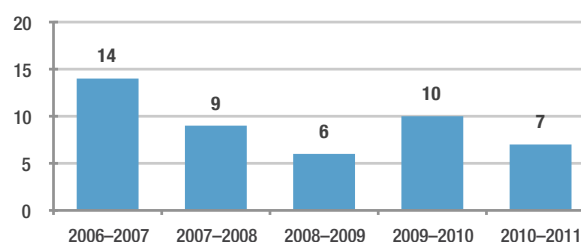
As planned, Héma-Québec’s facilities were inspected by Health Canada’s Health Products and Food Branch Inspectorate in 2010-2011. These inspections took place in Québec City in September and in Montréal in November.

For the first time, Héma-Québec was given a perfect grade during a regular Health Canada inspection. No observations were raised during the inspection of the Québec City facility. Six observations were issued for the Montréal facility and only one for the GLOBULE Blood Donor Centre at Place Versailles. Following these audits, Héma-Québec once again received praise from the inspectors for the quality of its practices and the professionalism of its staff.

Over the past four years, Health Canada has issued an average of eight observations in all for the two facilities and the three GLOBULE Blood Donor Centres.

### OBSERVATIONS MADE BY HEALTH CANADA

Observations



All were category 3 observations (low risk for the donor and the recipient of blood products).

For each observation issued, corrections have either already been made or will be made shortly.

### Regulatory training

Under the authority of the Quality and Standards division, regulatory training is an essential element of Héma-Québec’s mission. The organization must ensure that its staff is adequately trained in order to keep up to date with the various procedures to be followed.

Regulatory training is part of the requirements that must be met to comply with best practices. It is also key to maintaining the optimal quality and safety of our products.

During the year, the Regulatory Training department held 2,102 training sessions during which 1,109 staff members familiarized themselves with the new procedures in effect. Among the training activities, 915 re-certifications ensured that the staff refreshed their knowledge about current standards and procedures.

## ENSURING A SUFFICIENT SUPPLY OF LABILE BLOOD PRODUCTS

### AWARENESS CAMPAIGN DIRECTED AT CULTURAL COMMUNITIES

At present, 99% of Québec's collective blood supply is made up of white donors, while the visible minority groups represent close to 9% of Québec's population (Statistics Canada, 2006 Census). It is vital that we raise awareness about blood donation among members of the cultural communities in order to be able to meet the needs for blood groups specific to certain populations.

It should be noted that, in addition to the ABO system, which is well represented in all human blood types, there are some 30 other blood groupings on the surface of red blood cells, each of which can be found in varying proportions from one ethnic group to another, but are more similar within the same group. The chances of quickly finding a compatible donor increase substantially if the search is directed toward the blood of individuals who belong to the same ethnic group.

Héma-Québec increased its blood donation awareness raising activities among the cultural communities in 2010–2011, focusing particularly on Cegep and university students and members of associations working within the ethnic communities.



DANIEL, BLOOD DONOR

The first group targeted was Montréal's French-speaking Black community, more specifically the Haitian community, which has the largest population, in order to meet the needs of recipients with sickle cell anemia. This blood disease, which often requires numerous transfusions, is the most widespread in the world and mostly affects members of the Black community.

In order to reach this community, Héma-Québec became involved in *Black History Month*, and joined forces with the Association de l'anémie falciforme du Québec as well as the Jeune chambre de commerce haïtienne de Montréal.

Several Héma-Québec divisions and departments were involved in this major project, which resulted in an increase in the number of phenotyping tests performed by the Reference and Stem Cell Laboratory (RSCL). As a result of the efforts put forth, more than 1,500 new Black donors were recruited, including 325 with a sought-after phenotype. Since the beginning of the campaign in December 2009, close to 2,000 new Black donors have contributed to the collective blood supply.

In the long term, the purpose of this campaign is to ensure that we can count on a specific register with more than 2,500 donors from the targeted groups.

### DEVELOPMENTS IN TERMS OF COLLECTION METHODS

#### Double red blood cell collection technology

Double red blood cell collection increased by 40% compared to the previous year, while the number of collections increased from 1,697 to 3,973. As a result of double red blood cell collection, a donor can now make a double red blood cell donation in one blood draw. This is particularly useful in terms of increasing the reserves of red blood cells in blood groups for which there is more demand, such as type O, Rh negative.

#### Multiple collection

The number of products obtained through multiple blood component collection grew 400% over the last year, for a total of more than 23,000. This increase can be attributed, among other things, to the implementation of this type of collection in the Montréal and Laval GLOBULE Blood Donor Centres in spring 2010. It should be noted that the program was launched in the Québec City GLOBULE Blood Donor Centre in November 2009.

Multiple collection makes it possible to collect a specific combination of cells, platelets or plasma, all in a single donation. In other words, it maximizes each donation based on the donor's blood group.

## ADOPTION OF THE 2011–2014 SUPPLY STRATEGY

The Operations division has developed the supply strategy covering the period from 2011 to 2014. This strategy, which focuses on eight strategic choices, was adopted last February.

In terms of the safety of the supply, the organization will, among other things, pay particular attention to the supply of platelets, a blood component for which the demand is rapidly increasing and which presents special challenges since it expires quickly.

Attention will also be given to technologies that help to improve practices, specifically with respect to the procedure for registering donors and the administration of the blood donation questionnaire. Moreover, the strategy identifies certain avenues in terms of new information technologies, which could provide interesting opportunities, particularly with respect to reaching a new pool of donors.

Although the results indicate that the benefits are interesting and the various collection methods in use are pertinent, the strategy clearly identifies certain challenges to be faced, particularly in terms of cost control.

## IMPROVEMENTS IN PROCESSING METHODS

### Implementation of the buffy coat method

Last October, after more than two years in the works, the buffy coat method of producing platelets from whole blood was implemented. This change in the processing method affected most sectors, from collection to distribution to the hospitals.

Héma-Québec is the first supplier of blood products in North America to use the latest CaridianBCT (Atreus®/Orbisac®) technology in its processing of blood products. As a result of this modernization, the staff enjoys increased flexibility that allows, among other things, for the preparation of three times more products within the same amount of time. In fact, where we used to have eight hours after the collection to produce platelet concentrates from whole blood, we now have 24 hours because the blood bags are quickly cooled immediately following the collection. This significant improvement means that we can travel greater distances to collect blood and, as a result, reach a larger pool of donors.

Moreover, using this technology enables Héma-Québec to simplify the tasks of our human resources by reducing the number of manual operations and, in turn, the possibility of error. In short, this technology has many advantages and in the long run benefits the patients who need blood components to recover their health.



Atreus® equipment.



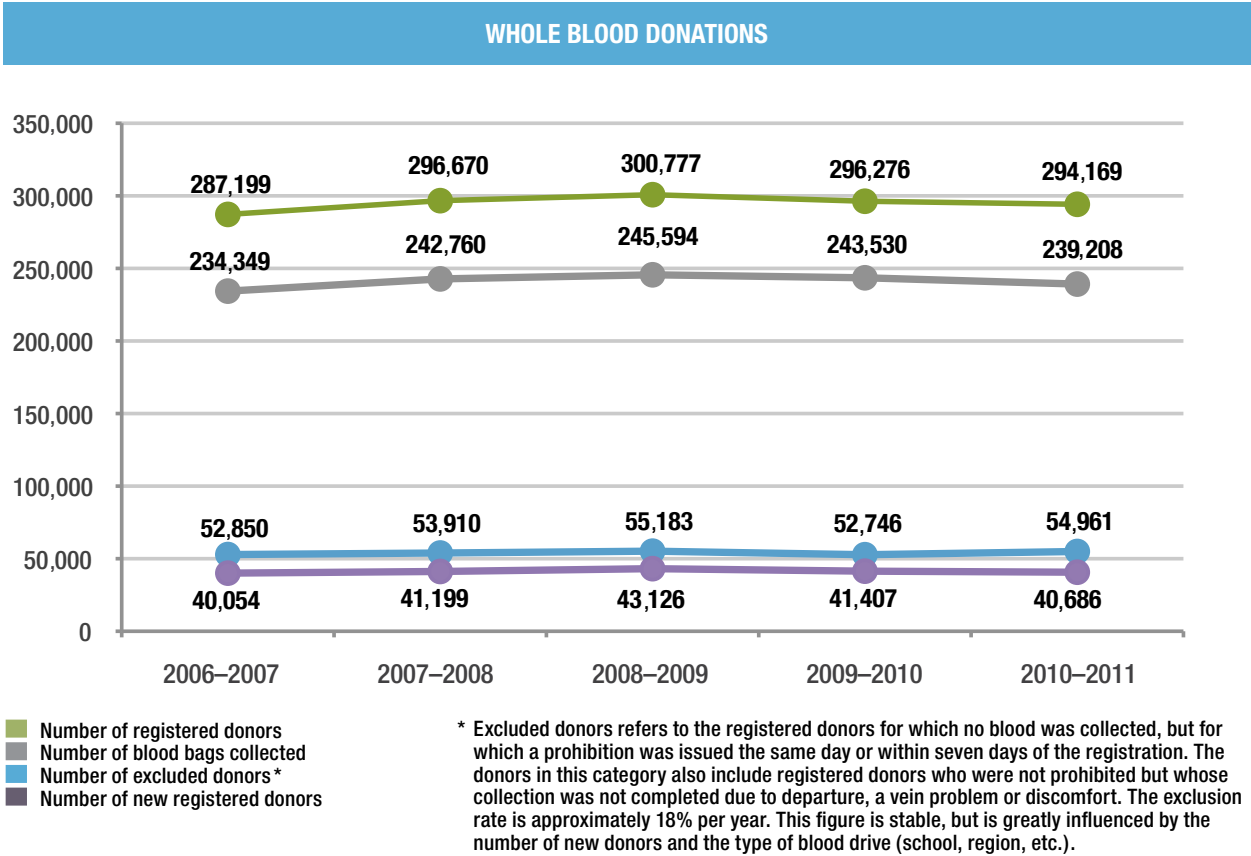
Implementation of automated extractors

In October 2010, the processing laboratory at the Québec City facility implemented MacoPress® automated extractors. The same equipment was also put into use at the Montréal facility in March 2011. This new technology optimizes the separation of red blood cells and plasma through the use of precise optic sensors and welding heads that seal the various tubes during separation. This has resulted in a significant increase in quality and productivity.

RESULTS

Whole blood donations

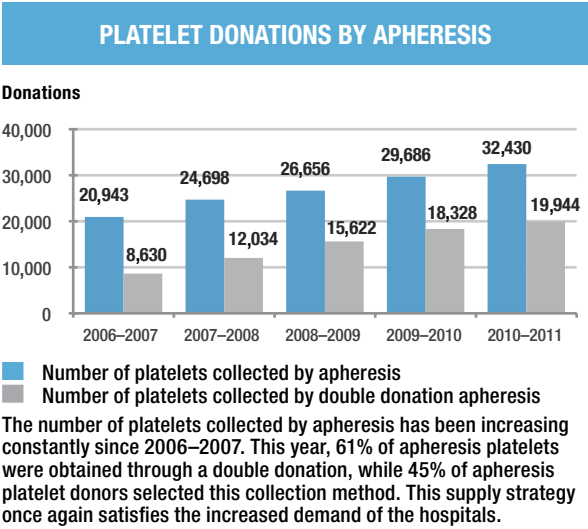
As a result of our improved blood donation collection processes, we were able to reduce the number of donations to be collected by reducing the quantity of rejected and expired products. This advance enabled us to increase our deliveries to hospitals while requiring fewer new donors.



Donation by apheresis

Platelet donations

Apheresis collection techniques are at the heart of the platelet supply strategy. In particular, apheresis serves to reduce the number of donors by collecting the equivalent of five products from a single donor. Since it is possible for the donor to make a double donation, using this technology means that we can obtain a significantly larger quantity of a blood component from a single donor than with the traditional donation of whole blood. This is a major asset in terms of supply.

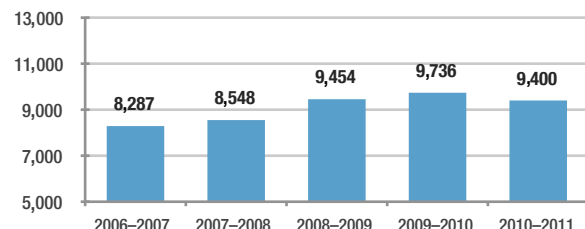


## Plasma donations

The advantages of apheresis are just as significant for the plasma supply. The number of collections by apheresis is maintained at a stable level that satisfies the needs of the hospitals.

### PLASMA DONATIONS BY APHERESIS (500 ml)

Donations



## PERFORMANCE

### Process yield

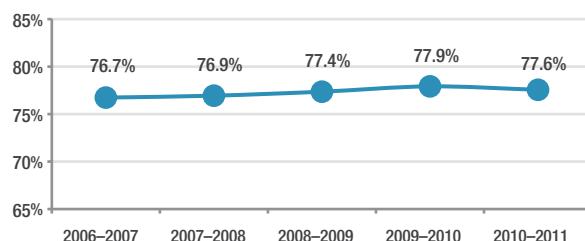
The process yield rate provides an overall view of the efficiency of the various methods used to supply hospitals with the blood products and components they need. Mobile blood drives generate 86% of blood donations and are the main source of the supply. Other sources include targeted blood drives, donations by appointment and blood collections by the mobile unit. Lastly, we must include all of the donations collected at the GLOBULE Blood Donor Centres, an important component of Héma-Québec's supply strategy. A large portion of these donations are specialized (apheresis, double red blood cell, multiple products) and made by appointment by dedicated donors.

The overall process yield rate helps, for example, to evaluate the results of a blood drive based on fixed objectives: the number of donations collected vs. the number of donors solicited. This yield is influenced by a range of variables, including human resources planning for blood drives, the achievement of donor recruitment objectives, donor exclusions, various product rejections as well as their expiration date.

The table below shows the yield over the past five years:

### PROCESS YIELD RATE

Rate



The consistency of the process yield rate over the past five years can be attributed to a significant reduction in the loss rate of packed red blood cells during production and a substantial reduction in the expiration rate.

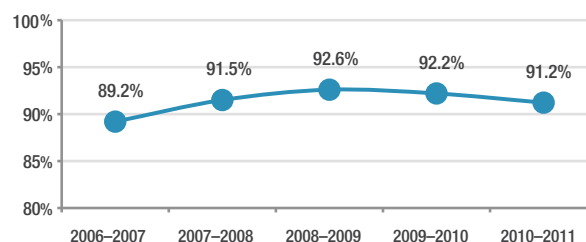
### Yield of mobile blood drives

The yield rate of mobile blood drives is a measure of the number of individuals who actually give blood vs. the set objectives (see table below).

The success of mobile blood drives depends in large part on human resources planning, coordination with the organizing committees and improved supply planning.

### YIELD RATE OF MOBILE BLOOD DRIVES

Rate



The number of targeted blood drives has increased tenfold in six years. The advantage of such blood drives is that they can be used to collect specific blood groups and ensure the diversity of the collective blood supply. However, targeted blood drives bring a small pool of donors together at a time, which slightly reduces the overall yield of the mobile blood drives in terms of the number of individuals who give blood per blood drive.

### Effectiveness of GLOBULE Blood Donor Centres

The GLOBULE Blood Donor Centres accommodate an average of 1,500 donors per week and are an important element in Héma-Québec's supply strategy since all types of specialized donations are performed in these centres: apheresis, double red blood cells and multiple products.

## DONATIONS – GLOBULE BLOOD DONOR CENTRES

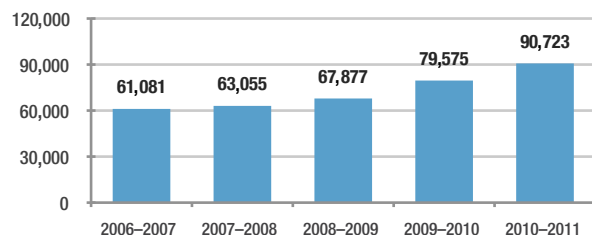
	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011
WHOLE BLOOD	31,788	29,596	31,698	34,751	30,473
PLATELETS BY APHERESIS	20,943	24,698	26,656	29,686	32,430
PLASMA BY APHERESIS – 500 ml	8,287	8,548	9,454	9,736	9,400
PACKED RED BLOOD CELLS BY APHERESIS (INCLUDING MC*)	–	–	–	3,411**	8,494**
PLASMA BY APHERESIS 250 ml (INCLUDING MC*)	–	–	–	1,827**	9,836**
GRANULOCYTES	63	213	69	164	90
<b>TOTAL AMOUNT COLLECTED</b>	<b>61,081</b>	<b>63,055</b>	<b>67,877</b>	<b>79,575</b>	<b>90,723</b>

\*MC: donations by multiple collection.

\*\*This type of donation started in 2009–2010.

## INCREASE IN THE NUMBER OF PRODUCTS COLLECTED IN THE GLOBULE BLOOD DONOR CENTRES

Products collected



The growth can be attributed to the multiple products (+8,000) as well as platelets by apheresis (+3 000) since 2008–2009.



## Yield of processing methods

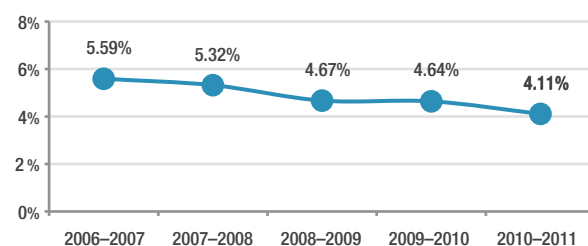
Several performance indicators for the supply strategies are compiled to obtain an overall assessment of process performance. The process yield rate specifically includes the following indicators:

- Mobile blood drive yield rate
- Rate of red blood cells lost during production
- Rate of red blood cell expiration

The improvement of the processes related to all the activities of the Operations division—from supply planning to delivery to hospitals—has had a significant beneficial effect on the process yield rate, which includes the rate of red blood cells lost during production, the red blood cell expiration rate and the expiration rate for equivalent platelets<sup>1</sup>. The process yield rate has consistently improved over the past five years.

## RATE OF PACKED RED BLOOD CELLS LOST DURING PRODUCTION

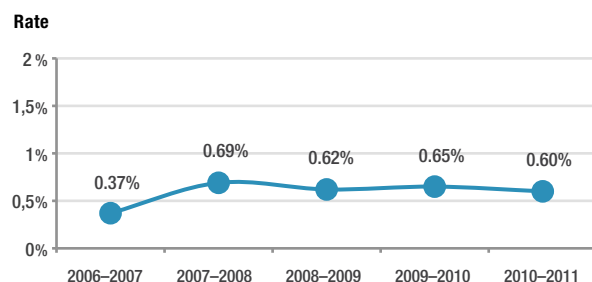
Rate



Progress was made again this year. However, it is inevitable that the extent of the improvements will decrease from year to year. In total, the loss rate has decreased 26.4% since 2006–2007.

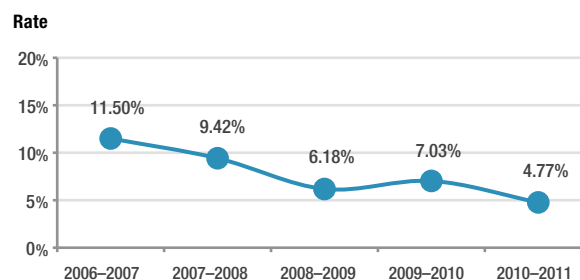
<sup>1</sup> The term “equivalent platelets” refers to the total of the platelets from whole blood and the platelets collected by apheresis.

### EXPIRATION RATE OF PACKED RED BLOOD CELLS



The expiration rate of packed red blood cells remained below 1% this year. This is the result of the good inventory management practices implemented. It should be noted that the lifespan of red blood cells is 42 days.

### EXPIRATION RATE OF EQUIVALENT PLATELETS\*



Sound management practices, combined with a targeted supply to hospitals, helped to keep the expiration rate very low. It should be mentioned that the lifespan of platelets is five days.

## Deliveries to hospitals

### LABILE BLOOD PRODUCTS DELIVERED TO HOSPITALS

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
<b>TOTAL PACKED RED BLOOD CELLS</b>	<b>223,100</b>	<b>227,581</b>	<b>231,958</b>	<b>233,446</b>	<b>236,699</b>
PLATELET POOLS <sup>6</sup>					3,387
WHOLE BLOOD PLATELETS	46,776	31,631	33,503	31,770	21,396
PLATELETS COLLECTED BY APHERESIS	20,078	23,636	25,153	27,990	30,550
EQUIVALENT PLATELETS (APHERESIS + POOLS X5) <sup>1</sup>	100,390	118,180	125,765	139,950	169,685 <sup>7</sup>
<b>TOTAL PLATELETS <sup>2</sup></b>	<b>147,166</b>	<b>149,811</b>	<b>159,268</b>	<b>171,720</b>	<b>191,081</b>
PLASMA	47,457	51,045	53,199	53,040	41,771
PLASMA COLLECTED BY APHERESIS 250 ml <sup>3</sup>	—	—	—	1,397	8,997
PLASMA COLLECTED BY APHERESIS 500 ml	7,727	7,583	6,877	7,341	6,047
EQUIVALENT PLASMA (APHERESIS X2) <sup>4</sup>	15,454	15,166	13,754	14,682	12,094
<b>TOTAL PLASMA <sup>5</sup></b>	<b>62,911</b>	<b>66,211</b>	<b>66,953</b>	<b>69,119</b>	<b>62,862</b>
<b>CRYOPRECIPITATES</b>	<b>15,793</b>	<b>15,824</b>	<b>17,426</b>	<b>20,508</b>	<b>20,913</b>
<b>CRYOPRECIPITATE SUPERNATANTS</b>	<b>7,792</b>	<b>7,546</b>	<b>9,358</b>	<b>6,742</b>	<b>4,278</b>
<b>GRANULOCYTES</b>	<b>60</b>	<b>205</b>	<b>69</b>	<b>164</b>	<b>90</b>
<b>TOTAL</b>	<b>456,822</b>	<b>467,178</b>	<b>485,032</b>	<b>501,699</b>	<b>515,923</b>

To respond to hospital demand, collections of platelets were increased by slightly over 11%. Moreover, changes to medical practices in hospitals resulted in a significant decrease in the demand for plasma products. The delivery of red blood cells remained stable.

<sup>1</sup> Five blood donors are needed to obtain a quantity of platelets equivalent to that obtained with a single donation by apheresis. "Equivalent platelets (apheresis + pools X5)" is therefore five times the number of products found on the line "platelets collected by apheresis" and the line "platelet pools".

<sup>2</sup> "Total platelets" refers to the addition of "whole blood platelets" and "equivalent platelets (apheresis + pools X5)".

<sup>3</sup> This type of collection started in 2009-2010.

<sup>4</sup> The plasmapheresis procedure makes it possible to collect a volume of plasma twice (500 ml) that of a whole blood donation (250 ml). "Equivalent plasma (apheresis X2)" is therefore twice the number of products indicated on the line "plasma by apheresis 500 ml".

<sup>5</sup> "Total plasma" is the sum of "plasma", "plasma collected by apheresis 250 ml" and "equivalent plasma (apheresis X2)".

<sup>6</sup> Platelet pools started in October 2010.

<sup>7</sup> 191,081 equivalent platelets represents 38,216 doses.

## DONOR RETENTION

### Continued positive public perception

#### Pleasant advertising campaign

Héma-Québec's advertising campaign continues to receive the approval of Quebecers. The images of donors wearing shirts with one short sleeve and one long sleeve appealed to 90% (TV) and 85% (posters) respectively of those who responded to a survey conducted by SOM. These results are similar to those of last year.

Once again, it was revealed that intentions to give blood over the coming year are much higher in those who have seen the advertising.

In terms of the younger generation, 42% of young people aged 18 to 24 believe that their chances of giving blood over the next 12 months is "very high" or "somewhat high."

Although the campaign seems to be running out of steam to a certain extent, Héma-Québec was recognized as the organization behind the campaign more than ever this year: 35% compared to 17% last year.

#### Quebecers trust Héma-Québec

An omnibus survey, conducted each spring for 12 years now, serves to evaluate the public's perception of Héma-Québec. The variables evaluated include Héma-Québec's popularity, as well as public trust in the management of the collective reserve.

The 2011 edition of this survey indicated that the public still has a very positive opinion of Héma-Québec, with

87% of respondents stating that they have a good opinion of the organization. While Héma-Québec's overall popularity is considerable, it has remained stable since 2002.

A vast majority (94%) of the respondents that know of Héma-Québec still believe that the organization does all it can to ensure the safety of the blood collection and distribution system and has done so since it was created. In the same respect, concern with regard to giving or receiving blood products has been gradually declining since 2007.

### Blood product donor recognition

The generosity and commitment of donors have been central to Héma-Québec's success in fulfilling its primary mission. To thank them and underscore their vital contributions, each year the company organizes a series of donor recognition evenings.

First, five events honouring donors of 100+ donations were held in various regions of Québec. Of the 772 donors invited, 512 took part. They were presented with certificates of honour, glass trophies (reserved for donors of 200+ donations) or prestigious awards (reserved for donors of 800+ donations).

Moreover, the research donor recognition evening honoured the contribution of 76 individuals who made donations to various scientific research projects. In general, these donors cannot or are no longer eligible to give blood but wish to contribute nonetheless to improving the quality and effectiveness of Héma-Québec's services.



Jacques Paquin donated his blood for the thousandth time at the Laurier Québec Globule Blood Donor Centre on February 7, 2011. He is seen here (striped shirt, front row) surrounded by the staff of the Globule Centre, the President and Chief Executive Officer, Dr. Francine Décarie (on his left) and a few relatives.



### Creation of the title “Blood donor grand ambassador”

With the recent implementation of new collection methods, such as the double red blood cell technology and multiple collection, it is becoming more and more likely that the most faithful blood donors will surpass the incredible threshold of 1000+ donations.

To highlight the most exceptional contribution of these donors, Héma-Québec now gives them the title of “Blood Donor Grand Ambassador” in addition to official recognition.

### Second donor honoured for 1000+ donations

A second donor, Jacques Paquin, from the South Shore of Québec, reached the milestone of 1,000 donations in February 2011. This remarkable citizen has been making donations on a weekly basis since the early 1980s, specializing in plasma donations by apheresis.

