



# 2011–2012

## ANNUAL REPORT

# 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; TO 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 PRESIDENT AND CHIEF EXECUTIVE OFFICER

OVER THE YEARS, HÉMA-QUÉBEC'S GREATEST ACCOMPLISHMENT HAS, WITHOUT A DOUBT, BEEN HELPING SAVE LIVES BY ENSURING A SAFE AND SUFFICIENT SUPPLY OF BLOOD PRODUCTS, HUMAN TISSUES AND STEM CELLS FOR ALL QUEBECERS.

The fiscal year 2011–2012 has been special in that it encompassed both continuity and change. This final year of the 2007–2011 plan was marked by the arrival of a new President and CEO, Dr. Jean De Serres, and the development of new directions for 2012–2015. This exercise required a new assessment of all fields of activity, in keeping with anticipated changes in needs and scientific developments, taking into account international experience. This led to a new vision and a new understanding of our mission and opportunities. Great efforts were made to prepare the innovative projects and the investments that will lead Héma-Québec even further towards excellence and satisfying Quebecers' needs.

The evolution of science and developments in the fields of transfusion medicine and human tissue grafts constantly result in new challenges for Héma-Québec, which must continuously excel and innovate in the service of health. To do so, it once again faced complex challenges and chalked up several remarkable achievements.

Héma-Québec has been able to maintain an optimal level of safety for all products as a result, namely, of a high level of quality control. Product safety was confirmed by inspections performed by Health Canada as well as other external groups, in addition to internal audits. For a second consecutive year, we received a perfect grade during a regular Health Canada inspection.

A record increase in the demand for blood products marked the summer of 2011 and continued throughout the fall. Thanks to generous donors, dedicated volunteers, competent staff and rigorous management, Héma-Québec continued to respond to hospitals' demand and delivered more than 526,000 labile blood products during the year. Moreover, efforts deployed among cultural communities attracted 28% more blood donors of ethnic origin to the blood drives than in 2010–2011.

Héma-Québec also celebrated its tenth year of operation in the field of human tissues with a string of successes, including a 27% decrease in the corneal transplant waiting list over last year. Since January 1, 2012, Héma-Québec has served as the central facility for Health Canada with respect to the activities of Québec's two eye banks – at the Hôpital Maisonneuve-Rosemont in Montréal and the Centre universitaire d'ophtalmologie in Québec (CUO). Moreover, it became the first to offer lyophilized bones in Canada in 2011.

With respect to stem cells, its public cord blood bank is the first Canadian public bank to obtain Netcord-FACT accreditation. These international standards cover the collection, processing, analysis, storage, selection and distribution of cord blood. They are defined by recognized specialists, in keeping with the most recent knowledge in the field of cord blood banks. This accreditation positions



Héma-Québec among the leaders in the field of cord blood. It demonstrates Héma-Québec's readiness to make every effort to achieve a superior quality medical and laboratory practice in the field of cell therapy and its ability to help sick people around the world who need transplants from allogenic donations.

With respect to research and development, several projects were completed in order to optimize blood product processing operations. Moreover, a particular effort was made with respect to recruiting and genotyping donors from various cultural communities. In this way, donors of rare blood types were identified, thereby increasing the reserve of frozen rare blood types in order to better respond to hospitals' demand.


Héma-Québec intensified its efforts to achieve savings and kept the rate increase below inflation. The effort of these savings is reflected in credits granted to the hospitals.

As it is about to initiate its new strategic plan, Héma-Québec feels ready to accomplish even greater feats, based on its strengths and its expertise, in order to improve, expand and create added value for the products and services it provides to the people of Québec.

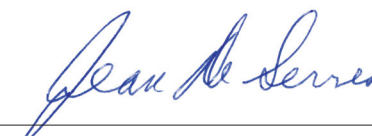
The results presented in this report provide ample evidence of the efforts deployed to continuously improve the quality and accessibility of blood products, stem cells and human tissues for all Quebecers.

We would like to thank all the employees, donors and volunteers who give their all day after day to improve both the health and well-being of Quebecers who are ill and the accessibility of products. We would also like to thank the members of the Board of Directors for their unflagging support.



  
**Jean-Pierre Allaire, FCPA, FCA**  
 Chair of the Board of Directors



  
**Jean De Serres, MD, MSc, MBA**  
 President and Chief Executive Officer

# OUR VISION

TO EXCEL AND INNOVATE FOR BETTER HEALTH

# OUR VALUES

TO BE AUTHENTIC AND TRANSPARENT

TO BUILD TRUST

TO SOLVE PROBLEMS AT THE SOURCE

TO LEARN TO COMMUNICATE

TO DO THINGS RIGHT THE FIRST TIME

TO WORK HARD AT THEIR ENDEAVOURS

TO THINK “SERVICE” AT ALL TIMES

FOR BOTH EXTERNAL AND INTERNAL CLIENTS

# STRATEGIC PLAN

SINCE THE 2007–2011 STRATEGIC PLAN HAS COME TO AN END AND A NEW PRESIDENT AND CEO HAS COME ON BOARD, THIS IS AN OPPORTUNE TIME TO DEVELOP NEW STRATEGIC DIRECTIONS.