### The number of young blood donation ambassadors is growing

Since it was launched in April 2009, the BLOOD RED! Educational kit has been distributed to more than 300 teachers at primary and secondary schools in Québec. This initiative has led to the organization of 231 blood drives in schools, which involved close to 29,000 donors, 18% of which were between the ages of 30 and 39, an age group that represents only 13% of donors at all other blood drives.

It should be noted that this kit is primarily intended to be a learning tool for children aged 9 to 13. The goal is to inform students and make them aware of the importance of giving blood, to foster the development of a new generation of donors and blood drive organizers, and to contribute to the training of future citizens who are responsible and involved.

Héma-Québec teamed up with the *Institut national de recherche scientifique* (INRS) to monitor the deployment of the kit in the various regions of Québec and measure its impact. The research project is underway and will continue for a period of three years, until 2013.

### National Blood Donor Week

*National Blood Donor Week* is organized around *World Blood Donor Day*, which is celebrated on June 14 in more than 80 countries around the world. In 2010, the theme for the two events was: *New Blood for the World*. In addition to reminding people about the importance of blood donation and blood workers throughout Canada, *National Blood Donor Week* is intended to thank all those who help maintain the collective blood supply.

Several actions were taken as part of this third annual event, which took place from June 14 to June 20:

- Television hosts Sébastien Benoit and Pénélope McQuade and athlete and businessman Bruny Surin agreed to take on the cause of blood donation. For the first time since the existence of *National Blood Donor Week*, the top billed stars that were chosen went beyond just making an appearance and became veritable spokespeople, sending the message loud and clear throughout the province: “*This summer, lend an arm.*”



- Several daily newspapers highlighted their support for the cause of blood donation. *La Presse*, *Le Journal de Montréal* and *Le Journal de Québec* included red in their logos, while *The Gazette* used the image of a newspaper boy wearing a shirt with one sleeve cut off. The campaign was also deployed on TV with a count-down banner during the show *Bons baisers de France* on Radio-Canada.

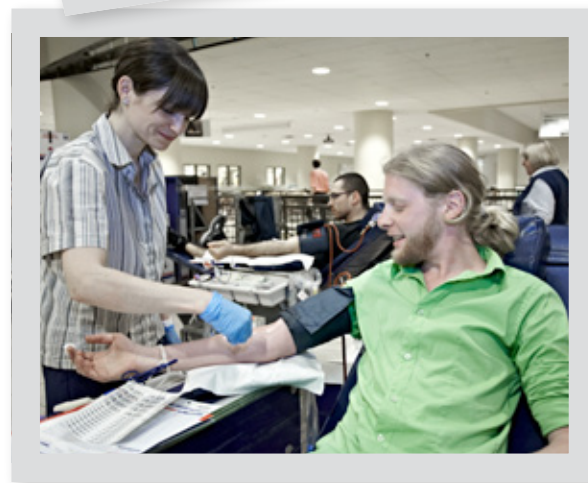


A survey on advertising popularity and the impact of *National Blood Donor Week* revealed that television is the media that contributed the most to awareness of the *National Blood Donor Week* advertising. In fact, 46% of the respondents stated that they had seen or heard the campaign on TV. Billboards and posters ranked second (26%), almost equal with the radio (25%), followed by newspapers (22%). Moreover, seven Quebecers out of ten said that the advertising made them aware of the importance of giving blood. In fact, one-quarter of those who had seen the advertising said that it caused them to make a blood donation or increased their intention to do so.

### Blood drives in Cegeps and universities

Since its inception, Héma-Québec has relied in the support of the Association of Blood Donation Volunteers (ABDV), a group representing blood donors and volunteers in all 13 regions of Québec. In addition to liaising between the regions and Héma-Québec, the ABDV actively promotes blood donation, especially among college and university students, demonstrating its effectiveness in recruiting new donors.

The presence and awareness-raising efforts of ABDV volunteers during campus blood drives achieve excellent results. In total, close to 27,700 donors were welcomed in the province's Cegeps and universities in 2010–2011. Moreover, the yield rate of campus blood drives was 96%, greater than the average for regular mobile blood drives, which was 91.2% this year.



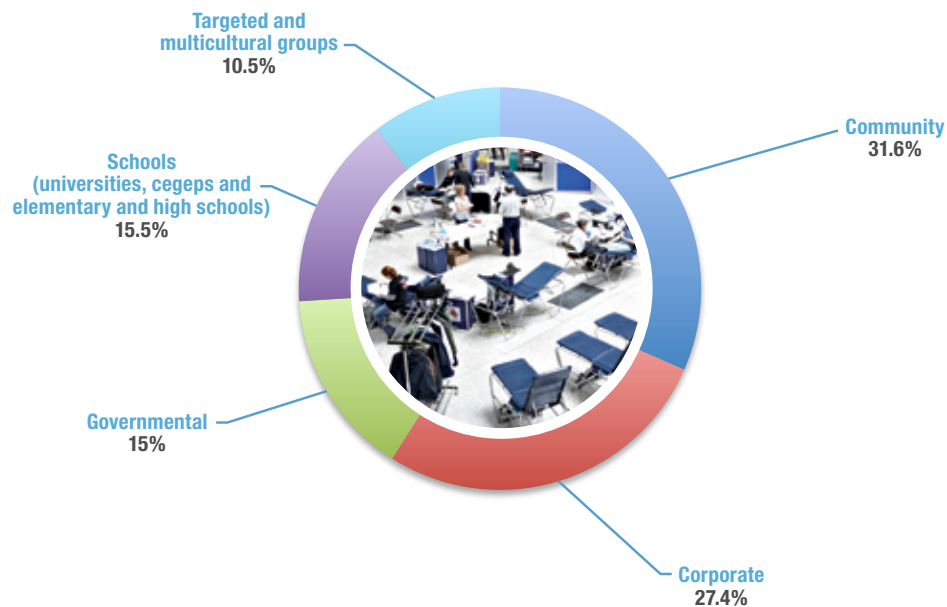
Samuel Charest is one of many students who cares about sharing the priceless gift of health. He is seen here donating blood at a blood drive held at the *École de technologie supérieure*.

### BLOOD DRIVES IN UNIVERSITIES AND CEGEPS

	2007–2008	2008–2009	2009–2010	2010–2011
BLOOD DRIVES	173	221	202	215
OBJECTIVES	21,985	27,240	26,025	26,810
REGISTERED DONORS	21,936	26,694	25,264	25,697
<b>OVERALL PERCENTAGE OF OBJECTIVES ACHIEVED</b>	<b>99.8%</b>	<b>98%</b>	<b>97.1%</b>	<b>95.8%</b>

It should be noted that the slight decrease in the percentage of objectives attained may be the result of various factors, including cancellations of blood drives on certain university campuses.

### DISTRIBUTION OF BLOOD DRIVES BY SECTOR

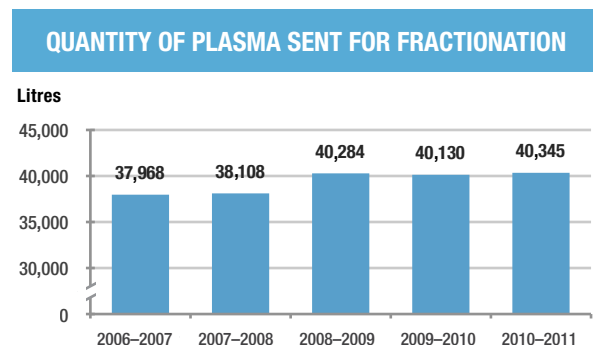


## STABLE PRODUCTS

The Stable Products division is responsible for supplying hospitals with plasma products and recombinant products once Québec's Ministère de la Santé et des Services sociaux has authorized their distribution.

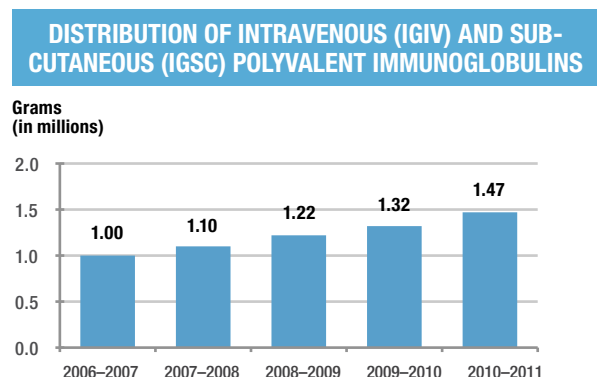
The stable products distributed by Héma-Québec include albumin, polyvalent immunoglobulins, specific immunoglobulins, coagulation products and biosurgery products.

### QUANTITY OF PLASMA SENT FOR FRACTIONATION

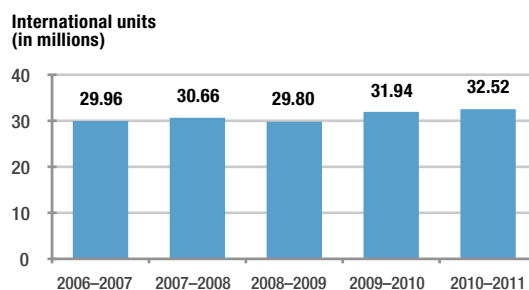


Since last year, Héma-Québec has been supplying a third intravenous immunoglobulin formula. This addition allows it to respond to a greater need for accessibility expressed by patient groups and clinicians, to diversify its supply and to be prepared in case of a supply shortage.

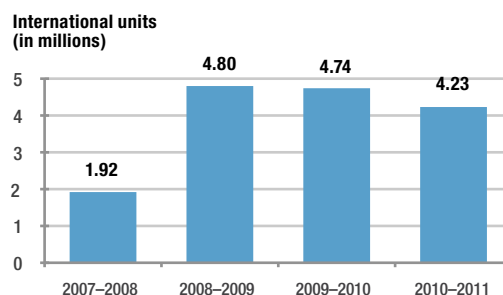
### DELIVERIES OF STABLE PRODUCTS TO HOSPITALS



### DELIVERIES OF RECOMBINANT ANTIHEMOPHILIC FACTOR VIII



### DELIVERIES OF PLASMA FACTOR VIII



## REFERENCE AND STEM CELL LABORATORY

### ISBT 128 STANDARD IMPLEMENTED IN THE INFORMATION SYSTEM OF THE MEDICAL AFFAIRS LABORATORIES

Following the measures implemented to maximize the safety of its supplies, Héma-Québec extended its application of ISBT 128 (international standard for labelling blood components) in 2011, by implementing it in the SILAM system (Medical Affairs laboratory information system). By doing so, the Reference and Stem Cell Laboratory (RSCL) became one of the few laboratories in the stem cell field to apply this standard in North America.

This improvement significantly reduces the number of errors that can be made during data entry, thus increasing product safety. Moreover, the standardization of the coding system facilitates the distribution of stem cells on an international scale.

### RENEWAL OF ISO 15189 CERTIFICATION

As part of its medical biology analyses, the Reference and Stem Cell Laboratory (RSCL) must be certified under ISO 15189. The audit for the renewal of this certification was conducted by the Bureau de normalisation du Québec (BNQ) in January at the Montréal facility and in February at the Québec City facility. No observations were issued concerning the performance of the analyses; this was a first for the agency performing the inspection. Fifteen minor observations were issued with respect to quality system management, pre-analyses and post-analyses. All of the corrections were made.

### ASHI (AMERICAN SOCIETY FOR HISTOCOMPATIBILITY AND IMMUNOGENETICS) ACCREDITATION

Since September 1, 2010, the HLA laboratory is also ASHI certified. This certification is necessary for HLA analysis of cord blood, donors from the stem cell registry and patients waiting for transplants.

An audit on compliance with this very specific standard was conducted before Héma-Québec obtained this new certification. Seven observations were issued, including five which were moderate and two minor. Corrections were made in order to obtain ASHI certification.

Obtaining this certification, along with ISO 15189 certification, confirms the role and the desire of the RSCL to be recognized as a leading-edge laboratory on an international scale.

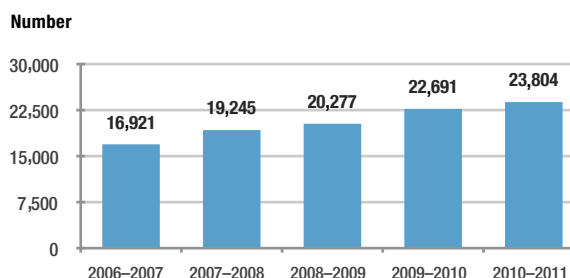
### FACT (FOUNDATION FOR THE ACCREDITATION OF CELLULAR THERAPY) ACCREDITATION

The application for FACT (Foundation for the Accreditation of Cellular Therapy) certification was submitted on March 21. This certification will give Héma-Québec the international recognition it needs to distribute cord blood abroad. The certification audit should be conducted during the summer of 2011.

### CONTINUED GROWTH FOR THE REFERENCE AND STEM CELL LABORATORY

The Reference and Stem Cell Laboratory continues to meet the growing demand for phenotyped blood (+5%), erythrocyte genotyping analyses (+8%) and HLA typing (+9%). In terms of case studies in erythrocytic immunology (-11%), we have observed a decrease in the number of cases received, but an increase in their complexity. This is in keeping with the mission of the Reference and Stem Cell Laboratory to play a specialized role.

#### PHENOTYPING INVOICED TO QUÉBEC HOSPITALS





NUMBER OF SPECIALIZED ANALYSES PERFORMED					
	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011
ERYTHROCYTIC IMMUNOLOGY	1,229	1,519	1,261	1,621	1,435
PLATELET IMMUNOLOGY	236	267	344	333	374
ERYTHROCYTE GENOTYPING	1,237	1,324	2,103	3,243	3,488
HLA A, B, C, DR, DQ TYPING <sup>1</sup>	–	–	4,434	5,224	5,672

<sup>1</sup> The results are only provided for the last three years due to a change in the compilation method from the previous years.

## HUMAN TISSUES

### ENSURING A SAFE SUPPLY OF HUMAN TISSUES

#### RENEWAL OF ISO 13485 CERTIFICATION

As part of its operations to produce human valve allografts for transplant, Héma-Québec must be certified under ISO 13485 to obtain approval from Health Canada for this medical instrument. A quality management supervision audit was conducted in February 2011. One single minor observation was issued during this audit. The correction was made and approved. The lead auditor recommended the extension of this certification.

#### AATB (AMERICAN ASSOCIATION OF TISSUE BANKS) ACCREDITATION

The American Association of Tissue Banks conducted an audit last year. One observation was made and the proposed corrective measure will be implemented in accordance with the established schedule. It should be reminded that the AATB audits are performed every three years.

#### RESULTS OF HEALTH CANADA AUDITS FOR HUMAN TISSUES

Health Canada performed a first inspection at the Québec City facility for the human tissue bank in April 2010. The purpose of the inspection was to verify compliance with the *Safety of Human Cells, Tissues and Organs for Transplantation Regulations*. Six observations were made by Health Canada and the corrective measures proposed by Héma-Québec were accepted.

#### QUALITY CONTROL

In order to ensure compliance with the safety standards in effect, samples of the human tissues that are collected are submitted to sterility tests. Moreover, the samples collected after processing are used to verify the quality and compliance of tissue processing and disinfecting methods.

QUALITY CONTROL OF HUMAN TISSUES			
TYPE OF PRODUCTS	TESTS PERFORMED	NUMBER OF PRODUCTS TESTED	REJECTIONS (% OF UNACCEPTABLE MICRO-ORGANISMS)
SKIN TISSUE	Pre-processing microbiological culture	110	2.7%
	Post-processing microbiological culture	108	2.8%
MUSCULOSKELETAL TISSUE	Pre-processing microbiological culture	283 <sup>1</sup>	2.1%
	Post-processing microbiological culture	409 <sup>1</sup>	0.3%
HEART TISSUE	Pre-processing microbiological culture	77	11.4% <sup>2</sup>
	Post-processing microbiological culture	77	13% <sup>3</sup>

<sup>1</sup> For this type of human tissue, processing is delayed.

<sup>2</sup> Regarding the pre-treatment microbiological culture, the high percentage of unacceptable micro-organisms on the heart tissues compared to other tissues can be explained by the fact that the sampling methods used in the collection of heart tissues are more sensitive than those used in the collection of other tissues. Furthermore, it should be noted that intestinal bacteria migrate toward the lymphatic and vascular systems following death and that the first tissues affected by this migration are the heart tissues.

<sup>3</sup> The work to optimize the heart valve disinfection process helped to reduce their rejection rate. In fact, the percentage of unacceptable micro-organisms for heart tissues decreased by half during the post-treatment microbiological culture compared to last year. Moreover, the high percentage of unacceptable micro-organisms on heart tissues compared to other tissues can be explained by the fact that no bacteria are accepted on heart tissues during packaging. The situation is different for skin tissues, for which the normal flora is accepted, as well as musculoskeletal tissues, which are subjected to a terminal irradiation at the end of the process. This irradiation cannot be performed on heart tissues.

### CORNEOLOGIST ADVISORY COMMITTEE (CAC)

Héma-Québec held three meetings with a dozen cornea specialists in 2010–2011. The purpose of the dialogues held within this *corneologist* advisory committee was to assess and validate the needs and cornea supply criteria with specialists.

In the same lines, the Human Tissues Operations department is currently working on putting together an advisory committee of orthopedists—who specialize in bone and tendons—for the coming year.

## ENSURING A SUFFICIENT SUPPLY

HUMAN TISSUE DISTRIBUTION					
	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011
<b>HUMAN TISSUE DISTRIBUTION</b>					
HEART VALVE AND VEIN ALLOGRAFTS WITHOUT VALVES	13	33	35	58	66
SKIN TISSUE		337	948	926	1,632
TENDONS		1	125	108	229
SPONGY BONES, INCLUDING LYPHILIZED	249	245	299	299	419
COMPACT BONES AND FEMORAL HEADS	102	114	183	170	219
HUMAN TISSUE DISTRIBUTION SUB-TOTAL HQ	364	730	1,590	1,561	2,565
IMPORTED		146	376	664	544
<b>TOTAL HUMAN TISSUE DISTRIBUTION</b>	<b>364</b>	<b>876</b>	<b>1,966</b>	<b>2,225</b>	<b>3,109</b>
<b>OCULAR TISSUE DISTRIBUTION</b>					
LOCAL CORNEAS	–	–	–	151 *	170
IMPORTED CORNEAS	–	–	–	255 *	429
<b>TOTAL CORNEA DISTRIBUTION</b>				<b>406</b>	<b>599</b>
<b>DISTRIBUTION GRAND TOTAL</b>	<b>364</b>	<b>876</b>	<b>1,966</b>	<b>2,631</b>	<b>3,708</b>

\* Refers to the year in which the distribution began.



The auxiliary technologist, Déo Tabu Imaniragwa, is preparing the necessary material for the collection of human tissues.

## **DISTRIBUTION OF HUMAN TISSUES: A SIGNIFICANT INCREASE!**

The distribution of human tissues increased by 41% in the last year. Including imports, the total number of human tissues distributed was 3,708 in 2010–2011, compared to 2,631 for the previous year.

Growth was sustained for all types of tissues, but particularly for tendons (+110%) and skin tissues (+76%). The distribution of corneas increased by 48% compared to 2009–2010, for a total of 599. Lastly, the number of heart valves distributed increased by 14%, going from 58 in the previous year to 66 this year. Considering the global shortage for this type of product and the difficulty in obtaining referrals, this performance is excellent. This growth can be attributed in part to the implementation of a new valve disinfection technique (see hereinafter “New valve disinfection methods”).

## **RISE IN REFERRALS BY HEALTH-CARE PERSONNEL**

Human tissues<sup>1</sup> were collected from close to 800 donors last year. Moreover, more than 1,500 referrals<sup>1</sup> were received from hospitals, helping to maintain the increased level of distributions (see above “Distribution of human tissues: a significant increase!”).

### **Pilot project for donor referrals**

As part of a pilot project initiated at Hôpital l’Enfant-Jésus de Québec, Héma-Québec is testing a new human tissue donor referral strategy by targeting partner hospitals, following the model used for the cord blood supply.

A Héma-Québec employee speaks to the families about human tissue donation and helps the health-care personnel support and guide families throughout the process. Moreover, a “guide for families and loved ones” was prepared in cooperation with the Public Affairs and Marketing team in order to facilitate the work of the health-care personnel who help the families. The results of this pilot project should be disclosed in June 2011.

## **THE QUÉBEC CITY FACILITY NOW COLLECTS CORNEAS**

After beginning the collection of ocular tissue at the Montréal facility two years ago, the human tissue team set up an eyeball collection team at the Québec City facility. Its purpose is to respond to the need for cornea transplants in the Québec City region, where there is a great demand. The new team has already produced good results in the field and this should translate into an increase in the number of corneas available for transplant.

## **NEW VALVE DISINFECTION METHODS**

A new procedure for disinfecting heart valves, implemented in June 2010, has enabled Héma-Québec to be more efficient by rejecting fewer products and has increased the number of allograft valves available for surgeons.

After analyzing the practices of other tissue banks throughout the world, verifying the regulations, assessing the risk, and presenting this to the safety committee, the Human Tissues Operations division modified its procedures. The human tissues team, in collaboration with the research and development operational test group, had previously demonstrated the efficiency of the new measures.

## **CREATION OF AN ORGAN AND TISSUE DONATION CONSENT REGISTRY**

Since February 28, 2011, Québec citizens have a new tool to indicate their intention to donate their organs and tissues after death. Now, all they have to do is complete the “Consent to organ and tissue donation” form distributed by the *Régie de l’assurance maladie du Québec* (RAMQ) when it is time for their cards to be renewed.

The consent forms received are registered in the *Registre des consentements au don d’organes et de tissus*: a centralized registry managed by the Régie and created following the adoption of Bill 125 last December. The information transmitted to the Régie is kept confidential. At the appropriate time, Québec-Transplant and Héma-Québec can quickly verify, at the request of the physician or an authorized person, if the consent has been registered.

The Stem Cells, Human Tissues and Reference Laboratory Operations as well as the Legal Affairs and Public Affairs and Marketing divisions were all involved in this matter. Before Bill 125 was adopted, Héma-Québec presented a brief to the parliamentary committee of the National Assembly. Once the bill was adopted, it helped harmonize the information held by the RAMQ, Québec-Transplant and Héma-Québec.

It should be noted that people can also indicate their consent for organ and tissue donation by signing the RAMQ sticker and placing it on the back of their health insurance cards or by entering their decision in the organ donation consent registry managed by the *Chambre des notaires du Québec*.

<sup>1</sup> All tissues combined, including ocular tissues.

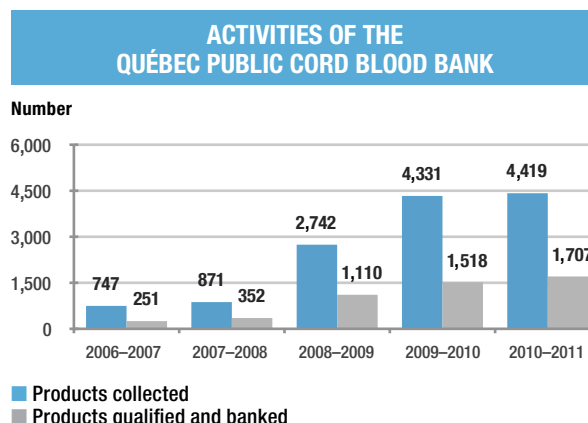
## HEMATOPOIETIC STEM CELLS

### ENSURING A SAFE AND SUFFICIENT SUPPLY OF HEMATOPOIETIC STEM CELLS

#### PUBLIC CORD BLOOD BANK CONTINUES TO GROW

As a result of numerous awareness-raising efforts focused on future mothers and the obstetric staff at participating hospitals, the public cord blood bank continued to grow at a fast pace. When the initial business plan was submitted, the objective was 1,000 new cords. The results greatly surpassed expectations, since 1,707 new cord blood units were added to the bank. This represents an increase of more than 12% compared to the previous year. Since the creation of the bank in 2004, Héma-Québec has managed to qualify and make available for transplant more than 5,000 units of cord blood.

Moreover, in order to ensure an adequate representation of the cultural communities in Québec, the public cord blood bank signed an agreement with an eighth partner hospital to collect cord blood donations. *Hôpital du Sacré-Cœur de Montréal* (HSCM) was targeted since 80% of the mothers who give birth there are not Caucasian.



The objective is to maintain a collection qualification rate comparable to other cord blood banks around the world, namely 40%. In order to achieve this, Héma-Québec provides ongoing training for delivery room staff on the procedures to follow to collect cord blood. Efforts in this respect are bearing fruit; the rate was 39% in 2010-2011 (35% in 2009-2010).

#### QUALITY CONTROL

STEM CELL QUALITY CONTROL					
	TEST PERFORMED	NUMBER OF PRODUCTS	COMPLIANCE PERCENTAGE	ACCEPTABLE VALUE	PERCENTAGE ACCEPTABLE
STEM CELLS (POST-PROCESSING)	Sterility	2,073	98% *	No contamination	100% of tested bags

\* The cord blood collection method is more susceptible to contamination; however, the result observed is fully comparable to the results obtained by other cord blood banks.

#### DELIVERY OF CORD BLOOD UNITS

Héma-Québec delivered cord blood units to ten recipients in the last year, namely six more than in 2009-2010. In order to exploit the full potential of the cord blood bank, international certifications will be necessary as they are essential for any future exports outside Canada. Accordingly, a submission was sent to the Foundation for the accreditation of cellular therapy in March.

#### RECOGNITION OF STEM CELL AND HUMAN TISSUE DONORS

A recognition evening, organized specifically for unrelated stem cell donors, was held in October 2010 to highlight their extraordinary generosity and altruism. Fourteen donors were honoured on the occasion. This event, which took place in Montréal this year, is held alternately in Montréal and Québec.

The contribution of the staff of the cord blood bank partner hospitals as well as those involved in the human tissue donation process was also highlighted during this ceremony.



SYLVAIN, NURSE



# SECOND GOAL

## THE NEED TO LEAD EMPLOYEES WHILE FOSTERING THEIR COMMITMENT, SUPPORT AND RECOGNITION IN ORDER TO INCREASE THEIR MOBILIZATION

### FOSTERING SUPPORT, COMMITMENT AND RECOGNITION

#### INTERNAL COMMUNICATIONS IN ACTION

The attention given to internal communications is part of a general strategy to reinforce employees' sense of pride and belonging at all levels of the organization. The Internal Communications team plays a proactive role by being involved in each major project, ensuring employees are properly informed and are given a comprehensive view of what is going on and what affects them within Héma-Québec.

This year, the Internal Communications team was involved in the organization of several events intended to recognize each individual's contribution.

Lastly, for the entire year, the Internal Communications team issued a total of 47 *Express d'Héma* information leaflets and published two issues of the *Les Mots d'Héma* internal newsletter.

#### POSSIBILITY OF ADVANCEMENT WITHIN HÉMA-QUÉBEC

Héma-Québec recognizes its employees' involvement, abilities and skills acquisition. Promotion and internal mobility are just two of our many engagement and development measures. Accordingly, 51% of the positions posted have been filled internally.

#### REMOTE SCHEDULE VIEWING

The Montréal blood drive employees have been able to view their work schedules remotely since last year. Given the success of this new application and the fact that it is very highly appreciated, it has been decided to extend this practice to the Québec City blood drive employees as well as those of the Montréal laboratories. The Information Technology division, the Workforce Planning and Assignment department



The front page of the internal newspaper of Héma-Québec, March 2011 issue.

and the Human Resources Operations department in Québec collaborated on the implementation of this new support tool.

## EMPLOYEE SERVICE RECOGNITION ACTIVITIES

The service recognition ceremonies, held in Montréal and Québec City in February and March, were once again a resounding success: 222 staff members were celebrated for their loyalty this year.

SERVICE RECOGNITION			
YEARS OF SERVICE	QUÉBEC	MONTRÉAL	TOTAL
5 YEARS	9	40	49
10 YEARS	30	64	94
15 YEARS	11	11	22
20 YEARS	3	23	26
25 YEARS	5	7	12
30 YEARS	4	2	6
35 YEARS	2	10	12
40 YEARS	0	1	1
TOTAL	64	158	222

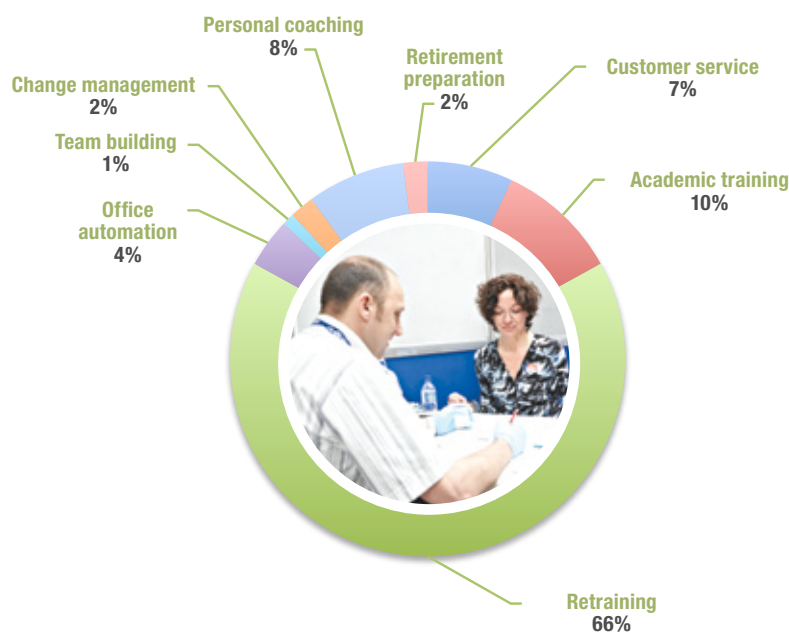
## STAFF TRAINING

### HUMAN RESOURCES TRAINING AND DEVELOPMENT (OTHER THAN REGULATORY TRAINING)

Excluding regulatory training, 163 different training activities intended for several categories of employees were offered in 2010–2011. Of that number, 32% were group activities and 68% were individual training sessions. In all, some 6,537 hours of non-regulatory training were given. The overall satisfaction rate for all of the training activities was 93%.

The efforts invested in employee training and development as well as those made to attract and retain employees contributed to a retention rate of one year or more of 82% for all full-time and part-time positions, with a turnover rate of less than 6%.

### BREAKDOWN IN THE NUMBER OF NON-REGULATORY TRAINING ACTIVITIES BY TYPE OF ACTIVITY



## CUSTOMER SERVICE TRAINING

The training program “*Pensez toujours service : approche et habiletés de service à la clientèle*” (service first: customer service approach and skills) was offered once again this year to blood drive personnel who were unable to attend the first time.

To date, 393 people have received the training, which is intended to help better serve donors by adopting an approach based on respect and cooperation.



Internal Communications prepared posters displaying situational vignettes of a few key customer service actions. These posters, published every two months, provide reminders of the training received up to now and showcase Héma-Québec employees in their respective workplaces.

## FOSTERING A STIMULATING AND PLEASANT WORK ENVIRONMENT

### IMPROVEMENT OF THE HAZARDOUS PRODUCTS MANAGEMENT SYSTEM

As part of applying the regulation on the Workplace Hazardous Materials Information System (WHMIS), pursuant to the *Act respecting Occupational Health and Safety*, the employer must ensure that the people working with hazardous materials have quick access to the material safety data sheets.

In this context, Héma-Québec has acquired a material safety data sheet management software (Preventis System). To date, more than 1,200 products are listed in it, allowing for better control of the handling and storage of these hazardous materials.

Two training programs are currently given to management and employees. One of them deals with the WHMIS (product categories and symbols, the dangers involved in using them, labelling, storage, etc.) and the other deals with using Préventis to consult the material safety data sheets.

Préventis conducted a general audit of all the departments to make sure that their practices with regard to using, labelling, packaging, storing, shipping and transporting the products were compliant. Recommendations were made and will be implemented over the coming year.

### OPTIMIZING HUMAN RESOURCES BUSINESS PROCESSES

As part of a project to optimize business procedures and rules, Human Resources reviewed the computerized absence and leave management program in collaboration with the Information Technology team. The absence history and the follow-up required for each type of absence or leave are now generated automatically.

## WORK-LIFE BALANCE MEASURES

The work time organization program gained in popularity in 2010–2011, with the number of participants going from 151 last year to 166.

A survey was conducted last February to evaluate employee interest in the reduction of work time. The document clearly presented the repercussions of reduced work time on employees' annual income and pensions. The Work-Life Balance Advisory Committee (WLBAC) received 388 completed questionnaires, representing 28% of the employees. More than 75% of respondents said they were interested in the program and 46% said they were also interested in the work time organization program.

The Management Committee approved the recommendations of the WLBAC to create working groups to determine the methods for exploring a work time reduction program and evaluate the feasibility in various sectors. The WLBAC was given the mandate to conduct an opportunity study on extending the work time organization program to operating sectors.

Moreover, the gradual retirement program was made available to certain groups of employees in January. It will gradually be extended to all employees during the course of the year.

## EVALUATION OF THE PAY EQUITY AUDIT

In accordance with the *Pay Equity Act*, employers had to perform the audit obligation by December 31, 2010 at the latest. The Human Resources division therefore conducted a first pay equity audit and posting for the seven programs in effect as of December 15, 2010. No salary adjustments were required pursuant to this obligation. The employees concerned by these postings had 60 days to request additional information or make observations. In accordance with the act, a second posting was made on March 14, 2011, confirming that no modifications were required.

## DIVERSITY AND EQUAL ACCESS TO EMPLOYMENT

This year, Héma-Québec continued its activities to raise awareness and provide information about its equal access to employment program, particularly among the unions. It also provided training on cultural diversity to the teams working on regulatory training.

### DEVELOPMENT OF A CULTURAL DIVERSITY MANAGEMENT POLICY

In order to provide Héma-Québec with a cultural diversity management policy, the Management Committee conducted an analysis based on the results of a survey conducted among management personnel. This analysis was intended to identify the elements to be included in a diversity management policy that respects both openness to this diversity and the values of Héma-Québec. This work has been completed and the drafting of the policy is in the final stages.

The policy will be issued in the coming months and various means will be used to promote the transition from knowledge to intercultural skills.

## RENEWAL OF SEVEN COLLECTIVE AGREEMENTS

The renewal of five collective agreements, representing some 600 unionized employees in Montréal, was completed in fall 2010. Two agreements, representing some 140 employees at the Québec City facility, were also ratified, while negotiations are still underway with two other unions. In all, nine collective agreements govern the working conditions of all Héma-Québec unionized employees.

The implementation of new provisions resulting from these seven agreements with five-year terms required the involvement of several teams (human resources, employee relations, information technology and public affairs) as well as meetings with the unions to ensure proper interpretation. These new provisions have also led to several changes in computer system configurations. All of the implementation deadlines negotiated with the unions were met.

## OPTIMIZATION OF ERGONOMICS AND OCCUPATIONAL HEALTH AND SAFETY

Training on handling blood drive equipment was given to the staff assigned to these tasks at the Québec City facility. A follow-up will be done at the blood drives to reinforce the techniques learned during the training. This training will also be given in Montréal next year.

## DEVELOPING A SENSE OF BELONGING AND TEAM SPIRIT

### CELEBRATION OF HÉMA-QUÉBEC'S 12<sup>th</sup> ANNIVERSARY

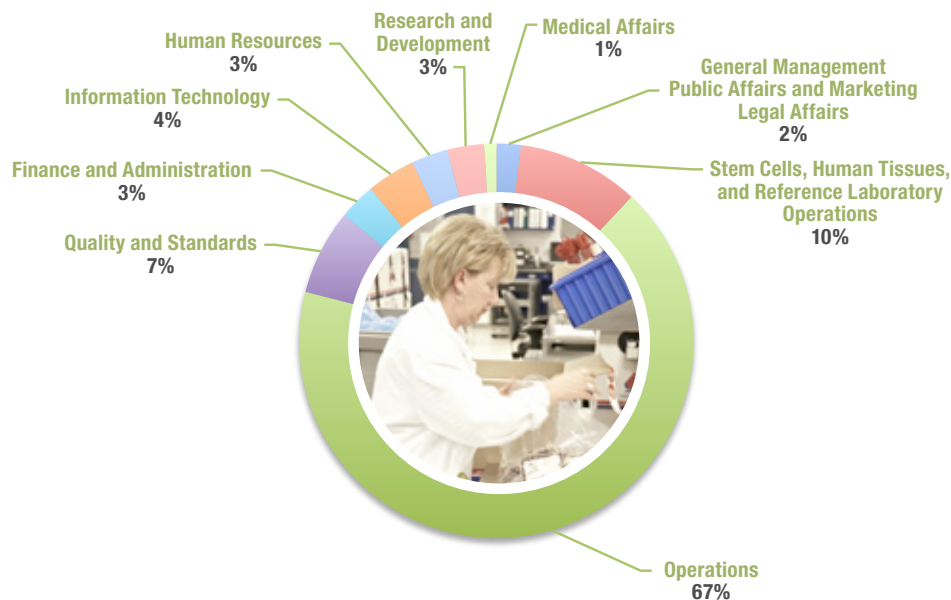
To celebrate the 12<sup>th</sup> anniversary of Héma-Québec, “healthy meal” days were organized at the end of September in Montréal and Québec City. For both occasions the President and CEO and the vice-presidents had the pleasure of serving a healthy breakfast to staff members.

The events in Montréal and Québec City attracted 400 and 100 people, respectively. For the blood drive and evening personnel, box lunches were also served.



The Vice-President, Public Affairs and Marketing, Manon Pepin; the Vice-President, Finance and Administration, Guy Lafrenière; the President and CEO, Dr. Francine Décary; the Vice-President and Chief Operating Officer, Yvan Charbonneau and the Vice-President, Quality and Standards, Suzanne Rémy, during the celebration of the 12<sup>th</sup> anniversary of Héma-Québec.

### BREAKDOWN OF EMPLOYEES PER AREA OF ACTIVITY



As of March 31, 2011, Héma-Québec had a total of 1,344 employees.





JOCELYNE, NURSE

# THIRD GOAL

## DEVELOPING AND MAINTAINING OUR CREDIBILITY, AS WELL AS THE TRUST AND SATISFACTION OF OUR CLIENTS AND PARTNERS

### MAINTAINING THE TRUST AND SATISFACTION OF HOSPITALS

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#### USER COMMITTEES

User committees encourage constructive discussions between Héma-Québec and hospital staff. These discussions are essential for transmitting new knowledge and updating knowledge acquired through training.

Last March, Héma-Québec introduced the WebEx conference tool, which allows hospital staff in remote regions to attend meetings live via the Web.

This formula encourages the participation of a greater number of people and is highly appreciated by our clientele. More than 109 people representing 70 hospitals took part in the last meeting.

#### HOSPITAL SATISFACTION SURVEYS

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Last year, a new survey was conducted among the hospital clientele to evaluate their satisfaction with Héma-Québec's products and services. More than 200 hospital staff members responded.

The results were excellent, with 98% of the clients stating that they were satisfied or very satisfied with the products and services offered. This exceptional rating was slightly higher than that in 2008.

The results indicate, among other things, a significant improvement in satisfaction with the time delay for transmitting erythrocytic serology reports as well as for the availability of O Rh negative packed red cells. Moreover, the clients appreciated Héma-Québec's new Web site and stated that they are satisfied with all aspects related to stable products, including coagulation products. This said, certain improvements will have to be made, in particular with regard to the supply of platelet products.

#### TRAINING SUPPORTED BY THE HÉMA-QUÉBEC FOUNDATION

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In fall 2010, Héma-Québec put the theory component of its erythrocytic serology course (Level 1) online; this course is intended for laboratory technicians working in hospital blood banks. This initiative, funded by the Héma-Québec Foundation and Talecris Biotherapeutics, is intended to make learning accessible to a larger number of people.

The portion of the course offered online includes 17 specific modules, including PowerPoint presentations, videos, complementary information and numerous references. It is also possible to ask questions and receive live responses (during pre-determined time periods). Beginning next year, the online course will also be available in English.

### MAINTAINING THE TRUST AND SATISFACTION OF DONORS

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#### REINSTATEMENT OF CERTAIN DONORS

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Until recently, all donors who tested positive for an infectious disease were declared ineligible to give blood, even if additional testing confirmed the absence of infection. Positive screening tests are often associated with false reactions, in which the donor has no infection and there is no risk for the recipient. In 2010, Health Canada approved a process by which Héma-Québec could make these donors eligible once again.

The donors affected by the reinstatement process receive an invitation to undergo a second screening test. If the results are negative, they can start giving blood again.

Héma-Québec started its eligible donor reinstatement process at the end of May 2010. Already, as of March 31, 2011, 317 donors out of the 1,293 who were informed about this new practice had been reinstated.

This accomplishment is the result of a dozen years of joint efforts between the Medical Affairs, Quality and Standards and Operations divisions.

## REVISION OF THE DONOR SELECTION CRITERIA MANUAL (DSCM)

The donor selection criteria manual (DSCM) is used to verify the eligibility of each blood or blood component donor. It is revised on a regular basis to improve the procedures, both for the donor and for the blood drive staff, while ensuring the safety of the recipients.

Last year, in order to provide better customer service, modifications were made to certain documents, including clarifications on the countries most frequently visited by Quebecers where there's a risk for malaria and the introduction of an eligibility card for the donor, to replace the "Request for medical information."

## REVISION OF THE HEMOGLOBIN CRITERION

In light of recent publications concerning the hemoglobin rate qualification criterion, a work group was created to evaluate the relevance of revising this criterion upward for male blood donors.

Before making a decision to modify the current criterion, it was agreed to wait for the conclusions of an international work group sponsored by *Advancing Transfusion and Cellular Therapies Worldwide* (AABB), which is also considering this matter. The conclusions are expected at the beginning of 2011–2012.

## STEPS TO MODIFY THE HIV CRITERION FOR THE O GROUP

Héma-Québec is continuing to make representations to Health Canada with respect to modifying the prohibition that applies to those who have lived or traveled in certain African countries or who have had sexual relations with a person living or traveling in these countries. An HIV variant, called Group O, is occasionally found in these countries and it was feared in the past that it could not be detected by the screening tests done on donors. For several years, Héma-Québec has been using tests that can detect these HIV variants; therefore, this prohibition is no longer necessary.

## STEPS TO INTRODUCE A MALARIA SCREENING TEST

In order to reduce the number of prohibitions attributed to people who have traveled in an at-risk zone, Héma-Québec has taken steps with suppliers and Health Canada to introduce a malaria screening test.

## DONOR APPRECIATION OF DOUBLE RED BLOOD CELL AND MULTIPLE PRODUCT COLLECTION

Following implementation of double red blood cell and multiple product collection in the various GLOBULE Blood Donor Centres, a survey was conducted to evaluate user satisfaction. Donors had a very positive response to these new collection methods which respectively make it possible to double the donation made during a single visit and collect a specific combination of blood cells, platelets or plasma.

## MAINTAINING THE TRUST AND SATISFACTION OF VOLUNTEERS

### REGIONAL PUBLIC MEETINGS

Every year, the organizing committees and their teams of volunteers organize numerous blood drives and help maintain the collective blood reserve at an optimal level. The annual round of Regional Public Meetings (RPM) is both an occasion to highlight the priceless contribution of volunteers and an opportunity for blood donation partners in Québec to share their knowledge and experiences.

During these activities supported by Héma-Québec's Board of Directors, the members of the various committees and Héma-Québec's staff have an opportunity to discuss the events of the past year as well as upcoming projects.

The Public Affairs and Marketing division, which organizes these meetings, and the Operations division are very involved in these discussions with the organizing committees, the members of the Association of Blood Donation Volunteers (ABDV) and the permanent volunteers of local blood drives.

Numerous dedicated partners were once again honoured this year for their sustained efforts toward the cause of blood donation. In all, 1,328 people attended one of the nine meetings held in all regions of Québec.

## RECOGNITION EVENINGS FOR PERMANENT VOLUNTEERS

In addition to the recognition activities held during the Regional Public Meetings, recognition meetings intended specifically for volunteers and blood drive organizers were held in Montréal and Québec City during Volunteer Action Week. These two evenings were attended by 973 volunteers and honoured the special contributions of 202 of them.

## STUDY OF THE ROLE OF VOLUNTEERS AT BLOOD DRIVES IN QUÉBEC

More than 16,000 volunteers play an active role each year in activities related to the cause of blood donation. We can expect that this volunteer population will change significantly over the coming years and decades. The average age of these volunteers is on the rise. Since people are living healthy lives longer, this is not necessarily a problem; but if the trend continues, it will require some attention. The aging of the members of groups that were traditionally Héma-Québec's most important partners is a matter of concern.

In this perspective, the *Centre Urbanisation, Culture et Société* of the *Institut national de recherche scientifique* was given a mandate to conduct a study on the role of volunteers in Québec blood drives. The final report was tabled in July 2010.

## MAINTAINING TRUST AND SATISFACTION RELATED TO THE REFERENCE AND STEM CELL LABORATORY

### OBTAINING OF ASHI CERTIFICATION

Since September 2010, the Reference and Stem Cell Laboratory has been certified by the American Society of Histocompatibility and Immunogenetics (ASHI). This necessary certification positions the HLA laboratory as a model in the HLA analysis of cord blood, stem cell registry donors and patients waiting for transplants.

The laboratory was inspected last June. Following a few minor observations, corrections were made so as to obtain ASHI certification. Preparations for obtaining this certification took more than five years.

This certification comes after the scientific director of the Reference and Stem Cell Laboratory obtained, on June 29, the title of ASHI certified director. She joined a small group of approximately 150 directors throughout the world, including three in Québec, who have this title. This certification authorizes the scientific management of an ASHI certified HLA laboratory.

## MAINTAINING HÉMA-QUÉBEC'S CREDIBILITY

### CONTRIBUTION OF THE EXTERNAL COMMUNICATIONS TEAM

#### WEB SITE MAKEOVER

The Web site makeover required several months of discussion with all divisions at Héma-Québec. Intended to better support the vital causes of blood, stem cell and human tissue donation, Héma-Québec's new virtual showcase is an essential work tool.

In addition to a more attractive design and a cohesive presentation template, the structure and the content have been improved. The new home page facilitates browsing and access to information according to both the user profile and the area of activity. Moreover, it provides greater visibility to activities related to stem cells and human tissues, two sectors that are constantly evolving at Héma-Québec.

Moreover, the new site has a search tool. In addition to being able to search the Web pages and up-to-date and detailed content, blood donors appreciate the ability to search for blood drives by postal code and use Google Maps to locate the results on a map.

Another new feature: the addition of online forms. Whether people want to sign up for the Stem Cell Donor Registry or apply for a job at Héma-Québec, they can now do so directly from the Web site. A mobile version of the site is also available.

Lastly, a survey conducted among hospital blood bank employees revealed that they are very pleased with the new site and visit it regularly.

#### INCREASED PRESENCE ON THE WEB

The rapid development of new technologies is transforming consumer media and is contributing to the erosion of traditional marketing campaigns. In order to keep up, Héma-Québec has had to optimize its presence on the Web. Therefore, in June 2010, Héma-Québec put up its new Web site and entered the universe of social media, creating official pages on Facebook, Twitter and YouTube. Then, in the fall, the Public Affairs and Marketing division orchestrated a first advertising campaign on the Web, through a Facebook application.

#### SOCIAL MEDIA ADVERTISING CAMPAIGN

Through its Web 2.0 "Save the World" campaign, Héma-Québec was very successful in reaching its target clientele in Cegeps and universities. The initial objective of 1,000 new Facebook friends was surpassed in one week. After two weeks, the number of friends had tripled and, at March 31, 2011, the number



was close to 4,000. This result significantly surpasses those of other similar institutions throughout the world.

### ELECTRONIC COMMUNICATIONS IN FULL SWING

The number of requests for information by email has been growing significantly over the years. In 2010–2011, more than 154 emails were received each month and handled personally by the External Communications team, for a total of 1,848 email exchanges.

This communication tool is used by several donors, partners and volunteers. It supports Héma-Québec's various areas of activity, in particular the Planning and Supply division.

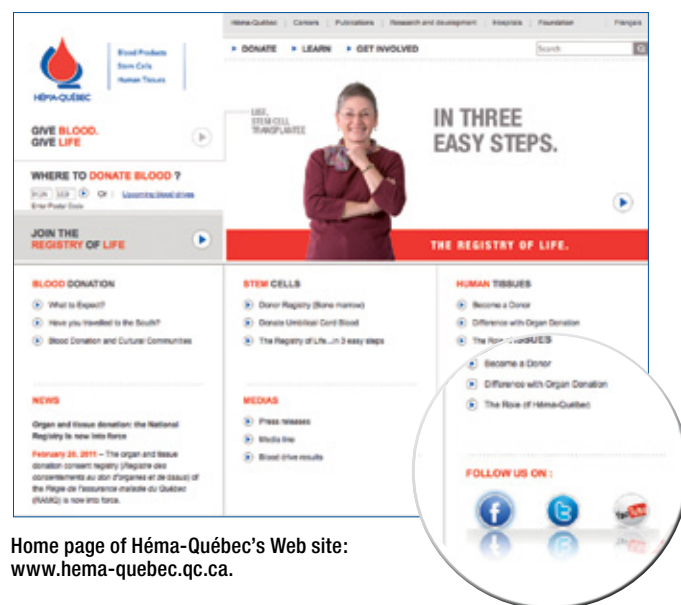
In 2010–2011, most of the requests handled came from donors inquiring about their eligibility to give blood, reporting a change of address or asking about the malaria eligibility criterion following a trip abroad.

### COMMUNITY COMMUNICATIONS

The External Communications team also ensured ongoing communications with media partners, donors and recipients.

#### A few statistics for 2010–2011

- 161 interviews with the media
- 19 press releases issued
- More than 30,000 visits each month to the Héma-Québec Web site (an increase of 88% compared to 2009–2010)



Home page of Héma-Québec's Web site:  
www.hema-quebec.qc.ca.



An overview of the Web campaign launched via Facebook.



## VISIT OF MONTRÉAL AND QUÉBEC FACILITIES

The External Communications team welcomed 370 visitors in 45 delegations who came to visit the Montréal or Québec City facilities. Most of these visitors had their first opportunity to assess the blood product processing and qualification work done within Héma-Québec's walls.

## SUSTAINABLE DEVELOPMENT—A DAILY OBJECTIVE

Through its *Government Sustainable Development Strategy 2008–2013*, the Québec government challenges all departments and public agencies by proposing that they adopt some of the objectives among the 29 included in its strategy.

To comply with these legal requirements and contribute to the improved well-being, health and quality of life of Quebecers, Héma-Québec has established its own strategic plan and identified six objectives that are relevant to the nature of the organization. This plan was developed around five key directions.

These directions, objectives and actions aimed at improving Héma-Québec's record in terms of sustainable development are summarized below.

### Government objective No. 1

Make people better aware of the concept and principles of sustainable development. Promote the

sharing of knowledge and experience in this area and the integration of knowledge and know-how facilitating its implementation.

Two major awareness-raising actions were taken with the staff to achieve this objective:

- The development of an internal communications campaign including the publishing of five issues of *Express d'Héma* (Défi Climat, Alternative Transportation Week, etc.) and six articles in the internal newsletter *Les Mots d'Héma* (Green committee, eco tips, sustainable development action plan, etc.) as well as including information about sustainable development in the guides given to employees during the initiation process. Moreover, awareness-raising and information activities were conducted by way of posters, emails, information cards for blood drive staff and the organization of a contest to test employee knowledge about sustainable development. Lastly a poster campaign on Alternative Transportation Week was prepared for the Green Committee.
- Training activities on integrating the concept of sustainable development in daily activities. Several employees took part in various types of training related to sustainable development. In particular, a conference on the impact of climate change as well as solutions for dealing with the

**QU'EST-CE QUE LE DÉVELOPPEMENT DURABLE?**

Il s'agit d'un développement qui répond aux besoins du présent sans compromettre la capacité des générations futures à répondre aux leurs. Le développement durable s'appuie sur une vision à long terme qui prend en compte le caractère indissociable des dimensions environnementale, sociale et économique des activités de développement.

Saviez-vous qu'Héma-Québec intègre la dimension économique du développement durable dans son plan d'action?

Notre organisation prend maintenant en compte les principes du développement durable dans ses appels d'offres.

Pour en savoir plus sur notre plan d'action et courir la chance de gagner un iPod RED, visitez [onygagnetous.com](http://onygagnetous.com).