Héma-Québec has fulfilled its mission with vim and vigour, becoming a world leader. Nevertheless, its environment is constantly changing. As a result of scientific developments, blood today is always processed so that a recipient can be given one or several components that have been modified to enhance safety and effectiveness. There are more and more applications for the products. Certain components are now produced artificially; others may be produced from human stem cells. Likewise, certain human tissues distributed by Héma-Québec are starting to be produced in the laboratory from human cells as well. Moreover, economic constraints are increasing.

In 2011–2012, therefore, the management committee decided to review its structures, resources and processes to determine if adjustments were needed. For this purpose, all of the Héma-Québec teams were consulted. Following this, an organizational assessment was made, along with an analysis of our strengths, weaknesses, opportunities and threats.

The members of the management committee worked on what Héma-Québec should and could be in 2020, considering the changing needs of recipients and the changes in donor and volunteer behaviours, as well as the evolution of science, computer technology and our society. The purpose of this undertaking was to resolve weaknesses, seize opportunities, and use and maintain strengths, all the while mitigating the risks. This analysis served to identify the changes required to enable Héma-Québec to continue to excel at fulfilling its mission.

Following the organizational assessment conducted at the start of the year, the president and CEO presented the broad outlines of the 2012–2015 strategic plan to the

board of directors. In January 2012, the directors adopted the proposed plan, in which Héma-Québec takes on a new vision: to excel and innovate in the service of health. In other words, it is preserving what it has acquired in terms of quality and a reliable supply and preparing for future excellence through three strategic orientations in quality, efficiency and innovation.

Among other things, it will improve efficiency through the increased automation of processes and certain management changes. It will invest more in innovation, in all sectors of activity. Finally, it wants to increase quality standards. These are ambitious objectives for an organization that has already proven itself. Nevertheless, interventions are needed in all three areas. In its organizational culture, it will emphasize excellence, communication, accountability, partnership and humanism, all in order to enhance the strength of its team. It will also have to review its processes and adjust its benchmarks. Finally, it will acquire additional means with respect to plasma collection, stem cell production and human tissue production.

This plan, with its objectives and targets, places Héma-Québec in a strong position with respect to the major challenges it will be called on to face over the coming years. The resulting action plans will be presented at the start of the 2012–2013 year.

In particular, the current annual report highlights the results obtained by Héma-Québec with respect to the objectives set out in its 2007–2011 strategic plan and presents the audited financial statements.

LUCAS,  
RECIPIENT







1<sup>st</sup>

# GOAL

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

# LABILE BLOOD PRODUCTS

## ENSURING A SAFE SUPPLY OF LABILE BLOOD PRODUCTS

### DENGUE FEVER

A risk analysis was performed to determine whether Héma-Québec should impose a temporary exclusion on travellers who have visited zones where dengue fever, which can be transmitted by transfusion, is endemic.

The dengue fever virus is transmitted by mosquito bites and the infection is endemic in several tropical regions. A donor who is infected during the final days of travel in an endemic zone may carry the virus before the symptoms of the infection appear. In theory, there is a risk that this infection can be transmitted during a blood donation. In most of the countries where the infection is endemic, there is also a risk of malaria. Therefore, the prohibition for the risk of malaria eliminates the risk pertaining to dengue fever for donors who come back from these countries. However, dengue fever is also endemic in a few geographic zones where there is no risk of malaria.

Therefore, the Medical Affairs team undertook a quantitative risk analysis to determine if it would be appropriate to temporarily prohibit donors returning from these same geographic zones. That analysis indicated that the risk is so low that the measure is not justified.

### MEASURES TO INCREASE THE RECRUITMENT OF IGA DEFICIENT DONORS

Immunoglobulin A (IgA) deficiency is primarily hereditary and affects approximately 0.1% of the population. In most cases, the absence of IgA does not cause any health issues. However, known carriers of this deficiency who need a transfusion must receive blood products which are IgA deficient in order to prevent severe allergic reactions.

In order to ensure an adequate supply of IgA-deficient plasma, the Supply Planning, Reference and Stem Cell Laboratory, Research and Development and Marketing

teams have implemented measures to increase the recruitment of donors with this deficiency. Thanks to this effort, the inventory of IgA-deficient plasma has increased by approximately 25% since 2010.