**LE CONCOURS SE TERMINE LE 31 MARS 2011.**

**Le développement durable, ON Y GAGNE TOUS.**

**ON Y GAGNE TOUS.COM**

HÉMA-QUÉBEC

Produits sanguins  
Cellules souches  
Tissus humains

Awareness-raising and information activities were conducted by way of posters, emails and information cards for blood drive staff. A contest was also organized to test employee knowledge about sustainable development, as can be seen on the images above.

climate crisis were offered to a portion of the employees, whereas the managers took part in information sessions.

#### **Government objective No. 4**

Continue developing and promoting a culture of prevention and define conditions that are beneficial for health, safety and the environment.

Several actions were taken to achieve this objective. These include continued regular meetings with the health and safety committees and all of the unions as well as the increased presence of the health and wellness advisor at blood drives in order to resolve specific problems immediately. An ergonomic analysis of the workstations is now possible for office employees who request it.

In addition, Héma-Québec is currently working on implementing a hotline for managers through its employee assistance program to obtain problem solving methods with regard to employees who experience psychological issues or adjustment difficulties at work.

#### **Government objective No. 6**

Apply environmental management measures and an eco-responsible procurement policy within the government departments and agencies.

Identify potential markets in which sustainable development criteria can be applied and use these criteria in calls for tenders and in the marketplace.

Several actions were taken to better incorporate sustainable development criteria in all Héma-Québec activities. Once again this year, sustainable development clauses were added to all calls for tenders and contracts issued by the various departments. LEED CI<sup>1</sup> elements were also included in estimates related to the master development plan. Lastly, contracts dealing with recycling and the environment must now include clauses on sustainable development.

The following points related to the concept of sustainable development were given particular attention in 2010–2011:

- Héma-Québec undertook to reduce its bulk printing. Thus, a decision was made to replace the paper version of the annual report with a digital version. Likewise, the book on the creation of Héma-Québec was not printed, but was made available in electronic format.
- Héma-Québec encourages the purchase of

recycled supplies (paper, laser cartridges, etc.) and ensures Energy star compliance when selecting and purchasing new equipment (printers, computers, servers, screens, etc.). The old equipment is sent to an institution that dismantles it and recycles the materials.



- Several measures have been implemented to promote better quality of life for employees, by encouraging them to use public transit and practice car pooling.

#### **Government objective No. 7**

Promote reduction in the amount of energy, natural resources and materials used to produce and market goods and services.

Several actions were taken to meet this objective:

- Purchase of an energy management application (Helios) that helps to reduce and control energy costs through a monthly follow-up of consumption.
- Installation of a micro-modulation system on the boilers at the Montréal facility to reduce gas consumption.
- Submission of an application to the Canadian Green Building Council to obtain LEED Silver

<sup>1</sup> The Canadian Green Building Council's rating system for the interior design of commercial spaces.

certification for the new facilities to be set up in accordance with the master plan for the Montréal facility.

- Acquisition of four energy-efficient hybrid vehicles to reduce energy consumption related to transportation.
- Efforts made through the Green Committee to raise employee awareness about ways to save energy at the office and at home.
- Removal of bottled water distributors from the administrative facilities to promote the use of water fountains.
- Partnership agreement between Héma-Québec, the *Centre des technologies de l'eau* and the *Ville de Montréal* on the measurement, identification and implementation of measures to conserve drinking water.

#### **Government objective No. 14**

Focus on family life and facilitate balance between work, study and personal life.

Various measures have been implemented to give a greater number of employees access to measures that facilitate a work-life balance:

- A survey was conducted to determine employees' interest in a new measure to facilitate work-life balance, namely work time reduction (for more details see "Work-life balance measures" on page 32).
- Various measures were implemented to help employees plan their retirement. In particular, training on active retirement was given to the employees; a Web site was designed to help employees view the amounts accumulated for their retirement and simulate various scenarios; and a gradual retirement program was designed.

The popularity of the work time organization measure has continued to increase since it was implemented in 2007.

#### **Government objective No. 24**

Increase citizens' involvement in their community.

To meet this objective, Héma-Québec has, among other things, increased its blood donor promotion activities in schools with the distribution of the BLOOD RED! kit and awareness-raising activities among Cegep and university students in collaboration with the Association of Blood Donation Volunteers. In all, 17,536 donors took part in 141 blood drives at the primary and secondary level, while 25,697 donors took part in 215 blood drives at the Cegep and university levels.

Maintaining the number of active volunteers contributing to blood drives and Héma-Québec's activities is also a priority. The goal is to maintain this number at approximately 16,000.



ANDY, STEM CELL DONOR

# FOURTH GOAL

## THE NEED TO UPDATE OUR SYSTEMS AND TECHNOLOGIES

### IMPLEMENT AN INFORMATION SYSTEM OF THE COMPUTERIZED QUALITY MANAGEMENT SYTEM

#### THE QUALITY MANAGEMENT INFORMATION SYSTEM IS TAKING SHAPE

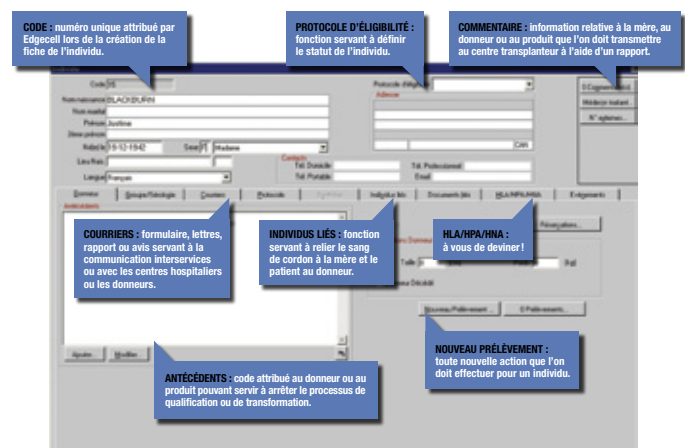
The first phase of the implementation of the computerized quality management system (SIGQ) was launched this year. Over the next two years, a series of four management modules will be implemented. These modules deal with document management, regulatory training, quality control and audits. The first module, on document management, will be implemented in fall 2011. This will help the institution make the transition from the paper management of all processing procedures to electronic management. In all, more than 4,000 paper documents will be transferred and used in digital format from now on. Previously, this represented approximately 30,000 copies to be controlled.

### IMPLEMENT AN INFORMATION SYSTEM FOR THE MEDICAL AFFAIRS LABORATORIES

#### FIRST PHASE OF THE SILAM PROJECT

Since the EdgeCell application was implemented in February 2011, the Reference and Stem Cell Laboratory (RSCL) has enjoyed the use of a computerized system enabling it to manage all of its operations more efficiently.

This is a major improvement for the RSCL and the Stem Cell Donor Registry, which, up to now, had to manage 95% of their work in paper format. Only the search for HLA compatibles was performed using the SCOR (Sang de CORDon) application.



Overview of the various functionalities offered by EdgeCell's software when creating a file.

EdgeCell manages the entire cord blood and stem cell process, from the registration of the mother, the donor and the patient to the distribution of the product, including product selection based on HLA compatibility. Each product is qualified using several questionnaires and analyses, and is then processed, labelled and placed in inventory. Throughout the process, tests are performed to ensure that the product and the mother qualify under various established criteria.

The second phase of the project, which involves computerizing the leucoplatelet immunology laboratory (HLA) through the implementation of the EdgeLab application, was started in December 2010.

#### OPTIMIZED INFORMATION TECHNOLOGY QUALITY SYSTEM

This year, the Information Technology quality system was upgraded. The risk management procedure for information system changes was simplified and optimized. As part of the improvements made, the documentation was reduced by one-third.





JESSICA, STEM CELL DONOR

# FIFTH GOAL

## THE ONGOING PURSUIT OF GREATER EFFICIENCY

### MASTER DEVELOPMENT PLAN NOW COMPLETED

The master development plan, developed in response to growing operational needs in the new sectors of Héma-Québec, such as the Stem Cells, Human Tissues and Reference Laboratory Operations, was implemented in May 2009 and completed in March 2011.

Designed by the Material Resources team, which reports to the Operations division, this overall plan was intended to optimize the use of existing spaces at the Montréal and Québec City facilities and obtain LEED (Leadership in Energy and Environmental Design) certification for the Montréal facility. The application for LEED certification has been submitted to the Canada Green Building Council.

As a result of the completion of the development master plan, the Stem Cells, Human Tissues and Reference Laboratory Operations employees of the Montréal facility were brought together and the stem cell processing methods were optimized (for more details, see “Optimization of stem cell processing” on the next page).

In total, the development master plan represents an investment of \$7 million.



The cord blood units are preserved in special cassettes inside these liquid nitrogen tanks.





The Public Affairs and Marketing division provided promotional assistance to the Stem Cell Donor Registry in the deployment of this new measure.

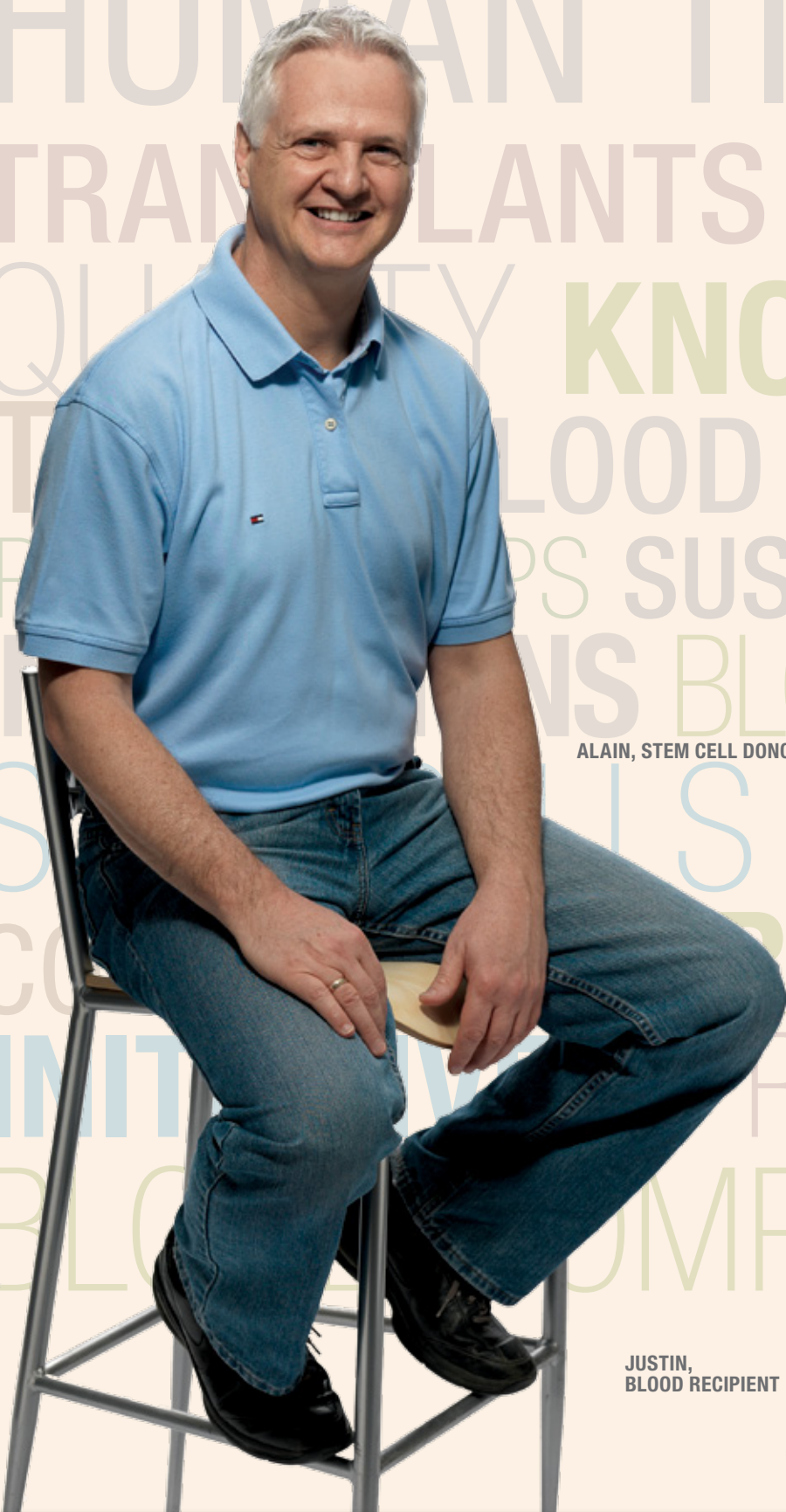
All in all, these combined actions have helped increase the number of registrations from 800 last year to more than 1,800 this year.

## REVISION OF THE BUSINESS PROCESSES WITHIN THE STEM CELLS, HUMAN TISSUES AND REFERENCE LABORATORY OPERATIONS DIVISION

Major continuous improvement activities related to the Stem Cell Donor Registry in spring 2010 and human tissues in fall 2010 resulted in a business process review using the Kaizen technique. This review, combined with added value management tools, resulted in the addition of almost 1,000 registrations, without the need for additional personnel. For human tissues, distribution increased by 41%. Total distributions increased from 2,631 (2009–2010) to 3,708 (2010–2011).



CATHERINE,  
STEM CELL TRANSPLANTEE



ALAIN, STEM CELL DONOR



JUSTIN,  
BLOOD RECIPIENT



# SIXTH GOAL

## THE SUSTAINABILITY AND TRANSFER OF THE ORGANIZATION'S KNOWLEDGE AND EXPERTISE

### DEVELOPING THE NEXT GENERATION

STUDENT AND INTERN TRAINING		
STUDENT/INTERN CATEGORY	TOTAL	SCHOLARSHIP STUDENTS
MASTER'S (M.SC.)	6	5
DOCTORAL (PH.D.)	7	5
POSTDOCTORAL INTERNS	2	2
OTHER INTERNS	13	10

### DEVELOPING AN INTERNAL SUCCESSION PLAN

#### PILOT PROJECT: TRAINING IN TRANSFUSION MEDICINE

The transfusion medicine training pilot project, which began in November 2009, was completed in January 2011. Twenty-one employees took part in this development project, which was divided into seven two-hour sessions. The ultimate goal of the training was to transfer knowledge from Héma-Québec's transfusion medicine experts to other staff members with less training in this field. At the end of the training, these staff members stated that they were 95% satisfied with all of the material presented. A study is currently underway to determine if the knowledge acquired by the employees is useful to them in their duties and to measure the added value.

#### ORGANIZATIONAL MEMORY: A TRANSFER FOR CONTINUITY!

Sustainability and the transfer of knowledge and expertise is a strategic issue that is particularly important for Héma-Québec in a world where organizations are dealing with various realities, such as the shortage of skilled labour, technological advancements, the aging of the population, the different values between generations and the management styles to be adopted.

In this perspective, all Héma-Québec managers were given an opportunity to attend a conference on the transfer of knowledge in 2010-2011. The purpose was to allow them to become familiar with the issues related to organizational memory and the transfer of knowledge when key employees leave the company, while highlighting the importance of intergenerational cohabitation.

Moreover, workshops offered during forums organized for managers and supervisors gave them an opportunity to discover efficient approaches for dealing with this new reality along with various tools for preventing a loss of memory and expertise within the organization and their teams.



JOSÉE, MOTHER OF LAËLA,  
CORNEA TRANSPLANT RECIPIENT

# SEVENTH GOAL

## THE NEED TO PURSUE INNOVATION INITIATIVES

### INNOVATION IN PRODUCTION

#### **HÉMA-QUÉBEC PREPARED TO ASSUME THE MANAGEMENT OF A BREAST MILK BANK FOR VERY PREMATURE BABIES**

Héma-Québec has informed the *Ministère de la Santé et des Services sociaux* of its interest in managing and operating a public breast milk bank for Québec. This decision was based on the results of a feasibility study conducted at the beginning of the year.

Using financial support received from the Héma-Québec Foundation, BioMedCom was mandated to conduct this study. The purpose was to evaluate the relevance of creating such a bank, determine the operating methods, including its costs related to start-up and operation by Héma-Québec, and confirm, through medical and scientific data, the benefits of breast milk for premature babies.

Considering its experience and expertise in the collection, preparation and distribution of biological products, including the application of measures to ensure the quality and safety of these products, Héma-Québec believes that it is in a good position to set up and manage a public breast milk bank.

Since the ideal situation is one in which the mother breastfeeds her baby, Héma-Québec considers that a public breast milk bank is indicated in certain specific situations, including that of very premature babies that cannot be breastfed by their mothers. In these cases, such a resource would be favoured over commercial milk preparations.

A study of the scientific literature has determined that the greatest benefits of the breast milk bank apply to premature babies born at 32 weeks or less.

### INNOVATION IN RESEARCH AND DEVELOPMENT

#### **PREPARATION OF A STRATEGIC DEVELOPMENT PLAN**

One of the major accomplishments of 2010–2011 for the Research and Development (R&D) division was, without a doubt, the establishment of a strategic development plan for the next five years. This project responds to one of the major recommendations made by the last external experts committee, which evaluated all of Héma-Québec's R&D activities in March 2010.

Preparing a strategic plan involved the gathering of basic information and fundamental indicators on research at Héma-Québec in order to improve the position of Héma-Québec research team with respect to academic and industrial research while taking into account the context and particular characteristics of Héma-Québec.

Discussion groups were formed with stakeholders from the hospital and industrial sectors to find out these partners' perceptions and expectations with regard to Héma-Québec's research activities. One of the main elements that emerged from these meetings is a desire for increased visibility of R&D activities, not only for Héma-Québec but also for the scientific, medical and industrial communities as a whole.

This plan must be finalized in accordance with the new long-term strategic plan scheduled for next year.

## CELL ENGINEERING OBTAINS A PATENT

A significant portion of the efforts put forth in cellular engineering is devoted to therapeutic immunoglobulins and to their mechanisms of action. A second aspect of the research work done in this respect involves hematopoietic stem cells and platelet recovery during stem cell transplants. Progress continued in 2010–2011 with respect to these two projects.

The increased visibility of research in cellular engineering, through publications and presentations at conferences, demonstrates the progress made in the past year. In all, cellular engineering contributed to nine scientific publications, 25 presentations at conferences and two invited lectures.

In February 2011, a European patent was granted to Héma-Québec for a natural interferon-alpha production technology using hematopoietic stem cells. It should be noted that an equivalent patent was obtained in the United States in 2002. Moreover, a patent application was submitted in the past year for a technology for converting human B lymphocytes into immunoglobulin secreting cells.

## CREATION OF THE FRANCINE-DÉCARY AWARD AND ANNOUNCEMENT OF THE FIRST RECIPIENT

The Research and Development division also makes a significant contribution to training a qualified new generation in the fields of blood and transfusion medicine. Every summer, the R&D laboratories welcome a dozen undergraduate students for an internship lasting a few months.

For these students, the internship gives them an opportunity to apply some of the knowledge they acquired in their respective academic programs and also to gain practical experience in research. At the end of their internships, the students are asked to present the results of their experiments in an oral presentation to all R&D personnel.

The Research and Development division decided to institute an award to recognize the best presentation. It was named after the first President and chief executive officer of Héma-Québec : the “Francine-Décary award”. The very first award recipient was Lee-Ann McKinnon, an undergraduate student in Biochemistry at Université Laval. Ms. McKinnon completed her internship under the supervision of Louis Thibault, Director of Operational Research, and worked on a project entitled “*Une hormone pour améliorer la conservation des culots globulaires*” (a hormone to improve the preservation of packed red blood cells).



From left to right: President and Chief Executive Officer, Dr. Francine Décary; Operational Research Director and Traineeship Director, Louis Thibault; the very first award recipient, Lee-Ann McKinnon; Research Assistant, Marie Joëlle de GrandMont; and Vice-President of Research and Development, Yves Blais.



## BIOSCIENCE APPRENTICE PROGRAM

The Research and Development division received funding from the Héma-Québec Foundation by joining forces with the *Apprentis en biosciences* (bioscience apprentice) program of the *INRS-Institut Armand-Frappier* in 2010. This program introduces upper secondary students to the world of research by offering a one-week training course in a scientific environment.

For the apprentices, this week is an opportunity to discover the sciences used in transfusion medicine, such as virology, bacteriology, cellular and molecular biology as well as immunology.

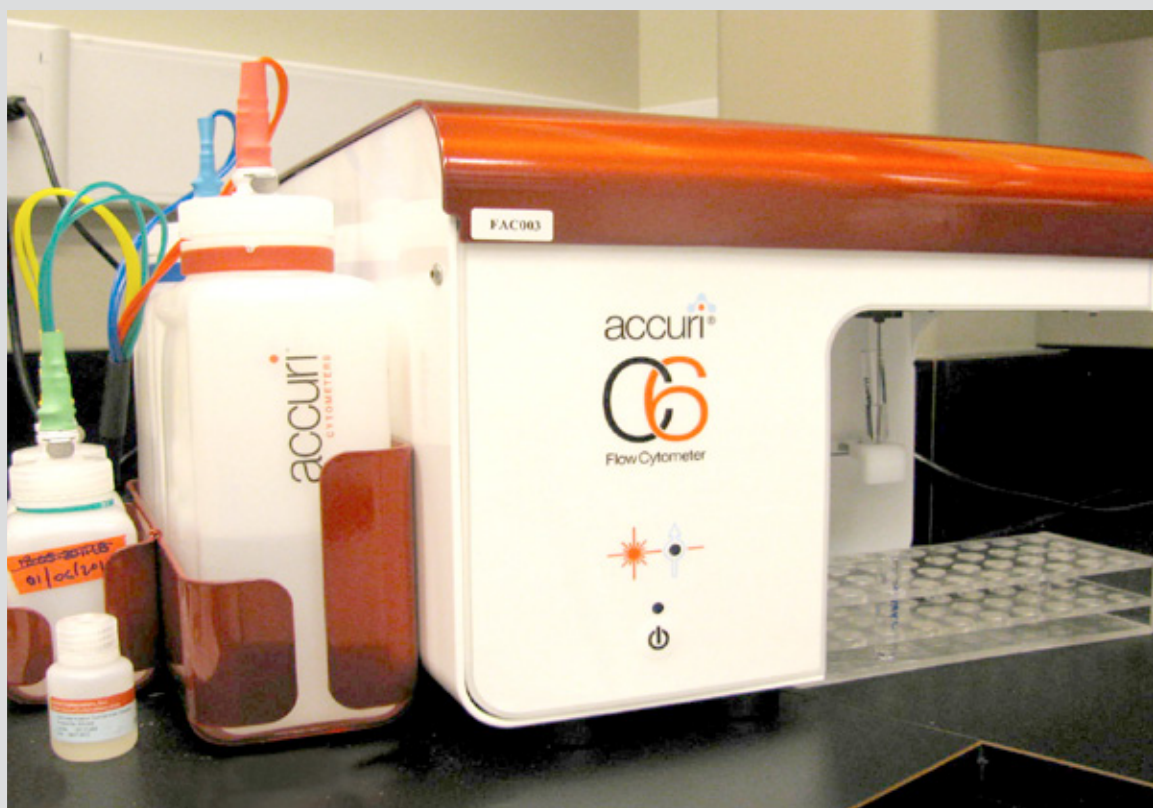
The Héma-Québec Foundation also funded leading-edge research and various pilot projects undertaken by Héma-Québec's Research and Development team.

## ACQUISITION OF A SECOND CYTOMETER

A portion of the funds collected during the Red Diamond for Life evening, a benefit event of the Héma-Québec Foundation, was used to purchase a flow cytometer. This high-tech equipment will enable the Héma-Québec Research and Development (R&D) team to significantly improve its operating capacity.

The flow cytometer is used to pass particles, molecules or cells through a laser beam at high speed to count and examine them individually (cell by cell). This is a central process in research laboratories.

Until now, the Héma-Québec R&D laboratory had only one of these devices; therefore, any minor technical problem interfered with the work of researchers, mainly by causing delays. With this second cytometer, the laboratory will be better able to share out its operations.



The flow cytometer is used to pass particles, molecules or cells through a laser beam at high speed to count and examine them individually (cell by cell).



## VISIBILITY OF RESEARCH PROGRAM

### SUBSIDY FROM THE FRSQ'S CELL AND TISSUE THERAPY NETWORK

The Research and Development department received financial support from the FRSQ cell and tissue network (Réseau ThéCell) for its work on blood platelets.

Nicolas Pineault, cellular engineering scientist, received a two-year research subsidy worth \$60,000 as part of the Thécell network 2011–2012 structuring projects competition. The funds obtained will be used to characterize a co-culture process for stem cells

isolated from umbilical cord blood with mesenchymal cells in order to optimize the preparation of platelet producing cells (megakaryocytic cells). Moreover, the effectiveness of the cells produced by this co-culture process on platelet recovery will be evaluated using an animal model. Mr. Pineault is working as the principal investigator on this project, in collaboration with two other researchers from the *Centre de recherche de l'Hôpital Maisonneuve-Rosemont* and *Université Laval*.

OUTPUT OF RESEARCH AND DEVELOPMENT WORK				
PROGRAM	SCIENTIFIC ARTICLES PUBLISHED	PATENTS GRANTED	PRESENTATIONS AND INVITED LECTURES	GRADUATING STUDENTS
<b>CELLULAR ENGINEERING</b>				
IMMUNOGLOBULINS	6	–	20	1 (Ph. D.)
PLATELETS	3	1	7	2 (1 M. Sc., 1 Ph. D.)
<b>TOTAL</b>	<b>9</b>	<b>1</b>	<b>27</b>	<b>3</b>
<b>OPERATIONAL RESEARCH</b>				
OPERATIONAL TESTING GROUP	1	–	7	–
SCREENING GROUP	3	–	5	–
<b>TOTAL</b>	<b>4</b>		<b>12</b>	

## OPERATIONAL RESEARCH

### BIOPRODUCTION COMBINED WITH OPERATIONAL RESEARCH

The year 2010–2011 was marked by a major organizational change: the integration of the bioproduction unit into the operational research section in March 2010. The purpose of this structural change was to:

- concentrate the expertise of the research teams, whose mandates overlapped to a certain extent before the integration;
- use the full potential of the critical mass of qualified employees who are now grouped together; and
- promote synergy within an expanded team.

It should be noted that the bioproduction team has a mandate to prepare, in a regulated environment, products and kits intended for the Reference and Stem Cell Laboratory, which offers a range of specialized services to our hospital clients.

The bioproduction group, which was very active this year, continued its activities to support and collaborate with the Reference and Stem Cell Laboratory, particularly in the preparation of genotyping strips. However, the bioproduction group stopped performing West Nile virus screening confirmation tests for blood donations. The product qualification laboratory is now responsible for this.

The bioproduction team also re-evaluated all of the activities and services offered to its internal and external clients in order to improve its internal processes and efficiency.

### A PRODUCTIVE YEAR IN OPERATIONAL RESEARCH

Operational Research includes two research groups: the operational test group and the screening group.

The operational test group is working with Operations and Medical Affairs on the operational evaluation of new technologies and equipment for the collection, processing and distribution of blood components

as well as the optimization of the quality of blood components. Over the past year, the operational test group completed a total of seven technical evaluation and study reports on the quality of blood components.

The Operational Research department also participates in increasing the visibility of research conducted at Héma-Québec. In total, it contributed to four scientific publications, gave 11 presentations at conferences and one invited lecture.

Moreover, it is responsible for the Research Donor Registry. This anonymous and secure registry consists of a bank of blood donors who are interested in contributing to advancing research at Héma-Québec by taking part in projects that require the collection of human blood samples or the participation of volunteer subjects. A research donor recognition evening was held in Québec City this year (for more information about this evening, see “Blood product donor recognition” on page 18).

#### **SCREENING GROUP DEVELOPS TWO PROTOCOLS**

The screening group is responsible for developing reagents and typing kits for donors, recipients and emerging pathogens. In 2010–2011, the screening group transferred a new genotyping test (Dombrock antigen on red blood cells) to the bioproduction team and developed two protocols for the Reference and Stem Cell Laboratory.

#### **OPERATIONAL EVALUATION OF THE NOVARTIS DIAGNOSTICS PROCLEIX TIGRIS SYSTEM**

Two nucleic-acid based screening platforms for viruses that can be transmitted by transfusion (HIV, HCV, HBV, and WNV) are available commercially. In order to keep up with the technologies available on the market, the operational test group evaluated the operations and performance of the PROCLEIX TIGRIS system by Novartis Diagnostics. This automated platform is used for the high throughput screening of hematogenous viruses in blood donations through the amplification of nucleic acids. This evaluation contributes to the development of internal expertise on the systems and technologies directly related to Héma-Québec’s activities.

#### **ADVANCES IN MASS GENOTYPING**

In collaboration with the Reference and Stem Cell Laboratory (RSCL), it was decided to increase the number of frequent donors listed in the genotyped donor registry from 21,000 to 28,000. The genotyping of 7,000 additional frequent donors was completed at the end of fall 2010. The purpose of this decision was to better meet the needs of hospitals. Moreover, the expertise developed by the RSTL in blood typing is being called on more and more, with hospitals relying on the RSTL to analyze an ever-growing number of complex cases of patients requiring transfusions.

The genotyped donor registry is used to facilitate the search for compatible packed red blood cells, particularly for recipients who have developed antibodies to blood group antigens.

BLOOD COMPONENTS  
HUMAN TISSUES  
TRANSPLANTS DONORS  
QUALITY KNOWLEDGE  
TRUST DONATION  
PARTNERSHIP SUSTAINABILITY  
INNOVATION GOOD DRIVES  
STABILITY GLOBULE  
COMMITMENT BILITY  
INNOVATION RECIPIENTS  
BLOOD COMPONENTS



VALÉRIE AND MARTIN,  
SKIN GRAFT RECIPIENTS

# EIGHTH GOAL

## THE PURSUIT OF OPPORTUNITIES FOR PARTNERSHIP DEVELOPMENT

### BROADENING HÉMA-QUÉBEC'S INFLUENCE

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#### **NATIONAL ORGAN AND TISSUE DONATION WEEK**

For the 2010 Organ and Tissue Donation Awareness Week, Héma-Québec took another step forward in its efforts to raise awareness among donors and volunteers.

From April 18–25, the donors at blood drives throughout the province were encouraged to indicate their intention to donate organs and tissues following their death. They were able to obtain the organ and tissue donation consent sticker, which they could sign and place on the back of their health insurance card.

Through this initiative, which was the first of its kind, Héma-Québec wanted to remind the public of the importance of signing the consent sticker that is provided when it is time to renew their health insurance card.

In addition to its usual partnership with Québec-Transplant, Héma-Québec was also involved with the Canadian Transplant Games in 2010.

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#### **PRESENTATION OF A BRIEF ON THE CREATION OF AN ORGAN AND TISSUE DONOR CONSENT REGISTRY**

The Stem Cells, Human Tissues and Reference Laboratory Operations, Public Affairs and Marketing, and Legal Affairs divisions worked together to present a brief on Bill 125 to the parliamentary committee at the National Assembly. It should be reminded that this bill was adopted in December 2010 to set up an organ and tissue donor consent registry on February 28, 2011 (to learn more about Bill 125, see “Creation of an organ and tissue donor consent registry” on page 26).

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#### **PRESENTATION OF A BRIEF FOR THE DEVELOPMENT OF A PAN-CANADIAN CORD BLOOD BANK**

Despite a very limited time frame, the Stem Cells, Human Tissues and Reference Laboratory Operations and the Public Affairs and Marketing divisions worked closely to present a brief to the Standing Committee on Health at the House of Commons in November 2010.

This brief presented a feasibility study on establishing a pan-Canadian cord blood bank including a partnership between Canadian Blood Services and Héma-Québec.

During the Conference of Provinces and Territories Deputy Ministers of Health, held in February 2011, the proposal presented by Héma-Québec and supported by the Government of Québec was not retained.

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#### **LAUNCH OF A BOOK ON THE CREATION OF HÉMA-QUÉBEC**

The story of the creation of Héma-Québec is now told in a book entitled *La création d'Héma-Québec : l'histoire d'un succès*. This book was written by journalist Pierre Cayouette. It focuses on the events that led to the birth of Héma-Québec and its first few months of activity.

A ceremony to mark the launch of this book was held on March 8, 2010, in Montréal. In addition to the author and certain key stakeholders from that time being present, the management committee, as well as the members of the Board of Directors, the Association of Blood Donation Volunteers and Héma-Québec's staff also attended.

Out of a concern for the environment, this book was only published in digital format. It can be viewed on Héma-Québec's Web site, under Publications.



## CREATION OF A FUND IN HONOUR OF Dr. FRANCINE DÉCARY

The Héma-Québec Foundation created a fund in honour of the first president and CEO of Héma-Québec, Dr. Francine Décary, who left her position on March 31, 2011. The Foundation will use the funds collected, more than \$136,000, to provide financial support for projects to keep Héma-Québec at the leading edge of knowledge and services related to the supply of blood products, stem cells and human tissues.

## UNVEILING OF ARTWORK AT THE QUÉBEC FACILITY

During a ceremony held on March 24 in front of the Québec City facility, the President and CEO, Dr. Francine Décary, unveiled a work of art entitled *Les veilleuses*.

This work by Pierre Fournier consists of a group of six individual masts topped by shapes. The random movements of these shapes evoke the ever-changing nature of life and allude to the fundamental dynamic of Héma-Québec, which is constantly changing with its environment.

This work of art was obtained as part of the *Politique d'intégration des arts à l'architecture et à l'environnement des bâtiments et des sites gouvernementaux et publics*, which encourages organizations to reserve a portion of the budget allocated for constructing or expanding a building or a public site for the purchase of works of art designed specifically for that site.



Seen here is the work of art entitled *Les veilleuses* by Pierre Fournier.



## AWARDS AND DISTINCTIONS

### Dr. FRANCINE DÉCARY, WINNER OF THE RONALD O. GILCHER AWARD

In May 2010, the President and CEO, Dr. Francine Décary, received an exceptional honour when she was named a recipient of the prestigious Ronald O. Gilcher Award, which was presented by the Association of Donor Recruitment Professionals (ADRP).



Dr. Francine Décary received the Ronald O. Gilcher award from the hands of the President of the ADRP, John A. Hagins, in May 2010.

### Dr. GILLES DELAGE, WINNER OF THE 2010 LOUIS-PASTEUR AWARD

In June 2010, the Vice-President, Medical Affairs and Microbiology, Dr. Gilles Delage, received the 2010 Louis-Pasteur award, presented by the Association des Médecins Microbiologistes Infectiologues du Québec (AMMIQ).



The President of the Association des médecins microbiologistes infectiologues du Québec, Jean-François Paradis, the winner, Dr. Gilles Delage, and the master of ceremony, François Lamothe, at the ceremony for the 2010 Louis-Pasteur award.

### THE INTERNATIONAL SOCIETY FOR BLOOD TRANSFUSION HONOURS Dr. FRANCINE DÉCARY

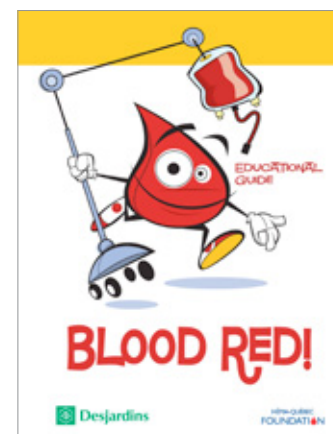
In July 2010, the President and CEO, Dr. Francine Décary, was given another prestigious distinction when she received the title of honorary member of the International Society for Blood Transfusion (ISBT) at a conference held in Berlin.

### Dr. DÉCARY RANKED AMONG THE 30 MOST INFLUENTIAL PERSONALITIES IN THE MEDICAL WORLD

In January 2011, the journal *L'actualité médicale* designated Dr. Francine Décary, President and CEO, as one of the 30 most influential people in the medical world of the past 30 years.

### RECIPIENT OF THE ZÉNITH AWARD

Héma-Québec won the 2010 Zénith award for its televised advertising campaign and was a finalist for the "BLOOD RED!" educational kit. The Zénith awards recognize projects submitted by Québec government departments and public agencies and highlight excellence in government communication.



## PUBLICATIONS, PARTICIPATIONS, COMMITTEES

### PUBLICATIONS

**Germain M, Thibault L, Jacques A, Tremblay J, Bourgeois R.** (2010) Heart valve allograft decontamination with antibiotics: impact of the temperature of incubation on efficacy. *Cell and Tissue Banking* 11 (2) : 197-204.

**Devine DV, Sher GD, Reesink HW, Panzer S, Hetzel PA, Wong JK, Horvath M, Leitner GC, Schennach H, Nussbaumer W, Genoe K, Cioffi JM, Givisiez FN, Rogerson M, Howe D, Delage G, Sarappa C, Charbonneau, Fu Y, Sarlija D, Vuk T, Strauss Patko M, Balija M, Jukić I, Ali A, Auvinen MK, Jaakonsalo E, Cazenave JP, Waller C, Kientz D, David B, Walther-Wenke G, Heiden M, Lin CK, Tsoi WC, Lee CK, Barotine-Toth K, Sawant RB, Murphy W, Quirke B, Bowler P, Shinar E, Yahalom V, Aprili G, Piccoli P, Gandini G, Tadokaro K, Nadarajan VS, de Kort W, Jansen N, Flanagan P, Forsberg PO, Hervig T, Letowska M, Lachert E, Dudziak K, Antoniewicz-Papis J, de Olim G, Nascimento F, Hindawi S, Teo D, Reddy R, Scholtz J, Swanevelde R, Rovira LP, Sauleda S, Carasa MA, Vaquero MP, Ania MA, Gulliksson H, Holdsworth S, Cotton S, Howell C, Baldwin C, Cusick RM, Geele GA, Paden C, McEvoy P, Gottschall JL, McLaughlin LS, Benjamin RJ, Eder A, Draper NL, AuBuchon JP, León de González G.** (2010) Inventory management. *Vox Sanguinis*. Avril 2010; 98 (3 Pt 1) : e295-e363.

**Robert A, Boyer L, Pineault N.** (2011) Glycoprotein Ib $\alpha$  receptor instability is associated with loss of quality of platelets produced in culture. *Stem Cells and Development* 20 (3) : 379-390.

**Denomme GA, Westhoff CM, Castilho LM, St-Louis M, Castro V, Reid ME.** (2010) Consortium for Blood Group Genes (CBGG): 2009 report. *Immunohematology* 26 (2) : 47-50.

**Leysi-Derilou Y, Robert A, Duchesne C, Garnier A, Boyer L, Pineault N.** (2010) Polyploid megakaryocytes can complete cytokinesis. *Cell Cycle* 9 (13) : 2587-2597.

**Richard L, Nunes JM, Riccio ME, Buhler S, Di D, Currat M, Ries F, Almada AJ, Benhamamouch S, Benitez O, Canossi A, Fadhlaoui-Zid K, Fischer G, Kervaire B, Loiseau P, de Oliveira DC, Papasteriades C, Piancatelli D, Rahal M, Richard L, Romero M, Rousseau J, Spiroski M, Sulcebe G, Middleton D, Tiercy JM, Sanchez-Mazas A.** (2010) Analysis of the HLA population data submitted to the 15<sup>th</sup> International Histocompatibility/Immunogenetics Workshop by using the Gene[rate] computer tools

accommodating ambiguous date (AHPD project report). *Tissue Antigens* 76 (1) : 18-30.

**Devine DV, Reesink HW, Panzer S, Irving DO, Körmöcz G, Mayr WR, Blais Y, Zhu Y, Qian K, Zhu Z, Greinacher A, Grazzini G, Pupella S, Catalano L, Vaglio S, Liunbruno GM, Smeenk JW, Josemans EA, Briët E, Letowska M, Lachert E, Antoniewicz-Papis J, Brojer E, Gulliksson H, Scott M, Williamson L, Prowse C, AuBuchon JP, López JA, Hoffman P, Busch MP, Norris PJ, Tomasulo P, Dodd RY.** (2010) Research and development. *Vox Sanguinis* 99 (4) : 382-401.

**Marceau F, deBlois D, Petitclerc E, Levesque L, Drapeau G, Audet R, Godin D, Larrivée JF, Houle S, Sabourin T, Fortin JP, Morissette G, Gera L, Bawolak MT, Koumbadinga GA, Bouthillier J.** (2010) Vascular smooth muscle contractility assays for inflammatory and immunological mediators. *International Immunopharmacology* 10 (11): 1344-1353.

**Richard M, St-Laurent J, Perreault J, Long A, St-Louis M.** (2011) A new *SEMA7A* variant found in Native Americans with alloantibody. *Vox Sanguinis* 100 (3) : 322-326.

**Proulx M, Cayer MP, Drouin M, Laroche A, Jung D.** (2010) Overexpression of PAX5 induces apoptosis in multiple myeloma cells. *International Journal of Hematology* 92 (3) : 451-462.

**Patenaude A, Fortin JS, Deschenes R, Côté MF, Lacroix J, Gaudreault RC, Petitclerc E.** (2010) Chloroethyl urea derivatives block tumour growth and thioredoxin-1 nuclear translocation. *Canadian Journal of Physiology and Pharmacology* 88 (11): 1102-1114.

**St-Louis M, Perreault J, Lavoie J, Émond J, St-Laurent J, Long A, Richard M.** (2010) Génomotypage de 21 000 donneurs de sang au Québec et analyse du *RHD*. *Transfusion Clinique et Biologique* 17 (4) : 242-248.

**Godin G, Sheeran P, Conner M, Delage G, Germain M, Bélanger-Gravel A, Naccache H.** (2010) Which survey questions change behavior? Randomized controlled trial of mere measurement interventions. *Health Psychology* 29 (6) : 636-644.

**Pineault N, Cortin V, Boyer L, Garnier A, Robert A, Thérien C, Roy DC.** (2011) Individual and synergistic cytokine effects controlling the expansion of cord blood CD34<sup>+</sup> cells and megakaryocyte progenitors in culture. *Cytotherapy* 13 (4) : 467-480.

**Néron S, Nadeau PJ, Darveau A, Leblanc JF.** (2011) Tuning of CD40–CD154 interactions in human B-lymphocyte activation: a broad array of *in vitro* models for a complex *in vivo* situation. *Archivum Immunologiae et Therapiae Experimentalis* 59 (1) : 25-40.

**Robillard P, Delage G, Karl Itaj N, Goldman M.** (2011) Use of hemovigilance data to evaluate the effectiveness of diversion and bacterial detection. *Transfusion*. DOI : 10.1111/j.1537-2995.2010.03001.x. Published online January 7, 2011.

**Aubin É, Roberge C, Lemieux R, Bazin R.** (2011) Immunomodulatory effects of therapeutic preparations of human albumin. *Vox Sanguinis*. DOI : 10.1111/j.1423-0410.2011.01475.x. Published online March 22, 2011.

**Klein HG, Bower W, Delage G, Dodd RY, Fearon M, Hewlett I, Holmberg J, Katz LM, Kleinman S, Stramer SL, Hollinger FB, McCleary KK, Ruscetti F, Silverman RH.** (2011) Xenotropic murine leukemia virus-related virus (XMRV) and blood transfusion: report of the AABB interorganizational XMRV task force. *Transfusion*. 51 (3) : 654-661.

## INSTITUTIONAL AND SCIENTIFIC PRESENTATIONS

**ANNUAL CONFERENCE OF THE CORPORATION DES THANATOLOGUES DU QUÉBEC, MONTRÉAL, QUÉBEC, CANADA, MAY 2, 2010**

*Oral presentation*

**Beaupré, G.** “Le don de tissus humains : un choix qui fait toute la différence!”

**5<sup>th</sup> CANADIAN SYMPOSIUM ON GENE THERAPY AND VACCINES, GRENVILLE-SUR-LA-ROUGE, QUÉBEC, CANADA, MAY 2–4, 2010**

*Invited lecture*

**Drouin M, Cayer MP, Samson M, Jung D.** “Intracellular trafficking of Ad5/F35 adenovirus in normal human B lymphocytes and the human myeloma cell line U266”

*Poster*

**Drouin M, Cayer MP, Samson M, Jung D.** “Intracellular trafficking of Ad5/F35 adenovirus in normal human B lymphocytes and the human myeloma cell line U266”

**SCIENCE DAY OF THE CANADIAN INSTITUTES OF HEALTH RESEARCH (CIHR), QUÉBEC CITY, QUÉBEC, CANADA, MAY 5, 2010**

*Posters*

**Padet L, Bazin R.** “Inhibition of monocyte phagocytosis by intravenous immunoglobulins (IVIg)”

**St-Amour I, Bazin R.** “Immunologic abnormalities in a triple transgenic mouse model of Alzheimer disease: Implications for the preclinical study of IVIg”

**XXV<sup>th</sup> CONGRESS OF THE INTERNATIONAL SOCIETY FOR ANALYTICAL CYTOLOGY (ISAC), SEATTLE, WASHINGTON, UNITED STATES, MAY 8–12, 2010**

*Posters*

**Nadeau P, Néron S.** “Flow cytometry monitoring of primary human B cell REDOX potential using CMH<sub>2</sub>DCF-DA”

**Simard C, Néron S.** “Rapid screening of several signalling pathways to study IVIg modulation of B cells using fluorescent cell bar coding”

**CONFERENCE OF THE CANADIAN SOCIETY OF TRANSFUSION MEDICINE (CSTM), VANCOUVER, BRITISH COLUMBIA, CANADA, MAY 13–16, 2010**

*Oral presentations*

**Décary, F, AuBuchon J.** “Redefining Ourselves as Transfusion Medicine Specialists: What is our role in educating our peers?”

**St-Louis M, Perreault J.** “What can be found in Héma-Québec’s genotyped blood donors database?”

**Toukara Fatoumata K, Boyer L, Pineault N.** “Mild hyperthermia increases and accelerates Erythropoiesis ex vivo”

**Trépanier P, Aubin É, Paquin Proulx D, Bazin R.** “Cationic IgG present in IVIg preparations exhibit higher anti-inflammatory activity”

*Posters*

**Cayer MP, Drouin M, Proulx M, Jung D.** “2-Methoxyestradiol induce the conversion of human peripheral blood memory B lymphocytes into plasma cells”

**Nadeau P, Néron S.** “Redox potential regulation of B cells by N-acetylcysteine (NAC) modulated their homoaggregation, viability and proliferation”

**St-Louis M, Richard M, Perreault J, Constanzo-Yanez J, Côté M.** “Screening Strategy to identify compatible blood units for patients on erythrapheresis program”

**Thibault L, Jacques A, Ducas É, de Grandmont MJ, Rousseau MC, Delage G, Dion J.** “White particulate matter in red blood cell units: A sense of *déjà vu*?”

**10<sup>th</sup> ANNUAL SYMPOSIUM OF PROTEO, THE QUÉBEC NETWORK FOR RESEARCH ON PROTEIN FUNCTION, STRUCTURE, AND ENGINEERING, CONCORDIA UNIVERSITY, MONTRÉAL, QUÉBEC, CANADA, MAY 14, 2010**

*Posters*

**Padet L, Bazin R.** “Inhibition of monocyte phagocytosis by intravenous immunoglobulins (IVIg)”

**Tremblay-Rochette J, Néron S.** “La réponse des lymphocytes B aux interleukines 6 et 21 et à l’interféron- : un suivi via l’activation des STATs”

**ANNUAL MEETING OF THE AMERICAN SOCIETY FOR APHERESIS (ASFA), NEW ORLEANS, LOUISIANA, UNITED STATES, MAY 26–29, 2010**

*Poster*

**Kakaiya R, Gorlin JB, Pederson B, Winters JL, Thibault L, Tata R, Hogan M, Gardner K.** “Facial flushing reaction with automated double red cell donation by Alyx® instrument”

**28<sup>th</sup> CANADIAN BIOMATERIAL SOCIETY MEETING, KINGSTON, ONTARIO, CANADA, JUNE 2–4, 2010.**

*Oral presentation*

**Çelebi B, Pineault N, Mantovani D.** “How extracellular matrix proteins influence platelet production?”

**ANNUAL CONFERENCE OF SCOTBLOOD, STERLING, SCOTLAND, UNITED KINGDOM, JUNE 8–12, 2010**

*Invited lecture*

**Daigneault S.** “Partenaires pour la vie”

**CONGRESS OF THE ORDRE PROFESSIONNEL DES TECHNOLOGISTES MÉDICAUX DU QUÉBEC (OPTMQ), LAVAL, QUÉBEC, CANADA, JUNE 12, 2010**

*Oral presentation*

**Richard L.** “HPA et anti-HPA”

**ANNUAL EUROPEAN MEETING OF THE TISSUE ENGINEERING AND REGENERATIVE MEDICINE INTERNATIONAL SOCIETY (TERMIS), GALWAY, CONNACHT, IRELAND, JUNE 13–17, 2010**

*Poster*

**Çelebi B, Dravigné J, Pineault N., Mantovani D.** “Design and validation of flow perfusion bioreactor for platelet production”

**INTERNATIONAL ROTARY CONVENTION, MONTRÉAL, QUÉBEC, CANADA, JUNE 21–22, 2010**

*Invited lecture*

**Daigneault S.** “Club 25, les jeunes et le don de sang”

**XXXI<sup>st</sup> CONGRESS OF THE INTERNATIONAL SOCIETY FOR BLOOD TRANSFUSION (ISBT), HELD JOINTLY WITH THE 43<sup>rd</sup> CONGRESS OF THE DEUTSCHE GESELLSCHAFT FÜR TRANSFUSIONSMEDIZIN & IMMUNHÄMATOLOGIE E.V. (DGTI), BERLIN, GERMANY, JUNE 26–JULY 1, 2010**

*Oral presentation*

**Ghibu S.** “Standing Committee on Ethics - Discussion Paper on Blood Doping”

*Poster*

**St-Louis M, Perreault J, Long A, Richard M.** “RhD analysis in Quebec: An overview”

**GORDON RESEARCH CONFERENCE ON PROPROTEIN PROCESSING, TRAFFICKING & SECRETION: LATEST INSIGHTS INTO MOLECULAR MECHANISMS, DISEASE AND THERAPEUTIC APPLICATIONS, COLBY-SAWYER COLLEGE, NEW LONDON, NEW HAMPSHIRE, UNITED STATES, JULY 18–23, 2010**

*Poster*

**Samson M, Drouin M, Cayer MP, Jung D.** “Intracellular trafficking of Ad5/F35 adenovirus in normal human B lymphocytes and human myeloma cell lines U266”

**ANNUAL MEETING OF THE SOCIETY FOR HEMATOLOGY AND STEM CELLS (ISEH), MELBOURNE, VICTORIA, AUSTRALIA, SEPTEMBER 15–18, 2010**

*Poster*

**Celebi B, Pineault N, Mantovani D.** “Improved expansion of CD34+ cells and progenitors with co-culture of CD34+ cells with immortalized umbilical cord blood mesenchymal stem cells”

**34<sup>th</sup> ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF TISSUE BANKS (AATB), NATIONAL HARBOR, MARYLAND, UNITED STATES, SEPTEMBER 10–14, 2010**

*Oral presentation*

**Germain, M.** “Human Derived Clotting Factors and Donor Eligibility”

*Poster*

**Thibault L, Béliveau L, Jacques A, Tremblay J, Germain M.** “Antibiotic Decontamination of Heart Valve Allografts at a Warmer Temperature: Does It Affect the Tissue Structural Characteristics?”