### RETURN OF THE WEST NILE VIRUS TO QUÉBEC

Tests performed on blood donations identified four donors carrying the West Nile virus (WNV) in 2011. Since the test was introduced in June 2003, this is the season during which the largest number of cases was recorded. Over the previous five years, only two WNV-positive cases were identified by Héma-Québec, in the summers of 2008 and 2006. During the summer season (from June 1 to November 30), all donations collected are tested for WNV. Since WNV infections are on the list of diseases that must be declared (MADO) in Québec, these cases were reported to the public health authorities.

### 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 standards and meet the highest requirements. The following table presents the quality control test results for labile blood products for 2011–2012.

QUALITY CONTROL FOR LABILE BLOOD PRODUCTS					
Products	Tests performed	Number of products tested	Percentage of compliance	Acceptable values	Acceptable percentage of tested bags
<b>Packed red blood cells*</b>	Residual leukocytes	2,867	100%	$< 5 \times 10^6/\text{bag}$	100%
	Hemoglobin (total packed red blood cells)	2,463	99.4%	$\geq 40 \text{ g/bag}$	90%
			99.9% <sup>1</sup>	$\geq 35 \text{ g/bag}$	100%
	Hemoglobin (packed apheresis red blood cells)	409	100%	$> 42.5 \text{ g/bag}$	95%
			100%	Average $\geq 51 \text{ g/bag}$	n/a
	Hematocrit	2,872	100%	$\leq 0.8 \text{ L/L}$	90%
	Hemolysis	2,534	99% <sup>2</sup>	$< 0.8\%$	100%
<b>Washed packed red blood cells</b>	Sterility	2,459	100%	No contamination	100%
	Hemoglobin	48	100%	$\geq 35 \text{ g/bag}$	90%
	Hematocrit	48	100%	$\leq 0.8 \text{ L/L}$	90%
	Hemolysis	48	100%	$< 0.8\%$	90%
<b>Deglycerolized packed red blood cells</b>	Sterility	46	100%	No contamination	100%
	Hemoglobin	51	100%	$\geq 35 \text{ g/bag}$	90%
	Hematocrit	51	100%	$\leq 0.8 \text{ L/L}$	90%
	Hemolysis	51	90.2%	$< 0.8\%$	90%
<b>Platelet pools</b>	Sterility	50	100%	No contamination	100%
	Residual leukocytes	122	100%	$< 5 \times 10^6/\text{bag}$	100%
	Platelet count	120	95.9%	$\geq 2.4 \times 10^{11} \text{ and } \leq 5.1 \times 10^{11}/\text{bag}$	75%
	pH	661	100%	6.4-7.8	95%
<b>Apheresis platelets</b>	Sterility	665	100%	No contamination	100%
	Residual leukocytes	428	100%	$< 5 \times 10^6/\text{bag}$	100%
	Platelet count	5,207	91.1%	$\geq 3 \text{ et } \leq 5.1 \times 10^{11}/\text{bag}$	90%
	pH	470	99.4%	6.4-7.8	95%
<b>Apheresis granulocytes</b>	Sterility	471	99.8% <sup>3</sup>	No contamination	100%
	Granulocyte count	49	87.8%	$\geq 1 \times 10^{10}/\text{bag}$	75%
<b>Fresh frozen plasmas by apheresis</b>	Sterility	57	100%	No contamination	100%
	Factor VIII	157	98.1%	$\geq 0.7 \text{ U.I./ml}$	75%
<b>Frozen plasmas</b>	Sterility	158	100%	No contamination	100%
	Factor VIII	1,862	94.5%	$\geq 0.52 \text{ U.I./ml}$	75%
<b>Cryoprecipitates</b>	Fibrinogen	338	100%	$\geq 150 \text{ mg/bag}$	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 review.

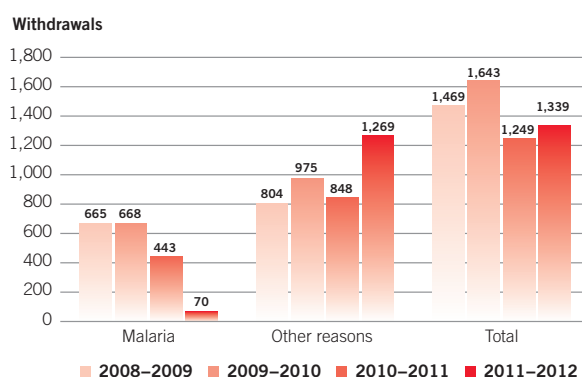
<sup>3</sup> One non-compliant apheresis platelet with no obvious explanation.