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**17<sup>th</sup> FALL DAY OF CONTINUING MEDICAL EDUCATION,  
SOCIÉTÉ FRANÇAISE DE TRANSFUSION SANGUINE, PARIS,  
FRANCE, OCTOBER 7, 2010**

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*Oral presentation*

**Delage G.** “Procédés de réduction des pathogènes applicables aux produits cellulaires : la perspective canadienne”

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**11<sup>th</sup> ANNUAL MEETING OF THE INTERNATIONAL ENDOTOXIN  
AND INNATE IMMUNITY SOCIETY (IEIIS), VANCOUVER,  
BRITISH COLUMBIA, CANADA, OCTOBER 7–9, 2010**

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*Poster*

**Padet L, Plante A, Bazin R.** “Decreased Expression of the LPS Receptor (CD14) on Human Monocytes Induced by Intravenous Immunoglobulins (IVIg)”

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**63<sup>th</sup> ANNUAL MEETING OF THE AABB AND CTTXPO,  
BALTIMORE, MARYLAND, UNITED STATES,  
OCTOBER 9–12, 2010**

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*Posters*

**Nadeau P, Ducas É, Néron S, Thibault L.** “A novel cytometry-based approach to measure oxidative status and integrity of stored red blood cells”

**Pineault N, Boyer L.** “Impact of cytokine cocktails and culture expansion time on the thrombopoietic potential of *ex vivo* expanded umbilical cord blood cells”

**St-Laurent J, St-Louis M.** “Analysis of complement receptor type I in Yka negative samples”

**St-Louis M, Perreault J, Long A, Éthier C, Côté M.** “An anti-K11 found in a patient undergoing a major surgery”

**Thibault L, Delage G, Jacques A, Potteiger T, Douglas TJ, Sample J, de Grandmont M, Strobl F, Bernier F.** “Workflow Analysis of the Procleix Tigris System for HIV-1, HCV, HBV, and WNV Molecular Testing Following Three WNV Seasonal Scenarios”

**Thibault L, Jacques A, de Grandmont M, Beauséjour A, Thibault S.** “Compatibility of Transfusion Sets with Component Bags from the Atreus/Orbisac System”

**Thibault L, Jacques A, Ducas É, de Grandmont M, Rousseau MC, Delage G, Dion J.** “Analysis of White Particulate Matter in Leukoreduced Red Blood Cell Units”

**Trépanier P, Aubin É, Bazin R.** “Cationized Albumin Exhibits Some of the Anti-Inflammatory Effects of IVIg”

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**XI<sup>th</sup> EUROPEAN SYMPOSIUM ON PLATELET AND  
GRANULOCYTE IMMUNOLOGY, BEAUNE, FRANCE,  
OCTOBER 21–24, 2010**

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*Poster*

**Perreault J, Richard L, St-Louis M.** “A robust and reliable improved MAIPA protocol”

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**MEETING OF THE WORLD HEALTH ORGANIZATION: “GLOBAL  
EFFORTS FOR COLLABORATION ON WORLD BLOOD DONOR  
DAY”, GENEVA, SWITZERLAND, OCTOBER 26–27, 2010**

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*Oral presentation*

**Pepin, M.** “Héma-Québec initiatives on World Blood Donor Day”

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**SCIENCE DAYS OF THE ONCOLOGY, MOLECULAR  
ENDOCRINOLOGY AND HUMAN GENOMICS RESEARCH  
CENTER (CREMOGH) AND THE ENDOCRINOLOGY AND  
GENOMICS SEGMENT–2010, QUÉBEC CITY, QUÉBEC,  
CANADA, OCTOBER 28–29, 2010**

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*Poster*

**St-Amour I, Tremblay T, Bazin R, Calon F.** “Immunologic Abnormalities in a Triple Transgenic Mouse Model of Alzheimer Disease: Implications for the Preclinical Study of IVIg”

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**2<sup>nd</sup> ANNUAL MEETING OF THE RÉSEAU DE THÉRAPIE  
CELLULAIRE ET TISSULAIRE (THÉCELL) OF THE FONDS DE  
LA RECHERCHE EN SANTÉ DU QUÉBEC (FRSQ), QUÉBEC  
CITY, QUÉBEC, CANADA, NOVEMBER 1<sup>st</sup>, 2010**

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*Oral presentation*

**Çelebi B, Pineault N, Mantovani D.** “Amélioration de l’expansion de cellules CD34+ de sang de cordon ombilical en coculture avec des cellules souches mésenchymateuses immortalisées de sang cordon ombilical”

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**40<sup>th</sup> ANNUAL MEETING OF THE SOCIETY FOR NEUROSCIENCE,  
SAN DIEGO, CALIFORNIA, UNITED STATES,  
NOVEMBER 13–17, 2010**

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*Poster*

**St-Amour I, Bazin R, Calon F.** “Immunologic Abnormalities in a Triple Transgenic Mouse Model of Alzheimer Disease”

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**CONSENSUS MEETING ON THE BACTERIAL CONTAMINATION  
OF BLOOD PRODUCTS, RIO DE JANEIRO, BRAZIL,  
NOVEMBER 15–17, 2010**

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*Oral presentations*

**Delage G.** “Bacterial Culture of Platelets Experience at Héma-Québec”

**Delage G.** “Bacterial Contamination of Blood Products, the problem and its prevention”



## CONGRÈS SUR LES PRATIQUES OPTIMALES EN PÉRÉNATALITÉ “ENFANTER LE MONDE”, QUÉBEC CITY, QUÉBEC, CANADA, NOVEMBER 25, 2010

### *Oral presentation*

**Germain M, Gagné L-P.** “Étude de faisabilité sur l’implantation d’une banque publique de lait maternel au Québec”

## 52<sup>nd</sup> ANNUAL MEETING OF THE AMERICAN SOCIETY OF HEMATOLOGY (ASH), ORLANDO, FLORIDA, UNITED STATES, DECEMBER 4–7, 2010

### *Poster*

**Boyer L, Pineault N.** “Characterization of the impact of culture on the thrombopoietic potential of cord blood progenitors”

## 50<sup>th</sup> ANNUAL MEETING OF THE AMERICAN SOCIETY FOR CELL BIOLOGY (ASCB), PHILADELPHIA, PENNSYLVANIA, UNITED STATES, DECEMBER 11–15, 2010

### *Poster*

**Cayer MP, Bertrand C, Samson M, Drouin M, Jung D.** “Suppression of protein phosphatase 2A activity enhances Ad5/F35 adenovirus transduction efficiency in human normal B lymphocytes and cell lines”

## ADVISORY COMMITTEE ON TRANSFUSION MEDICINE (MONTRÉAL) / ADVISORY COMMITTEE ON TRANSFUSION MEDICINE (QUÉBEC CITY), (CCMTM/CCMTQ), MONTRÉAL AND QUÉBEC CITY, CANADA, JANUARY 20, 2011.

### *Invited lecture*

**Thibault L.** “Décompte de globules rouges résiduels dans les concentrés de plaquettes préparés par Héma-Québec”

## CETEBIO MEETING “TECHNICAL STUDY ON MULTI-TISSUE BANKS: PARTNERSHIP BETWEEN HEMOMINAS AND HÉMA-QUÉBEC” AT BELO HORIZONTE, BRAZIL, FEBRUARY 26–MARCH 4, 2011

### *Oral presentation*

**Décary F, Germain M, Tremblay J.** “Evaluation of Technical Processes at Héma-Québec”

## MASTER'S THESIS

**Toukara FK.** “Étude des effets de l'hyperthermie légère sur la prolifération et la différenciation des cellules souches hématopoïétiques CD34+ issues du sang de cordon ombilical”. Thesis presented to the Faculty of Graduate Studies of Université Laval in partial fulfillment of the requirements for the degree of Master of Science (M. Sc.) in the Biochemistry master's program. Department of Biochemistry and Microbiology, Faculty of Science and Engineering, Université Laval, Québec City, Québec, Canada, 2010.

## DOCTORAL THESES

**Paquin-Proulx D.** “Effet des immunoglobulines intraveineuses sur les lymphocytes B : Mécanismes d'action et récepteurs impliqués”. Doctoral thesis presented to the Faculty of Graduate Studies of Université Laval in partial fulfillment of the requirements for the degree of Doctor of Philosophy (Ph. D.) in the Biochemistry doctoral program. Department of Biochemistry and Microbiology, Faculty of Science and Engineering, Université Laval, Québec City, Québec, Canada, June 2010.

**Leysi-Derilou Y.** “Monitoring and mathematical modeling of in vitro human megakaryocyte expansion and maturation dynamics”. Doctoral thesis presented to the Faculty of Graduate Studies of Université Laval in partial fulfillment of the requirements for the degree of Doctor of Philosophy (Ph. D.) in the Biochemistry doctoral program. Department of Chemical Engineering, Faculty of Science and Engineering, Université Laval, Québec City, Québec, Canada, 2011.

## BRIEFS

**Decelles M, Lebrun A.** Presentation of a brief for the development of a pan-Canadian cord blood bank to the Standing Committee on Health of the House of Commons, Ottawa, Ontario, Canada, November 23, 2010.

**Decelles M, Ghibu S.** Presentation of a brief on Bill 125 concerning organ and tissue donation to the Commission de la santé et des services sociaux, National Assembly, Québec City, Québec, Canada, November 24, 2010.

## PATENT

**Lemieux R, Néron S, Proulx C.** (2011) A novel method to produce human natural interferon-alpha. European patent EP 1 237 920, granted February 23, 2011.

## PARTICIPATION IN EXTERNAL COMMITTEES

**Dr. Francine Décary, President and Chief Executive Officer**

President of the human resources and compensation committee of the Centre d'interprétation des biosciences Armand-Frappier (CRHR-CIBAF) (2010–2011)

Chair of the Board of Directors of Friends of the Foundation of the International Society of Blood Transfusion (ISBT) (2010–2011)

Member of the jury for the 2010 Armand-Frappier award (2010)

Secretary of America's Blood Centers (ABC Officers and Directors) (2010–2011)

## **Manon Pepin, Vice-President, Public Affairs and Marketing**

Member of the Board of Directors of the Foundation for America's Blood Centers (2009– )

## **Suzanne Rémy, Vice-President, Quality and Standards**

Member of the Advancing Transfusion and Cellular Therapies Worldwide (AABB) Accreditation Program Committee (2004– )

Member of the Advancing Transfusion and Cellular Therapies Worldwide (AABB) Plasma Task Force (2011– )

CSA: Member of the technical committee on the safety of blood and labile blood products (2002– )

CSA: Member of the technical committee on the safety of cells, tissues and organs intended for transplant (2009– )

## **Sylvie Daigneault, Director, Marketing and International Affairs**

Liaison member of the Board of Directors of the Congress of the Association of Donor Recruitment Professionals (ADRP), Seattle, Washington, United States (2010– )

## **Gilles Beaupré, Manager, Donor Referral**

Member of the organ and tissue donation committee of the Centre hospitalier affilié universitaire de Québec (CHA), Québec City, Québec, Canada (2001– )

Member of the organ and tissue donation committee of the Centre hospitalier universitaire de Québec (CHUQ), Québec City, Québec, Canada (2001– )

Member of the organ and tissue donation committee of the Hôtel-Dieu de Lévis (HDL), Lévis, Québec, Canada (2011– )

## **Maryse St-Louis, scientist in the Operational Research department**

Member of the Consortium of Blood Group Genes (CBGG) (2005– ) and Canadian liaison in the CBGG since 2009

Member of the Molecular Testing Standards Program Unit (2008– )

## **Daniel Jung, scientist in the Cellular Engineering department**

Member of the Board of Directors of the Association de thérapie génique du Québec

Scientific research funding applications evaluator for the 2010–2011 competition of the Discovery Grants Program, Natural Sciences and Engineering Research Council of Canada.

## **GRANTS**

### **NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA (NSERC) AND FONDS QUÉBÉCOIS DE LA RECHERCHE SUR LA NATURE ET LES TECHNOLOGIES (FQRNT)**

Industrial innovation scholarship (IIS) awarded to Patrick Trépanier, doctoral student supervised by Renée Bazin, Director of Cellular Engineering.

### **2011/2012 STRUCTURING PROJECTS COMPETITION OF THE RÉSEAU DE THÉRAPIE CELLULAIRE ET TISSULAIRE (THÉCELL) OF THE FONDS DE LA RECHERCHE EN SANTÉ DU QUÉBEC (FRSQ)**

Two-year, \$60,000 research grant awarded to Nicolas Pineault, cellular engineering scientist, to fund the project entitled "Accélération de la reprise plaquettaire par voie d'expansion des progéniteurs mégacaryocytaires *ex vivo*".

## **EXTERNAL TRAINING ACTIVITIES**

### **DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY, UNIVERSITÉ LAVAL, QUÉBEC, CANADA**

**Néron S.** "Les anticorps et leurs cibles, les antigènes". Two-hour course offered to first-year B.Sc. students in biochemistry and microbiology, Université Laval, as a part of the course "BCM-1002 : Techniques immunochimiques", April 2010.

**Néron S.** "La cytométrie en flux : voir les cellules sous toutes les couleurs". Two-hour course given to B.Sc. students in microbiology, Université Laval, as a part of the course "MCB-3006 : Laboratoire d'immunologie", March 21, 2011.

### **TRAINING GIVEN TO HOSPITAL SEROLOGISTS, QUÉBEC, CANADA, OCTOBER 22 AND NOVEMBER 12, 2010**

**St-Louis M.** "Biologie moléculaire des groupes sanguins"

**Thibault L.** "Préparation et utilisation d'anticorps monoclonaux pour la banque de sang"

### **REFRESHER TRAINING GIVEN TO NURSES AT THE CÉGEP LIMOILLOU, QUÉBEC, CANADA, JANUARY 26, 2011**

**Lamothe, G.** "Le don de tissus humains : un choix qui fait toute la différence!"

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**TRAINING GIVEN TO NURSING AND MEDICAL STAFF AT  
 THE JEWISH GENERAL HOSPITAL, MONTRÉAL, QUÉBEC,  
 CANADA, OCTOBER 6, 2010**

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**Beaupré, G.** “Héma-Québec et les tissus humains”

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**TRAINING GIVEN TO THE NURSING AND MEDICAL STAFF AT  
 HÔPITAL CHARLES-LEMOYNE, GREENFIELD PARK, QUÉBEC,  
 CANADA, NOVEMBER 30, 2010**

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**Beaupré, G.** “Héma-Québec et les tissus humains”

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## OTHER ACTIVITIES

**Bazin R.** “Overview of Cell Engineering - Work on  
 IVIg and B cell cultures.” Speaker invited by Cangene,  
 Winnipeg, Manitoba, Canada, September 15, 2010.

**Bazin R.** “Une carrière en recherche” – Lecture given  
 to students during Career Day at Polyvalente de  
 Charlesbourg, Québec, Canada, November 10, 2010.

**Roy A.** “Le lymphocyte B : une usine à anticorps et  
 un régulateur de la réponse immunitaire.” Lecture  
 presented during Recruiting Day, Department of  
 biochemistry, microbiology and bioinformatics,  
 Université Laval, Québec, Canada, November 15,  
 2010.

# GOVERNANCE

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## BOARD OF DIRECTORS AS AT MARCH 31, 2011

### BUSINESS COMMUNITY

#### Chair

**Jean-Pierre Allaire, FCA, IAS.A**  
Corporate Director

**André Légaré**  
President  
André Légaré & Associés inc.

### HÉMA-QUÉBEC

#### Secretary

**Dr. Francine Décary**  
President and CEO  
Héma-Québec

### HOSPITALS

#### Vice-Chair

**René Carignan, CA**  
Associate Executive Director  
of Finance, Administrative and  
Clinical Support  
McGill University Health Centre

**Suzanne Turmel**  
Executive Director  
West Island HSSC

### RECIPIENTS

**Martine Carré**  
Senior Vice-President  
Leucan

### TRANSFUSION MEDICINE

**Dr. Annie Lagacé**  
Anesthesiologist  
Hôpital du Sacré-Cœur de  
Montréal

**Dr. Martin A. Champagne**  
Hematologist-Oncologist  
Centre hospitalier de Verdun

### DONORS

**Hélène Darby**  
Regional President, Eastern  
Townships Chapter, Association  
of Blood Donation Volunteers

### PUBLIC HEALTH

**Dr. Marc Dionne**  
Scientific Director  
Institut national de santé publique  
du Québec

### ACADEMIA

**Dr. Serge Montplaisir**  
Full Professor  
Department of Microbiology and  
Immunology  
Université de Montréal

**Dr. Patricia Pelletier**  
Assistant Professor  
Department of Medicine  
McGill University

### HAEMOVIGILANCE COMMITTEE OBSERVER

**Wilson Sanon**  
President, Sickle Cell Anemia  
Association of Québec

# ADMINISTRATION

## BOARD OF DIRECTORS

### STRUCTURE

The Board of Directors is made up of 12 members and one observer. Directors represent all phases of the transfusion chain, from donor to recipient, as stipulated in the *Act respecting Héma-Québec and the haemovigilance committee*.

Several modifications have been made to the make-up of the Board of Directors. In September 2010, the President and CEO of Héma-Québec (also the secretary of the Board of Directors) announced that she would be leaving her position on March 31, 2011, to take on new professional challenges. The individual who had guided the destiny of Héma-Québec since its creation therefore announced her departure after serving three mandates at the head of the organization.

In just a few years, she contributed to making Héma-Québec one of the safest and most reliable suppliers of blood products in the world. Moreover, under her guidance and direction, Héma-Québec successfully became a supplier of human tissues and stem cells. Lastly, the efforts she devoted to the good governance of Héma-Québec were acknowledged in 2009 when the organization received an honourable mention as part of the Grands Prix québécois de la qualité, presented by the Premier of Québec to the most successful private companies and public agencies.

The numerous honours Francine Décary has received during the course of her career have served to recognize her as a great scientist, a skilled manager and an exceptional woman: Médecin de cœur et d'action award (1999), Ortho Award (2002), Médaille du mérite international du sang (2002), award from the Réseau des femmes d'affaires du Québec in the category "Cadre ou professionnel, organisme public ou parapublic" (2003), Femme de mérite (2004), Armand-Frappier award (2005), Ordre national du Québec (2008), Thomas F. Zuck Lifetime Achievement award (2010) from America's Blood Centers, Ronald O. Gilcher award, MD award (2010) from the Association of Donor Recruitment Professionals (ADRP), title as honorary member of the International Society of Blood Transfusion (ISBT) and inclusion in the list of the 30 most influential personalities in the medical world of the past 30 years.

One of Dr. Francine Décary's greatest accomplishments was the creation of the Association of Blood Donation Volunteers (ABDV), an organization dedicated to the promotion of blood donation and to helping ensure the next generation of donors. The Board of Directors would like to express its most sincere gratitude to Dr. Décary for all of her accomplishments, her unparalleled dedication and her exceptional contribution.

## APPOINTMENT OF DR. JEAN DE SERRES

One of the highlights of the past year for the Board of Directors was the recruiting and appointment of a new President and CEO for Héma-Québec.

On February 17, 2011, the Chair of the Héma-Québec Board of Directors, Jean-Pierre Allaire FCA, announced the appointment of Dr. Jean De Serres as President and CEO of Héma-Québec, effective April 1, 2011.

With a solid background in medicine and management, Dr. De Serres has notably worked in the fields of public health and the pharmaceutical and biotechnology industries.



Dr. De Serres began his career as a general practitioner in 1985. He worked and actively taught family medicine for 11 years. He was the president of the Collège québécois des médecins de famille from 1995 to 1997. He simultaneously led a career in public health and was the Director of Public Health for the Outaouais region from 1995 to 1999.

His career then led him to the pharmaceutical sector, at CSL Behring, a global leader in plasma protein-based biotherapies. As the medical director and director of the Canadian division from 1999 to 2005, he played an active role in the implementation and development of the Canadian immunology and hematology activities of this multinational pharmaceutical company.

Before joining Héma-Québec, Dr. De Serres served as the Vice-President of Research, Regulatory Affairs and Business Development at Jubilant Draximage, a multinational company with facilities in Kirkland that specializes in developing, producing and selling nuclear medicine medications, and Vice-President of Research at Jubilant HollisterStier, a firm operating in the allergy-immunology sector.

Also in the life sciences sector, Dr. De Serres was involved in company start-ups in the biotechnology field, including MedDiscovery SA (2006), a Swiss firm developing new anti-cancer medications in urology, and Biomilestones Inc. (2008), a firm offering consulting services in the biopharmaceutical sector.

In addition to his medical training, Dr. Jean De Serres also has a Master of Business Administration (MBA) in Bio-industry Management from UQAM and a master's in Community Health.

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## OTHER CHANGES TO THE BOARD OF DIRECTORS

Some of the other changes made within the Board of Directors include the departure of the transfusion medicine representative, Dr. Sylvain Belisle. He is replaced by Dr. Annie Lagacé, anesthesiologist at Hôpital du Sacré-Cœur de Montréal.

## THE BOARD'S MANDATE

The Board initiates and adopts the strategic plan, in addition to revising and approving the budget and the financial statements. It also oversees the implementation of effective control and risk management systems. The Board is supported by a governance committee, an audit committee and a compensation and human resources committee. Moreover, it receives recommendations from three advisory committees: a safety advisory committee, a scientific and medical advisory committee, and a recipient representatives advisory committee. Lastly, the Board of Directors has delegated the monitoring of the respect of the rights of participants in research projects to the Research Ethics Committee, which reports to it on such matters.

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## STRATEGIC PLANNING

As a result of the major changes that took place within Héma-Québec's management, the strategic plan for the year just ending was extended to the end of the 2011–2012 year. A new plan should be submitted next year for 2012–2015. Moreover, the directors once again took part in the strategic planning session with management.

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## FINANCIAL RESULTS, INTERNAL CONTROL AND MANAGEMENT SYSTEM

The Board reviews the financial results and management statistics at every meeting. The Audit Committee oversees the implementation of internal control mechanisms.

## RISK MANAGEMENT AND SAFETY

Implemented in 2003, the risk management policy, which is revised regularly, is integrated into the management cycle and guides all the activities in accordance with strategic planning. At each meeting, the Board reviews the scorecard for the pathogens under surveillance. Periodically, it receives the report from the Audit Committee on the monitoring and management of all risks by management.

## GOVERNANCE

Although it is not subject to the *Act respecting the governance of state-owned enterprises*, Héma-Québec complies with its main principles, as directed by the Board. The Governance Committee has a mandate to support the Board of Directors in this respect. Moreover, the directors must comply with a code of ethics (for more details on this see “Governance framework and director code of ethics” on page 76).

## BOARD COMMITTEES

The board committees are formed by the Board of Directors and are made up of directors.

### EXECUTIVE COMMITTEE

If necessary, this committee meets between the regular Board meetings to make decisions for which it is responsible. The committee met in November 2010.

### GOVERNANCE COMMITTEE

The Governance Committee makes recommendations to the Board regarding principles of governance and codes of ethics for directors and employees. It ensures that directors are properly trained and evaluated. It monitors the attendance of directors at Board and committee meetings and recommends appointments to the various Board committees. Lastly, it submits an evaluation of how the Board operates every two years. This evaluation, which was conducted last year, confirmed that the directors are very satisfied with the manner in which the Board operates.

This year, the committee met twice to evaluate and propose changes to the *Act respecting Héma-Québec and the haemovigilance committee*. The purpose of these modifications was to update the Act in matters of governance. The committee also reviewed the voting method for electing the chair and the vice-chair. Lastly, the committee is currently working on implementing a process for the individual evaluation of directors.

### AUDIT COMMITTEE

The Audit Committee oversees the organization’s financial management, internal controls and risk management. Each year, it examines the budget and pricing for products and recommends approval to the Board of directors. It also supervises the external audit and production of the financial statements. Its duties specifically include verifying compliance with existing legislation, uncovering any financial irregularities, and evaluating the various contingency plans put in place by the organization.

Moreover, the Audit Committee monitored the various steps in the implementation of the computerized quality management system (SIGQ) for the Quality and Standards division, as well as those for the project to computerize the Reference and Stem Cell Laboratory (Système d’information des laboratoires aux affaires médicales - SILAM).

#### EXECUTIVE COMMITTEE AS AT MARCH 31, 2011

**Jean-Pierre Allaire FCA,  
IAS.A**

Chair of the Board

**René Carignan, CA**  
Vice-Chair of the Board

**Dr. Francine Décary**  
Secretary of the Board

**Dr. Marc Dionne**  
Director

**Hélène Darby**  
Director

#### GOVERNANCE COMMITTEE AS AT MARCH 31, 2011

Chair

**Hélène Darby**  
**Martine Carré**  
**André Légaré**

#### AUDIT COMMITTEE AS AT MARCH 31, 2011

Chair

**René Carignan, CA**  
**Dr. Serge Montplaisir**  
**André Légaré**

The Committee also supervised the implementation of new processing methods, namely the buffy coat method.

It also provided support for the Montréal facility development master plan up until the end-of-project report was submitted. Lastly, the Committee monitored the rate of labile blood products lost during production as well as the expiration rate.

## COMPENSATION AND HUMAN RESOURCES COMMITTEE

This committee examines the directions and strategies in human resource management. It recommends evaluation criteria for the President and CEO, evaluates the CEO annually and makes recommendations to the Board regarding the position, as well as the CEO's compensation. It also evaluates the succession plan for vice-presidents, as well as their performance and compensation.

In addition to the above activities, the Committee directed the selection committee responsible for recruiting the new President and CEO of Héma-Québec; monitored the yield of the employees' pension funds, the negotiations for the collective agreements at the Montréal and Québec City facilities as well as the implementation of pay equity; and ensured the active participation of vice-presidents in international associations so as to ensure Héma-Québec's visibility.

## ADVISORY COMMITTEES

The Board's advisory committees are made up of members who are independent from Héma-Québec. They are the Recipient Representatives Advisory Committee, the Safety Advisory Committee, the Scientific and Medical Advisory Committee and the Research Ethics Committee.

### RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE

The mandate of the Recipient Representatives Advisory Committee is to develop effective communications between Héma-Québec and the various groups that represent product recipients and to ensure that their specific interests are brought to the Board's attention. It looks at the recommendations of the Safety Advisory Committee before they are brought before the Board. This year, the Committee was informed about the monitoring done by the Safety Advisory Committee and also had a chance to state its position with regard to the new pathogen scorecard for tissues and stem cells.

### SAFETY ADVISORY COMMITTEE

The mandate of the Safety Advisory Committee is to provide the Board with opinions on product safety and to assist the Board in assessing risks. This committee monitors all existing and emerging pathogens. This year, the Committee focused more closely on a newly identified virus, XMRV, and monitored the results of selective screening tests for Chagas disease.

In addition to the activities listed above, the Committee helped create a pathogen risk management tool for human tissues and cord blood.

### SCIENTIFIC AND MEDICAL ADVISORY COMMITTEE

The Scientific and Medical Advisory Committee is mandated to advise the Board of Directors about the scientific relevance of research and development programs and scientific and medical advances that may have an impact on product supply.

### COMPENSATION AND HUMAN RESOURCES COMMITTEE AS AT MARCH 31, 2011

*Chair*

**Martine Carré**

**Jean-Pierre Allaire FCA, IAS.A**

**André Légaré**

**Dr. Serge Montplaisir**

### RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE AS AT MARCH 31, 2011

*Chair*

**Michel Morin**

COCQ-Sida

**Martine Allard**

**Jacques Dagnault**

Canadian Immunodeficiencies Patient Organization, Québec branch

**Marius Foltea**

**Pascal Mireault**

Canadian Hemophilia Society, Québec branch

**Jean-Pierre Juneau**

Association des grands brûlés

**Gaston Martin**

Transplant recipients

**Wilson Sanon**

**Marika Mouscardy**

Sickle Cell Anemia Association of Québec

**Claudette Pitre-Robin**

Leucan

**Hélène Darby**

**Martine Carré**

Board Observers

Last year, the Scientific and Medical Advisory Committee recommended that the Research and Development division put together a strategic development plan for the next five years. This project is in response to one of the major recommendations made by the most recent external expert committee, which examined all of Héma-Québec's research and development activities. Moreover, the committee monitored the ongoing projects of the Research and Development division.

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## RESEARCH ETHICS COMMITTEE

The mandate of the Research Ethics Committee (REC) is to assess the compliance of research projects with ethical regulations, monitor ethics and ensure the protection of the rights, safety and well-being of all research subjects. This year, the Committee approved ten new projects and renewed 24 others. No particular incident was brought to its attention.



## SAFETY ADVISORY COMMITTEE AS AT MARCH 31, 2011

### PUBLIC HEALTH

#### Chair

**Dr. Bryce Larke**  
Virologist  
Virology, ProVLab  
Alberta, Canada

### INFECTIOUS DISEASES

**Dr. Susan Stramer**  
Scientific Medical Director  
National Confirmatory Testing  
Laboratory  
American Red Cross  
Gaithersburg, United States

### EPIDEMIOLOGY

**Dr. Steven Kleinman**  
Biomedical Consultant  
Victoria, Canada

### TRANSFUSION MEDICINE AND PRACTICES

**Dr. Luiz Amorim**  
Medical Director  
Hemobras  
Brasilia, Brazil

**Dr. Georges Andreu**  
Official Representative of the  
Director General  
Institut National de la  
Transfusion Sanguine  
Paris, France

**Dr. James P. Aubuchon**  
President and Chief  
Executive Officer  
Puget Sound Blood Center  
Seattle, United States

**Dr. Louis M. Katz**  
Executive Vice-President,  
Medical Affairs  
Mississippi Valley Regional  
Blood Center  
Davenport, United States

**Dr. Henk W. Reesink**  
Associate Professor  
Department of hepatology  
Academic Medical Center  
Amsterdam, Netherlands

### TISSUES

**Dr. Douglas Michael Strong**  
Research Professor,  
Department of Orthopedics  
and Sports Medicine and  
Department of Surgery  
University of Washington  
School of Medicine  
Seattle, United States

### CANADIAN BLOOD SERVICES

**Dr. Margaret Fearon**  
Executive Director,  
Medical Microbiology  
Canadian Blood Services  
Toronto, Canada

### PUBLIC REPRESENTATIVE

**David Page**  
Executive Director  
Canadian Hemophilia Society  
Montréal, Canada

### REPRESENTATIVE OF THE RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE

**Marius Foltea**  
Canadian Hemophilia Society  
Québec branch  
Montréal, Canada

### OBSERVER FROM THE BOARD OF DIRECTORS

**Dr. Marc Dionne**  
Scientific Director  
Institut national de santé  
publique  
Québec City, Canada

## SCIENTIFIC AND MEDICAL ADVISORY COMMITTEE AS AT MARCH 31, 2011

### IMMUNOLOGY

#### Chair

**Dr. Yves St-Pierre**  
Professor  
INRS-Institut Armand Frappier  
Laval, Canada

**Dr. Srinivas V. Kaveri**  
Director  
Centre de Recherche  
des Cordeliers  
Team 16-INSERM-U 872  
Paris, France

### DIAGNOSTIC TECHNOLOGIES

**Dr. Michel Houde**  
Expert in diagnostic  
products and biomarkers  
Montréal, Canada

### TRANSFUSION MEDICINE

**Dr. Jean-François Hardy**  
Chairholder, ABDV-Héma-  
Québec-Bayer Chair in  
Transfusion Medicine,  
Université de Montréal

Full Professor,  
Department of Anesthesiology,  
Université de Montréal  
Montréal, Canada

**Dr. Vincent Laroche**  
Hematologist and Blood Bank  
Director and Associate Director  
of Clinical Research-Centre  
hospitalier affilié universitaire  
de Québec

Hematologist and Blood Bank  
Director-Institut universitaire  
de cardiologie et pneumologie  
de Québec  
Québec City, Canada

### BIOTECHNOLOGY

**Dr. Bernard Massie**  
Director, Bioprocess Centre,  
National Research Council  
of Canada (Biotechnology  
Research Institute)  
Montréal, Canada

### INDUSTRIAL RESEARCH

**Dr. Denis Riendeau**  
Scientific Consultant and  
Adjunct Professor  
Department of Biochemistry  
Université de Montréal  
Montréal, Canada

### HEMATOPOIESIS

**Dr. Julie Audet**  
Assistant Professor  
Institute of Biomaterials and  
Biomedical Engineering  
University of Toronto  
Toronto, Canada

### CANADIAN BLOOD SERVICES

**William P. Sheffield**  
Associate Director, Research,  
and Senior Scientist, R&D  
Canadian Blood Services  
Toronto, Canada

Professor, Pathology and  
Molecular Medicine  
McMaster University  
Hamilton, Canada

### REPRESENTATIVE OF THE RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE

**Marius Foltea**  
Canadian Hemophilia Society  
Québec branch

Montréal, Canada

### HÉMA-QUÉBEC BOARD OBSERVER

**Dr. Serge Montplaisir**  
Full Professor  
Department of Microbiology  
and Immunology  
Université de Montréal  
Montréal, Canada

## RESEARCH ETHICS COMMITTEE AS AT MARCH 31, 2010

### LAW

#### Chair

**Suzanne Courchesne**  
Attorney  
Borden Ladner Gervais

### LAW, SUBSTITUTE LEGAL EXPERT

**Mélanie Champagne**  
Attorney  
Borden Ladner Gervais

### RESEARCH FIELD SPECIALISTS

**Dr. Clermont Dionne**  
Population Health  
Research Unit  
Centre de recherche  
du CHA de Québec

**Dr. Michel Vincent**  
Centre de recherche  
sur la fonction, structure  
et ingénierie des protéines  
Université Laval

**Dr. Jacques J. Tremblay**  
Centre de recherche  
du CHUQ (CHUL),  
Ontogeny and reproduction

### BLOOD DONORS

**Pierre McDuff**  
Association of Blood  
Donation Volunteers

### RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE, ETHICIST

**Michel Morin**  
COCQ-Sida  
Montréal, Canada

### SUBSTITUTE ETHICIST

**Johane de Champlain**  
Attorney  
Fonds de la recherche  
en santé du Québec  
Montréal, Canada

# COMPLIANCE WITH LAWS

## ACCOUNTABILITY OBLIGATIONS

There are currently four laws that include accountability obligations:

- The *Sustainable Development Act* (for more information, see “Sustainable development—a daily objective” on page 39)
- The *Act respecting the Ministère du Conseil exécutif*, which covers the publication of the director code of ethics and cases handled under this code (see below)
- The *Regulation respecting the distribution of information* (see below)
- The *Act to implement certain provisions of the Budget Speech of 30 March 2010, reduce the debt and return to a balanced budget in 2013–2014*, better known as Bill 100 (see hereinafter)

### ACT RESPECTING THE MINISTÈRE DU CONSEIL EXÉCUTIF (R.S.Q. M-30)

Public administrators, including those of Héma-Québec, are held to the highest ethical and professional standards, fostering and preserving public trust and transparency in the management of Québec’s blood system.

Pursuant to the *Regulation respecting the ethics and professional conduct of public office holders*, the directors of Héma-Québec adopted a governance structure and a director code of ethics in 1999. It is reviewed annually and the directors sign it every year, certifying that they are committed to respecting it.

No incident was handled under the governance structure and director code of ethics and no breach was reported.

You can consult the code of ethics on page 76.

### REGULATION RESPECTING THE DISTRIBUTION OF INFORMATION AND THE PROTECTION OF PERSONAL INFORMATION

Pursuant to section 4 of the *Regulation respecting the distribution of information and the protection of personal information*, Héma-Québec certifies that it has posted the required documents or information on its Web site.

## REQUESTS FOR ACCESS TO INFORMATION

Four requests for access to information were received between April 1, 2010 and March 31, 2011. Two of these requests involved human resources and two involved contracts awarded by Héma-Québec. The requests were handled within the required time periods: three within 20 days and the last one within 30 days. Three requests were accepted in their entirety and another was partially accepted (refusal pursuant to sections 23 and 24 of the *Act respecting access to documents held by public bodies and the protection of public information* since it concerned information belonging to a third party).

## INFORMATION SECURITY COMMITTEE

Created in 2008, the Information Security Committee oversees the measures implemented to protect the personal information held by Héma-Québec. It meets once a month and submits an annual report of its activities to the President and CEO. Among these activities, the Information Security Committee conducted an awareness raising campaign on the protection of personal information for employees of Héma-Québec at the beginning of April 2010, distributing posters on the theme of “information security: a shared responsibility” covering good practices for the protection of personal information in the form of a quiz/questionnaire.

### ACT TO IMPLEMENT CERTAIN PROVISIONS OF THE BUDGET SPEECH OF 30 MARCH 2010, REDUCE THE DEBT AND RETURN TO A BALANCED BUDGET IN 2013–2014

In accordance with section 2 of the Act, Héma-Québec applied a salary increase of 0.5% for its executive, professional, technical and administrative support staff for 2010–2011.

# MANAGEMENT COMMITTEE



## EXECUTIVE MANAGEMENT COMMITTEE MEMBERS (from left to right):

**Manon Pepin, BA**

Vice-President, Public Affairs and Marketing

**Simon Fournier, DEC**

Vice-President, Information Technology

**Yves Blais, PhD, MBA**

Vice-President, Research and Development

**Marc Germain, MD, PhD**

Vice-President, Medical Affairs

**Suzanne Rémy, MSc, MBA**

Vice-President, Quality and Standards

**Yvan Charbonneau, Eng.**

Vice-President and Chief Operating Officer

**Smaranda Ghibu, BCL, LLB**

Vice-President, Legal Affairs

**Roger Carpentier, CRIA**

Vice-President, Human Resources

**Jean De Serres, MD, MSc, MBA**

President and Chief Executive Officer

**Marco Décelles, CMA**

Vice-President, Stem Cells, Human Tissues  
and Reference Laboratory Operations

**Guy Lafrenière, MBA, CMA**

Vice-President, Finance and Administration

# GOVERNANCE FRAMEWORK AND DIRECTOR CODE OF ETHICS

## PREAMBULE

Héma-Québec's mission is to efficiently provide adequate quantities of safe, optimal blood components and substitutes, human tissues, and cord blood to meet the needs of all Quebecers as well as to provide and develop expertise along with specialized and innovative services and products in the fields of transfusion medicine and human tissue transplantation.

This mandate is pursuant to the *Act respecting Héma-Québec and the Haemovigilance Committee* and to the recommendations of the Commission of Inquiry into the Blood System in Canada, headed by the Honourable Horace Krever.

As public administrators in the meaning of the *Act respecting the Ministère du Conseil exécutif* (R.S.Q. M-30), Héma-Québec's directors are held to the highest ethical and professional standards, fostering and preserving public trust and transparency in the management of Québec's blood system.

## GOVERNANCE FRAMEWORK

In making decisions and setting policies, Héma-Québec privileges the following principles and values:

### 1. SAFETY OF THE BLOOD SUPPLY

Supply safety involves finding a balance between product safety and sufficiency. An inadequate supply could also have consequences for recipients. Decisions are primarily based on safety, but an adequate supply also factors into the method used to apply decisions.

### 2. TRANSPARENCY

The success of a blood supply system depends on its credibility, and the trust and commitment it inspires. Transparency is the underlying attitude. Transparency calls for authenticity and an accessible decision-making process.

### 3. GIVING BLOOD IS A PRIVILEGE

Giving blood is a uniquely selfless act that must remain free. Blood donation is not a right and must not be used for other purposes.

### 4. RESPECT FOR DONORS AND VOLUNTEERS

Donors are the starting point of all Héma-Québec's operations. As donation is a selfless act, Héma-Québec must show donors respect and not undermine their integrity and dignity. Volunteers are also an essential part of Héma-Québec's mission. Volunteers must be treated with respect.

### 5. EFFICIENCY

When appropriate, a review of benefits and expenses, including a cost/benefit analysis and decision analysis, may be carried out.

## CODE OF ETHICS

### 1. GENERAL PROVISIONS

#### DEFINITIONS

In this code of ethics, unless the context dictates otherwise, the terms and expressions below are used as follows:

- 1.1 "Director or member of the Board of Directors": Person appointed to the Héma-Québec Board of Directors by the government, as well as the President and Chief Executive Officer, who is an ex officio member of the Board of Directors and acts as Secretary;
- 1.2 "Conflict of interest": Any real, apparent, potential or future situation in which a director may be inclined to give preference to his or her personal interest, or the interest of a related party, to the detriment of Héma-Québec;
- 1.3 "Board": Héma-Québec's Board of Directors;
- 1.4 "Related party": Individuals related by blood, adoption or marriage, or who have been living in a conjugal relationship for at least one (1) year, as well as any organization, partnership



or other entity in which the director or his/her friends and family may have a controlling interest.

## APPLICATION AND INTERPRETATION

- 1.5 This code of ethics applies to Héma-Québec's directors.
- 1.6 The code of ethics is not a substitute for any statutory, regulatory or ethical provision applicable to Héma-Québec directors, including those set out in the *Regulation respecting the ethics and professional conduct of public office holders*.
- Where such provisions differ, Héma-Québec directors shall abide by the more stringent provision. Moreover, in case of doubt, they must act in the spirit of the principles described in the provisions.
- 1.7 The code of ethics in no way rules out the drafting of additional guidelines or rules pertaining to certain more specific sectors of activity or situations.

## 2. MANAGEMENT DUTIES

- 2.1 Directors are appointed to contribute to the fulfilment of Héma-Québec's mission as part of their mandate. In carrying out their duties, they must adhere to the obligations imposed upon them by the law, the constitution and the rules and regulations, and act within the limits of the power conferred upon them.
- 2.2 THE DIRECTOR MUST PERFORM HIS/HER DUTIES WITH CARE AND RESERVE:**
- 2.2.1 The director must be rigorous and independent, and act in the best interests of Héma-Québec.
- 2.2.2 The behaviour of a director must be impartial.
- 2.2.3 The director must act within the limits of his/her mandate.
- 2.2.4 The director must be courteous, his/her relationships must be characterized by good faith, so as to maintain the trust and consideration required by his/her role.
- 2.2.5 The director must not in any way participate in illicit activities.
- 2.2.6 In the carrying out of his/her duties and responsibilities, the director must make decisions without regard for any partisan political consideration. Moreover, he/she must

demonstrate restraint in the public expression of personal opinions in matters directly concerning the activities of Héma-Québec and in which the Board of Directors has been involved.

## 2.3 THE DIRECTOR MUST ACT WITH HONESTY, LOYALTY AND SOLIDARITY:

- 2.3.1 The director must act with integrity and impartiality in the best interests of Héma-Québec.
- 2.3.2 The director must actively take part in the development and implementation of the general directions of Héma-Québec, which in no way precludes his or her right to dissent.
- 2.3.3 The director must be loyal and upstanding to his/her colleagues and honest in his/her dealings with them.
- 2.3.4 The director must dissociate the fulfilment of his/her duties from the promotion or exercise of his/her professional or business activities, save for the President and Chief Executive Officer, who is at the exclusive service of Héma-Québec.

## 2.4 THE DIRECTOR MUST ACT WITH SKILL, DILIGENCE AND EFFICIENCY:

- 2.4.1 The director must exercise his/her skills and abilities, demonstrating diligence and effectiveness in carrying out his/her mandate. He/she must also demonstrate independent professional judgment.
- 2.4.2 The director is responsible and accountable for all his/her actions taken in the performance of his/her duties.
- 2.4.3 The director must make informed decisions, taking into account any necessary expertise if need be and considering each file in its entirety.
- 2.4.4 All members of the Board of Directors must actively participate in the Board's work and attend meetings regularly. They must also be assiduous when taking part in Board committees.
- 2.4.5 The director must show discernment in the courses of action and choices he/she favours.

## 2.5 THE DIRECTOR MUST ACT ACCORDING TO THE RULES OF CONFIDENTIALITY:

- 2.5.1 The director must respect the confidential nature of any information that comes to his/her attention in the course of his/her duties or by virtue of his/her position.

The first clause is not intended to restrict necessary communications between Board members.

- 2.5.2 The director must not use confidential information that comes to his/her attention during the course of his/her duties for the purpose of obtaining a direct or indirect advantage, now or in the future, for him/herself or a related party.

### 3. CONFLICTS OF INTEREST

#### GENERAL PROVISIONS

- 3.1 The director must at all times maintain a high level of independence and avoid any situation in which there could be a personal advantage, direct or indirect, either now or in the future, which could jeopardize his/her independence, integrity or impartiality.
- 3.2 The director must prevent any conflict of interest or appearance thereof and avoid putting him/herself in a position that could ultimately prevent him/her from fulfilling his/her duties.
- 3.3 The director must avoid any situation which could compromise his/her capacity to fulfil his/her duties in an impartial, objective, professional and independent manner.
- 3.4 The director shall not commingle the assets of Héma-Québec with his/her own; he/she shall not use the assets of Héma-Québec for his/her personal gain or the gain of a related party.
- 3.5 The director may not use Héma-Québec's services or information for his/her personal benefit or for the benefit of a related party.
- 3.6 The director may not exercise his/her duties in his own interest or in the interest of a related party.
- 3.7 The director must not accept a current or future advantage from anyone if he/she has knowledge, evidence or reason to believe that this current or future advantage is granted to him/her for the purpose of influencing his/her decision.
- 3.8 The director shall not make a commitment to a third or related party nor grant that party any guarantee with regard to a vote he/she may be required to cast or to any decision whatsoever that may be made by the Board of Directors.

#### 3.9 THE DIRECTOR MUST AVOID ANY SITUATION IN WHICH HE/SHE COULD BE IN A CONFLICT OF INTEREST. WITHOUT LIMITING THE SCOPE OF THE FOREGOING, THE DIRECTOR:

- 3.9.1 Is in a conflict of interest when the interests in question are such that he/she may be brought to show preference for some of them to the detriment of Héma-Québec, or where his/her judgment and loyalty could be negatively affected.
- 3.9.2 Is not independent from a given decision if there is a personal advantage or advantage to a related party, now or in the future, as described in article 3.1.

#### PREVENTIVE MEASURES

- 3.10 At the start of each meeting, the director must declare any existing conflict of interest to the Chair and see that it is recorded in the minutes.
- 3.11 The President and Chief Executive Officer may not, under penalty of dismissal, have a direct or indirect interest in a corporate body, partnership or other entity which could lead to a conflict of interest between him/herself and Héma-Québec. However, dismissal shall not be invoked if the interest is devolved upon the President and Chief Executive Officer by succession or gift, provided he/she renounces it or disposes of it promptly. Any other director having a direct or indirect interest in a corporate body, partnership, or other entity which could lead to a conflict of interest between him/herself and Héma-Québec must, under penalty of dismissal, declare this interest in writing to the Chair of the Board as well as to the Minister and, if need be, abstain from participating in any deliberation or decision related to said corporate body, partnership, or other entity in which he/she has an interest. The director must also withdraw from the meeting for the duration of the deliberations and vote concerning the matter.
- 3.12 THE DIRECTOR MUST DEMONSTRATE IMPARTIALITY:
- 3.12.1 The director shall not solicit, accept or demand any gift, favour, other advantage or consideration, for him/herself or a related party, either directly or indirectly, now or in the future, which could compromise his/her independence, integrity or impartiality; such is the case of gifts, favours, advantages or considerations other than what is customary and of modest value.

3.12.2 The director must not award, offer to award or promise to award to a third party a gift, favour or other advantage or consideration that could compromise his/her independence, integrity or impartiality.

#### 4. POLITICAL ACTIVITIES

- 4.1 Any director who intends to run for public office must inform the Chair of the Board of Directors.
- 4.2 A Chair of the Board of Directors or President and Chief Executive Officer who wishes to run for public office must tender his/her resignation.

#### 5. POST-MANDATE MEASURES

- 5.1 After his/her mandate expires, the director must maintain confidentiality and refrain from disclosing any non-public data, information, debate or discussion to which he/she was privy by virtue of his/her position at Héma-Québec.
- 5.2 In the year following the expiration of his/her mandate, the director may not participate, either on his/her own behalf or that of a third party, in a procedure, negotiation or other operation to which Héma-Québec is a party and with regard to which he/she has information that is not available to the public.  
  
As well, the director must refrain from offering advice based on information that is not publicly available regarding Héma-Québec or another corporate body, partnership or entity with which he/she has had significant direct dealings in the course of the year preceding the conclusion of his/her mandate.
- 5.3 A director who has relinquished his/her duties must act in such a way so as not to reap undue advantage from his/her previous duties in the service of Héma-Québec.

#### 6. RESPONSIBILITIES AND SANCTIONS

- 6.1 Compliance with the code of ethics is an integral part of the duties and obligations of directors.
- 6.2 The Chair of the Héma-Québec Board of Directors has the duty to ensure that the code of ethics is complied with and applied.
- 6.3 A director who infringes upon any of the provisions in the code of ethics leaves him/herself open to the sanctions outlined in the Regulation respecting the ethics and professional conduct of public office holders,

in accordance with the procedure established in said regulation.

- 6.4 Héma-Québec's Board of Directors shall revise this code of ethics on an annual basis to ensure that it adequately reflects changes in the laws, rules, regulations and situations specific to Héma-Québec.
- 6.5 Each director undertakes to sign the code of ethics agreement form appended hereto at the start of his/her mandate and every year thereafter.

This version was adopted by the Board of Directors on October 4, 2006.

**Since Héma-Québec was founded in 1998, no case has ever had to be dealt with under the Governance Framework and Code of Ethics for Directors; 2010-2011 was no exception.**

# FINANCIAL STATEMENTS

## FOR THE YEAR ENDED MARCH 31, 2011

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# MANAGEMENT'S REPORT

The financial statements presented in this report were drawn up in accordance with Canadian public sector accounting standards, as described in note 2 to these financial statements.

The financial statements and all the information in this annual report are the responsibility of management. The financial information presented elsewhere in this annual report is consistent with that provided in the financial statements.

To assess certain events and transactions, management has made estimates based on its best judgment of the situation and by taking into account materiality.

To fulfil its mandate, management maintains a system of internal accounting controls designed to provide reasonable assurance that assets are safeguarded and that transactions are duly approved and properly recorded on a timely basis and in a manner suitable for preparing reliable financial statements.

Héma-Québec recognizes that it is responsible for conducting its affairs in accordance with the statutes and regulations governing it.

The Board of Directors monitors the manner in which management carries out its financial reporting responsibilities and approves the financial statements. It is assisted in its responsibilities by the Audit Committee whose members are not part of management. The committee meets with management and the Auditor General of Québec, reviews the financial statements and recommends their approval to the Board of Directors.

The Auditor General of Québec has audited the financial statements of Héma-Québec in accordance with Canadian auditing standards. His report states the nature and scope of the audit and expresses his opinion.



**GUY LAFRENIÈRE**

Vice-President, Administration and Finance



**JEAN DE SERRES**

President and Chief Executive Officer

Montréal, June 16, 2011

# INDEPENDENT AUDITORS' REPORT

To the Minister of Finance

## Report on the financial statements

I have audited the financial statements of Héma-Québec, which comprise the statement of financial position as at March 31, 2011, the statements of operations, changes in net assets and cash flows for the year then ended, and the accompanying notes.

### *Management's responsibility for the financial statements*

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian generally accepted accounting principles, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditor's responsibility*

My responsibility is to express an opinion on these financial statements based on my audit. I conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

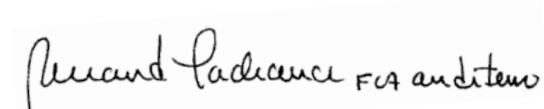
I believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for my audit opinion.

### *Opinion*

In my opinion, these financial statements present fairly, in all material respects, the financial position of Héma-Québec as at March 31, 2011 and the results of its operations and its cash flows for the year then ended in accordance with public sector accounting standards.

## Report on other legal and regulatory requirements

As required by the *Auditor General Act* (R.S.Q., chapter V-5.01), I report that, in my opinion, these principles have been applied on a basis consistent with that of the previous year.



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**RENAUD LACHANCE, FCA, AUDITOR**  
Auditor General of Québec

Montréal, June 16, 2011

# FINANCIAL STATEMENTS

## STATEMENT OF OPERATIONS FOR THE YEAR ENDED MARCH 31

[in thousands of dollars]

	2011	2010
<b>REVENUES</b>		
Blood products sold to Québec hospital centres	\$298,014	\$292,195
Grants from the Government of Québec	32,235	30,925
Human tissue sold to Québec hospital centres	2,475	1,897
Interest on bank deposits	200	95
Other	3,329	2,940
	<b>336,253</b>	<b>328,052</b>
<b>EXPENSES [note 3]</b>	333,296	325,149
<b>EXCESS OF REVENUES OVER EXPENSES (before undernoted)</b>	<b>2,957</b>	<b>2,903</b>
Credits issued to Québec hospital centres pertaining to previous year [note 4]	(2,903)	(3,351)
<b>NET EXCESS (DEFICIENCY) OF REVENUES OVER EXPENSES</b>	<b>\$54</b>	<b>\$(448)</b>

The accompanying notes are an integral part of the financial statements.

## STATEMENT OF CHANGES IN NET ASSETS FOR THE YEAR ENDED MARCH 31

[in thousands of dollars]

	2011	2010
<b>NET ASSETS, BEGINNING OF YEAR</b>	\$3,818	\$4,266
NET EXCESS (DEFICIENCY) OF REVENUES OVER EXPENSES	54	(448)
<b>NET ASSETS, END OF YEAR</b>	<b>\$3,872</b>	<b>\$3,818</b>

The accompanying notes are an integral part of the financial statements.

## STATEMENT OF FINANCIAL POSITION AS AT MARCH 31

[in thousands of dollars]

	2011	2010
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash [note 11]	\$13,587	\$19,458
Accounts receivable [note 5]	2,939	2,499
Grants forthcoming from the Government of Québec	-	2,522
Inventories [note 6]	33,631	36,340
Prepaid expenses [note 7]	1,292	2,474
	<b>51,449</b>	<b>63,293</b>
<b>PROPERTY, PLANT AND EQUIPMENT [note 8]</b>	39,255	36,671
<b>DEFERRED CHARGES [note 9]</b>	1,396	1,455
	<b>\$92,100</b>	<b>\$101,419</b>
<b>LIABILITIES</b>		
<b>CURRENT LIABILITIES</b>		
Borrowing under line of credit [notes 10 and 11]	\$-	\$15,004
Short-term borrowing [note 10]	-	3,000
Accounts payable and accrued liabilities [note 12]	27,122	32,650
Deferred grants from the Government of Québec	8,429	-
Non-interest bearing advance from the Government of Québec	4,294	5,113
Payment on long-term debt [note 13]	4,917	3,882
	<b>44,762</b>	<b>59,649</b>
<b>LONG-TERM DEBT [note 13]</b>	35,546	30,491
<b>ACCRUED BENEFIT LIABILITY [note 14]</b>	7,920	7,461
	<b>88,228</b>	<b>97,601</b>
<b>NET ASSETS</b>	3,872	3,818
	<b>\$92,100</b>	<b>\$101,419</b>

COMMITMENTS AND CONTINGENCIES [NOTES 16 AND 17]

ON BEHALF OF THE BOARD OF DIRECTORS,

  
**JEAN-PIERRE ALLAIRE**  
 Director

  
**RENÉ CARIGNAN**  
 Director

The accompanying notes are an integral part of the financial statements.

## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31

[in thousands of dollars]

	2011	2010
<b>OPERATING ACTIVITIES</b>		
<b>NET EXCESS (DEFICIENCY) OF REVENUES OVER EXPENSES</b>	\$54	\$(448)
<b>ITEMS NOT AFFECTING CASH AND CASH EQUIVALENTS</b>		
Amortization of property, plant and equipment	4,838	4,570
Amortization of deferred charges	59	60
Loss on write-off and disposal of property, plant and equipment	227	15
Unrealized exchange loss (gain)	(710)	303
Increase in accrued benefit liability	459	114
	<b>4,927</b>	<b>4,614</b>
<b>CHANGES IN NON-CASH WORKING CAPITAL ITEMS</b>		
Increase in accounts receivable	(440)	(352)
Decrease in inventories	2,709	520
Decrease (increase) in prepaid expenses	1,182	(109)
Increase (decrease) in accounts payable and accrued liabilities	(5,566)	1,530
Increase (decrease) in deferred grants from the Government of Québec	10,951	(2,522)
Increase (decrease) in advance from the Government of Québec	(819)	2,764
<b>Cash flows from operating activities</b>	<b>12,944</b>	<b>6,445</b>
<b>INVESTING ACTIVITIES</b>		
Acquisition of property, plant and equipment	(7,613)	(8,474)
Proceeds on disposal of property, plant and equipment	2	2
<b>Cash flows used in investing activities</b>	<b>(7,611)</b>	<b>(8,472)</b>
<b>FINANCING ACTIVITIES</b>		
Increase in long-term debt	10,200	6,108
Increase (decrease) in short-term borrowing	(3,000)	3,000
Repayment of long-term debt	(4,110)	(4,194)
<b>Cash flows from financing activities</b>	<b>3,090</b>	<b>4,914</b>
<b>UNREALIZED EXCHANGE GAIN (LOSS) ON CASH AND NON-CASH WORKING CAPITAL ITEMS DENOMINATED IN FOREIGN CURRENCIES</b>	710	(303)
<b>INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>9,133</b>	<b>2,584</b>
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	4,454	1,870
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<b>\$13,587</b>	<b>\$4,454</b>
Cash and cash equivalents are as follows:		
Cash [note 11]	\$13,587	\$19,458
Borrowing under line of credit [note 11]	—	(15,004)
	<b>\$13,587</b>	<b>\$4,454</b>
Interest paid	\$1,409	\$1,282
Acquisition of property, plant and equipment financed by accounts payable and accrued liabilities	\$577	\$539

The accompanying notes are an integral part of the financial statements.



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## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

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### 1. INCORPORATION AND ACTIVITIES

Héma-Québec, constituted on March 26, 1998 by letters patent issued under Part III of the *Companies Act* (R.S.Q., chapter c-38), is continued in accordance with the provisions of the *Act respecting Héma-Québec and the Haemovigilance Committee* (S.Q. 1998, chapter 41). Héma-Québec is a legal person not established for pecuniary gain (not-for-profit organization) whose mission is to efficiently provide adequate quantities of safe, optimal blood components and substitutes, human tissue and cord blood to meet the needs of all Quebecers; to provide and develop expertise, services and specialized and innovative products in the fields of transfusion medicine and human tissue transplantation. Héma-Québec operates in a regulated environment in compliance with the requirements of the *Food and Drug Act* (Canada) and under a licence from the Biologics and Genetic Therapies Directorate of Health Canada. Héma-Québec is not subject to the *Income Tax Act*.

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### 2. SIGNIFICANT ACCOUNTING POLICIES

In preparing its financial statements, Héma-Québec primarily uses the *Public Sector Accounting Handbook* of the Canadian Institute of Chartered Accountants (CICA). The use of any other primary source of generally accepted accounting principles must be coherent with the aforementioned *Handbook*.

The preparation of the financial statements of Héma-Québec in accordance with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the recognition of amounts of revenues and expenses for the financial statement reporting period. Actual results could differ from those estimates. The main estimates consist of the useful life of property, plant and equipment, the allowance for pay equity and the accrued benefit liability.

#### REVENUE RECOGNITION

Revenues resulting from the sale of blood, labile and stable products and human tissue are recognized at the time of delivery provided that collection is reasonably assured.

Revenues derived from Government of Québec grants relating to products and services consisting of human tissue, stem cells, cord blood, reference laboratory and eye bank as well as the Synagis product are accounted for using the deferral method and recognized during the year as the expenses are incurred.

#### INVENTORIES

The inventories of blood, labile and stable products, plasma for fractionation, blood drive and laboratory equipment, and human tissue are valued at the lower of cost or net realizable value. Cost is determined using the average cost method. Net realizable value is the estimated selling price less the related variable selling expenses.

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**NOTES TO FINANCIAL STATEMENTS**

Year ended March 31

[in thousands of dollars]

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**2. SIGNIFICANT ACCOUNTING POLICIES [CONT'D]****PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment are recorded at cost. Amortization is calculated on a straight-line basis over their useful lives using the following rates:

Building	4%
Betterment	5% and 10%
Leasehold improvements	lease term
Automotive equipment	20%
Machinery and equipment	10% and 20%
Office furniture and equipment	20%
Computer hardware	33 1/3%
Software applications	33 1/3%
Software packages	20%

Works of art are not recorded as property, plant and equipment: their cost is expensed in the year of acquisition.

**DEFERRED CHARGES**

Deferred charges related to the right to occupy premises are recorded at cost and amortized on a straight-line basis over the term of the lease.

**FOREIGN CURRENCY TRANSLATION**

Foreign currency transactions are accounted for at the average monthly exchange rate. Monetary assets and liabilities denominated in foreign currency are translated at the exchange rate in effect on the statement of financial position date, whereas non-monetary items are translated at the monthly average exchange rate. Exchange gains and losses on the translation of monetary assets and liabilities are included in the calculation of net excess of revenues over expenses for the year.

**EMPLOYEE BENEFIT PLANS**

Héma-Québec offers its employees defined benefit and defined contribution pension plans. Contributions are made by both Héma-Québec and plan members. Héma-Québec also offers its employees certain benefits that apply after termination of employment but before retirement, and provides certain retirees with health and life insurance benefits.

The cost of retirement benefits and other post retirement benefits is determined to attribute the cost of accrued benefits to the fiscal years in which the related services are rendered by participating employees, and it includes prior period service costs arising from plan amendments, as well as the interest cost on the accrued benefit obligation less the expected return on plan assets.

An accrued benefit asset or liability is presented in the statement of financial position to reflect the difference at year-end between the value of accrued benefit obligations and the fair value of plan assets, net of unamortized actuarial gains and losses.

## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

### 2. SIGNIFICANT ACCOUNTING POLICIES [CONT'D]

Accrued benefit obligations and other post retirement benefits are actuarially determined using the projected benefit method prorated on service and management's best estimate of expected return on plan investments, government bond rates, salary escalation, employee retirement ages and expected health care costs.

The market-related value method is used to calculate the value of assets and expected return on assets.

Actuarial gains or losses arise from, in particular, the difference between the actual long-term rate of return on plan assets and the expected long-term rate of return on plan assets, as well as the difference between plan experience and the actuarial assumptions used to determine the accrued benefit obligation, as well as changes to these assumptions.

Actuarial gains and losses are amortized over the expected average remaining service life for active participating employees, which is 11 years for the unionized employee pension plan, 12 years for the non-unionized employee pension plan, 6 years for the supplemental pension plan, 14 years for extended health and life insurance plans, and 2 years for post-employment benefits.

### CASH AND CASH EQUIVALENTS

Héma-Québec's policy consists in presenting bank balances in cash and cash equivalents, including bank overdrafts whose balances fluctuate frequently from being positive to overdrawn, as well as the line of credit used to make up cash deficiencies.

### 3. EXPENSES BY ACTIVITY CENTRE

				2011	2010
	LABILE PRODUCTS	STABLE PRODUCTS	OTHER SERVICES	TOTAL	TOTAL
Salaries and employee benefits	\$74,520	\$448	\$8,322	\$83,290	\$78,571
Medical and blood drive supplies	26,776	555	6,047	33,378	33,063
Stable products	–	167,428	–	167,428	165,853
Purchased services	59	1,533	3,737	5,329	5,433
Loss on write-off and disposal of property, plant and equipment	225	–	2	227	15
Exchange loss	324	5,074	–	5,398	4,251
Amortization of property, plant and equipment	4,522	8	308	4,838	4,570
Interest on long-term debt	1,436	–	–	1,436	1,304
Other interest and bank charges	326	–	–	326	286
Insurance	2,908	–	–	2,908	5,722
Other expenses	24,096	83	1,595	25,774	25,142
<b>SUBTOTAL</b>	<b>\$135,192</b>	<b>\$175,129</b>	<b>\$20,011</b>	<b>\$330,332</b>	<b>\$324,210</b>
Plasma for fractionation*	(8,508)	8,508			
Change in inventories of finished goods	863	2,112	(11)	2,964	939
<b>TOTAL</b>	<b>\$127,547</b>	<b>\$185,749</b>	<b>\$20,000</b>	<b>\$333,296</b>	<b>\$325,149</b>

\* Some expenses related to plasma for fractionation are incurred for labile products and reallocated to stable products on the basis of costs incurred. Costs are allocated based on units shipped.

**NOTES TO FINANCIAL STATEMENTS**

Year ended March 31

[in thousands of dollars]

**4. CREDITS ISSUED TO QUÉBEC HOSPITAL CENTRES PERTAINING TO THE PREVIOUS YEAR**

The budgeted rates for all blood products are provided every year to Sigmasanté, which is the body designated by the ministère de la Santé et des Services sociaux to manage joint supplies under Section VI of the *Act respecting Héma-Québec and the Haemovigilance Committee*. Following consultations with the Comité de gestion de l'approvisionnement et du financement (CGAF), the budgeted rates are confirmed by Sigmasanté. The CGAF is an advisory board for the Direction de la biovigilance, which falls under the purview of the Direction générale des services de santé et médecine universitaire. The CGAF's role is to make recommendations on financial and accounting issues relating to the supply of blood products.

At the end of each fiscal year, Héma-Québec adjusts the budgeted rates to better estimate the final rates for blood products sold to Québec hospital centres. Within six months following fiscal year-end, Héma-Québec reports to Sigmasanté and the CGAF to obtain approval for the final rates.

**5. ACCOUNTS RECEIVABLE**

	2011	2010
Trade accounts receivable	\$528	\$487
Sales taxes	2,016	1,731
Other receivables	395	281
	<b>\$2,939</b>	<b>\$2,499</b>

**6. INVENTORIES**

	2011	2010
Stable products	\$21,903	\$25,883
Plasma for fractionation	5,291	3,442
Labile products	3,065	3,928
Blood drive equipment	2,039	2,129
Laboratory equipment	726	362
Human tissue	607	596
	<b>\$33,631</b>	<b>\$36,340</b>

**7. PREPAID EXPENSES**

	2011	2010
Insurance	\$319	\$949
CSST contributions	—	635
Other	973	890
	<b>\$1,292</b>	<b>\$2,474</b>

## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

### 8. PROPERTY, PLANT AND EQUIPMENT

							2011	2010
	LAND	BUILDING, BETTERMENT AND LEASEHOLD IMPROVEMENTS	MACHINERY, AUTOMOTIVE AND OTHER EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE	SOFTWARE APPLICATIONS AND PACKAGES	TOTAL	TOTAL
<b>COST OF PROPERTY, PLANT AND EQUIPMENT</b>								
Opening balance	\$2,140	\$36,001	\$17,778	\$3,813	\$7,192	\$8,207	\$75,131	\$67,055
Acquisitions	–	3,232	2,188	465	795	971	7,651	8,959
Disposals	–	(1,212)	(630)	(17)	(1,262)	(13)	(3,134)	(883)
Closing balance	\$2,140	\$38,021	\$19,336	\$4,261	\$6,725	\$9,165	\$79,648	\$75,131
<b>ACCUMULATED AMORTIZATION</b>								
Opening balance	\$–	\$12,470	\$10,012	\$3,270	\$6,148	\$6,560	\$38,460	\$34,756
Amortization expense	–	1,802	1,492	240	646	658	4,838	4,570
Impact of disposals	–	(1,012)	(606)	(16)	(1,262)	(9)	(2,905)	(866)
Closing balance	\$–	\$13,260	\$10,898	\$3,494	\$5,532	\$7,209	\$40,393	\$38,460
<b>NET VALUE</b>	<b>\$2,140</b>	<b>\$24,761</b>	<b>\$8,438</b>	<b>\$767</b>	<b>\$1,193</b>	<b>\$1,956</b>	<b>\$39,255</b>	<b>\$36,671</b>

\* The accumulated cost of work in progress as at March 31, 2011 totalled \$1,288 excluding taxes, of which \$1,150 was included in software applications and packages and \$138 in automotive equipment (\$7,344 as at March 31, 2010 including \$4,608 in betterment, \$2,019 in machinery and equipment, \$354 in leasehold improvements, \$341 in software applications and packages and \$22 in computer equipment). Amortization of property, plant and equipment will begin when the projects are completed and the assets are commissioned.

### 9. DEFERRED CHARGES

Under an emphyteutic lease, Héma-Québec initially paid \$1,875 for the right to occupy premises at Université Laval for a thirty-year term expiring in 2034. The amortization for the period is \$59 (\$60 in 2010) and was recognized in income under “Other expenses.” Accumulated amortization on a straight-line basis amounted to \$479 (\$420 in 2010).



**NOTES TO FINANCIAL STATEMENTS**

Year ended March 31

[in thousands of dollars]

**10. CREDIT FACILITIES**

Héma-Québec was authorized by the ministère de la Santé et des Services sociaux to establish a borrowing plan under section 78 of the *Financial Administration Act*. Under this borrowing plan, Héma-Québec may borrow over the short term or under lines of credit from financial institutions or the ministère des Finances, as manager of the Financing Fund, and over the long term from the Financing Fund up to a maximum of \$77,000 until May 31, 2012 to fund, in particular, bank overdrafts, asset acquisitions and renewals, major work on buildings, loan renewals and product security projects at rates comparable or equivalent to those of the Government of Québec. The amounts borrowed under this plan as at March 31, 2011 were allocated as follows:

	2011	2010
Borrowing under line of credit	\$—	\$15,004
Short-term borrowing	—	3,000
Long-term borrowings [note 13]	27,749	19,294
	<b>\$27,749</b>	<b>\$37,298</b>

Héma-Québec also has a \$15,000 revolving line of credit with a financial institution, bearing interest at the prime rate which may be changed at the bank's option. This line of credit is repayable at any time and was undrawn as at the end of fiscal 2010 and 2011.

**11. CASH AND BORROWING UNDER LINE OF CREDIT**

Given that the \$13,587 in cash (\$19,458 in 2010) and the borrowing under line of credit with a nil amount (\$15,004 in 2010) are held with two different financial institutions, these two items are presented separately in the statement of financial position in accordance with the public sector generally accepted accounting principles since the requisite conditions for presenting a net amount of \$13,587 (\$4,454 in 2010) were not met.

**12. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES**

	2011	2010
Trade accounts payable	\$19,059	\$23,655
Salaries and accrued benefits	8,063	8,995
	<b>\$27,122</b>	<b>\$32,650</b>

**NOTES TO FINANCIAL STATEMENTS**

Year ended March 31

[in thousands of dollars]

**13. LONG-TERM DEBT**

	2011	2010
Loan, secured by the land and building, with a net carrying amount of \$3,839, repayable in monthly instalments of \$24 (principal only), at a fixed rate of 4.12%, renewable in 2011 and maturing in 2023.	\$3,593	\$3,877
Loans repayable in monthly instalments of \$194 (principal only), at fixed rates ranging from 2.92% to 4.67%, maturing from 2012 to 2016.	7,061	5,600
Loans repayable in monthly instalments of \$192 (principal only), at fixed rates ranging from 3.42% to 5.17%, renewable from 2011 to 2020 and maturing from 2013 to 2030.	29,809	24,896
	<b>40,463</b>	<b>34,373</b>
Current portion	(4,917)	(3,882)
	<b>\$35,546</b>	<b>\$30,491</b>

The following principal repayments on long-term debt to be made over the coming fiscal years are based on the assumption that said debt will be renewed under the same terms and conditions:

<b>2012</b>	\$4,917
<b>2013</b>	3,974
<b>2014</b>	3,894
<b>2015</b>	3,654
<b>2016</b>	2,858
<b>2017 and thereafter</b>	\$21,166

**14. DESCRIPTION OF EMPLOYEE BENEFIT PLANS**

Héma-Québec has several defined benefit plans, funded and non-funded, which provide pension benefits, other post retirement benefits and post-employment benefits to most employees.

The defined benefit plans are based on number of years of service and average salary at retirement. They also provide for partial indexation of pension benefits based on inflation.

**TOTAL CASH PAYMENTS**

Total cash payments for future employee benefits for 2011, which consist of Héma-Québec's contributions to its funded pension plans and amounts paid directly to beneficiaries under other non-funded plans amounted to \$7,601 [\$7,296 in 2010].

## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

### 14. DESCRIPTION OF EMPLOYEE BENEFIT PLANS [CONT'D]

#### DATES FOR VALUATION OF DEFINED BENEFIT PLANS

Héma-Québec determines its accrued benefits obligation and the actuarial value of pension plan assets for accounting purposes as at March 31 of each year. The effective dates of the most recent actuarial valuations as well as of upcoming mandatory valuations are as follows:

	EFFECTIVE DATE OF MOST RECENT ACTUARIAL VALUATION	EFFECTIVE DATE OF MANDATORY ACTUARIAL VALUATION
Pension plan for unionized staff	December 31, 2007	December 31, 2010
Pension plan for management, professional, technical and administrative support staff	December 31, 2007	December 31, 2010
Additional pension plan for executives	December 31, 2007	December 31, 2010
Other future benefit plans	December 31, 2009	December 31, 2012

#### DEFINED BENEFIT PLAN OBLIGATION

	2011		2010	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Accrued benefit plan obligation at beginning of year	\$104,116	\$5,564	\$92,962	\$5,070
Current period benefit cost	8,363	2,291	7,731	2,283
Interest expense on average obligation	6,372	176	5,714	173
Benefits paid	(3,069)	(2,367)	(2,347)	(2,398)
Actuarial loss	55	31	56	436
<b>Accrued benefit liability at end of year</b>	<b>\$115,837</b>	<b>\$5,695</b>	<b>\$104,116</b>	<b>\$5,564</b>

#### DEFINED BENEFIT PLAN ASSETS

	2011		2010	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Actuarial value of plan assets at beginning of year	\$96,864	\$—	\$87,501	\$—
Employer contributions	5,234	2,367	4,898	2,398
Employee contributions	3,637	—	3,360	—
Expected return on average assets	5,986	—	5,427	—
Benefits paid	(3,069)	(2,367)	(2,347)	(2,398)
Loss on plan assets	(286)	—	(1,975)	—
<b>Actuarial value of plan assets at end of year</b>	<b>\$108,366</b>	<b>\$—</b>	<b>\$96,864</b>	<b>\$—</b>

## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

### 14. DESCRIPTION OF EMPLOYEE BENEFIT PLANS [CONT'D]

#### ALLOCATION OF DEFINED BENEFIT PLAN ASSETS

[in% as at March 31]	2011	2010
Shares	60%	57%
Bonds	36%	37%
Other	4%	6%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

#### RECONCILIATION OF FINANCIAL POSITION AND AMOUNTS RECORDED IN FINANCIAL STATEMENTS

	2011		2010	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Actuarial value of plan assets	\$108,366	\$–	\$96,864	\$–
Accrued benefit obligation	115,837	5,695	104,116	5,564
<b>Financial position – deficit</b>	<b>(7,471)</b>	<b>(5,695)</b>	<b>(7,252)</b>	<b>(5,564)</b>
Net unamortized actuarial losses	5,018	228	5 158	197
<b>Accrued benefit liability at end of year</b>	<b>\$(2,453)</b>	<b>\$(5,467)</b>	<b>\$(2,094)</b>	<b>\$(5,367)</b>

#### CLASSIFICATION OF LIABILITIES RECORDED IN HÉMA-QUÉBEC'S FINANCIAL STATEMENTS

	2011	2010
Pension plans	\$2,453	\$2,094
Other plans	5,467	5,367
<b>TOTAL ACCRUED BENEFIT LIABILITY</b>	<b>\$7,920</b>	<b>\$7,461</b>

Accrued benefit obligations exceed plan assets for all Héma-Québec plans.

#### COST RECORDED FOR THE YEAR

	2011		2010	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Current period net benefit cost	\$4,726	\$2,291	\$4,371	\$2,283
Amortization of actuarial losses	481	–	296	–
Retirement benefit interest expense	386	176	287	173
<b>COST RECORDED FOR EMPLOYEE FUTURE BENEFITS</b>	<b>\$5,593</b>	<b>\$2,467</b>	<b>\$4,954</b>	<b>\$2,456</b>

## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

### 14. DESCRIPTION OF EMPLOYEE BENEFIT PLANS [CONT'D]

#### SIGNIFICANT ASSUMPTIONS

	2011		2010	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
<b>ACCRUED BENEFIT OBLIGATION AS AT MARCH 31</b>				
Discount rate	6.00%	4.20%	6.00%	4.40%
Rate of compensation increase	3.50%	3.50%	3.50%	3.50%
<b>BENEFIT COST FOR THE YEARS ENDED MARCH 31</b>				
Discount rate	6.00%	4.40%	6.00%	4.60%
Expected rate of return on plan assets	6.00%	—	6.00%	—
Rate of compensation increase	3.50%	3.50%	3.50%	3.50%

#### ASSUMED HEALTH CARE COST TREND RATES

	2011	2010
Initial health care cost trend rate as at March 31	10.00%	10.00%
Cost trend rate declines to	5.00%	5.00%
Year that the rate reaches the rate it is assumed to remain at	2020	2020

### 15. FOREIGN CURRENCY RISK MANAGEMENT

In the normal course of operations, Héma-Québec purchases approximately 75% of its stable products, and medical and blood drive supplies in U.S. dollars and is therefore exposed to currency fluctuations. Héma-Québec has established a foreign currency risk management policy and enters into derivative financial instruments for the management of foreign currency risk particularly through foreign exchange contracts. Héma-Québec has entered into 26 foreign exchange contracts to purchase U.S. dollars in the amount of \$134,000 at the rate of 1.0267 for the period from April 1, 2011 to March 22, 2012 to manage the foreign currency risk linked to the purchase of stable products, and medical and blood drive supplies (in 2010, 26 foreign exchange contracts in the amount of \$136,800 at the rate of 1.06171 for the period from April 1, 2010 to March 8, 2011). These contracts cover 90% of expected minimum foreign currency commitments. As at March 31, 2011, unrealized losses on foreign exchange contracts were valued at \$7,651 (\$6,280 as at March 31, 2010).

The statement of financial position includes the following amounts in Canadian dollars with respect to financial assets and liabilities denominated in U.S. dollars:

U.S. DOLLARS	2011	2010
Cash	\$733	\$8,936
Accounts payable and accrued liabilities	\$5,794	\$11,635



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## NOTES TO FINANCIAL STATEMENTS

Year ended March 31

[in thousands of dollars]

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### 16. COMMITMENTS

Héma-Québec has entered into long-term leases expiring at various dates over the next twenty-three years for its operating and administrative premises. In some instances, the leases for premises include a renewal option of up to five years.

Lease expenses for the premises for the year ended March 31, 2011 amounted to \$2,342 [\$2,386 in 2010]. Future minimum payments under long-term leases are as follows:

<b>2012</b>	\$2,230
<b>2013</b>	2,230
<b>2014</b>	2,024
<b>2015</b>	1,728
<b>2016</b>	1,724
<b>2017 and thereafter</b>	\$28,008

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### 17. CONTINGENCIES

In the normal course of business, Héma-Québec is exposed to various actions and claims. Héma-Québec disputes the legitimacy of all actions and claims, and management estimates that forthcoming settlements will not significantly influence its financial position and results.

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### 18. RELATED PARTY TRANSACTIONS

In addition to the related party transactions already disclosed in the financial statements and measured at the exchange amount, Héma-Québec is related to all government departments and special funds as well as to all organizations and enterprises controlled directly or indirectly by the Government of Québec or subject to joint control or to significant common influence by the Government of Québec. Héma-Québec has not entered into any business transactions with these related parties other than in the normal course of operations and subject to business terms that are usual and customary. These transactions are not disclosed separately in the financial statements.

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### 19. COMPARATIVE FIGURES

Certain prior year figures have been reclassified to conform to current-year presentation.

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