Quality control conducts certain tests with respect to labile blood products. These tests serve to check the quality and compliance of the processing methods.

## POST-DONATION INFORMATION

Information provided post-donation is crucial. 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 products is applied systematically if information that could compromise product quality is provided post-donation.

### WITHDRAWALS MADE BASED ON INFORMATION RECEIVED POST-DONATION



The reduction in the number of withdrawals related to malaria is a result of the simplification of the application of the withdrawal criteria. In 2010–2011, the simplified criteria had only been in effect for the last four months of the year and had resulted in an average decrease in withdrawals of 33% compared with the previous year. This year, once the simplified criteria were applied for a full year, a decrease of 84% was noted.

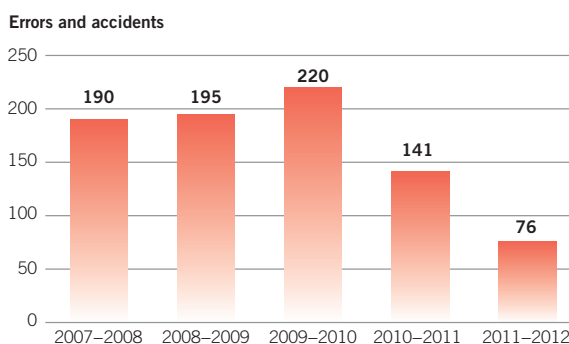
However, for the “other reasons” category, an increase in withdrawals was noted, primarily for declarations concerning:

1. “diseases other than a post-donation infection,” principally cancer;
2. “risky behaviours.” The increase in the withdrawals related to this category can be attributed to a tightening of the criteria extending the period covered for withdrawals.

## 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 reason, is recorded and analyzed in order to evaluate the risk for product safety and efficiency. Such deviations are considered errors and the products in question are immediately withdrawn from the inventory and destroyed. “Accidents” are defined as situations that can occur at any time during the process despite compliance with procedures.

### TOTAL ERRORS AND ACCIDENTS



The 46% reduction in the total number of errors and accidents can be attributed to:

1. a rigorous follow-up of corrective actions serving to correct the problems at the source;
2. a modification made to the concept of the loss of traceability. Since July 2010, transitory losses of traceability are no longer considered an error and accident declaration since the products are redirected without consequence.



## PERCENTAGE OF DONATIONS THAT TESTED POSITIVE FOR VIRAL MARKERS

The number of infections identified in donors has not varied significantly between 2007 and 2012, as indicated in the following table.

PERCENTAGE OF DONORS CONFIRMED POSITIVE FOR EACH MARKER					
	2007–2008	2008–2009	2009–2010 <sup>1</sup>	2010–2011 <sup>2</sup>	2011–2012 <sup>3</sup>
HIV	0.0004	0.0004	0.001	0.0004	0.0003
HCV	0.006	0.005	0.005	0.007	0.007
HBV	0.006	0.004	0.008	0.009	0.009
HTLV	0.001	0.001	0.002	0.001	0.0007
Syphilis	0.006	0.008	0.007	0.004	0.006
<b>Total donations</b>	<b>270,388</b>	<b>274,237</b>	<b>275,890</b>	<b>275,717</b>	<b>291,306</b>

<sup>1</sup> Four donors who confirmed positive for HBV made a donation a few days after receiving a vaccination for Hepatitis B.

<sup>2</sup> Two donors who confirmed positive for HBV made a donation a few days after receiving a vaccination for Hepatitis B.

<sup>3</sup> Seven donors who confirmed positive for HBV made a donation a few days after receiving a vaccination for Hepatitis B.

BACTERIAL CULTURE			
Type of platelets	Products collected	Number of cultures	Cultures testing positive
Apheresis platelets <sup>1</sup>	33,659	29,206	1
Buffy coat platelets <sup>2</sup>	53,064	9,640	1
<b>Total</b>	<b>86,723</b>	<b>38,846</b>	<b>2</b>

<sup>1</sup> A bacterial culture is done on platelets collected through apheresis. During a double donation, the sample to be analyzed is taken from the whole product before it is divided into two.

<sup>2</sup> A bacterial culture is performed on each pool (a pool is equivalent to five buffy coats).

## AUDITS

### Internal and supplier audits

The Audit department helps to ensure the safety of the blood product supply by monitoring compliance of the various activity sectors during internal audits. The compliance program for the 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 2011–2012, 14 internal audits (covering 32 of the organization's sectors) and seven supplier audits were performed. All suppliers obtained or maintained their "approved supplier" status.

### Health Canada audit results

Performed every year by Health Canada representatives at Héma-Québec's two facilities, namely the Montréal and

Québec City facilities, and every second year at the three GLOBULE Blood Donor Centres, these manufacturing process inspections are intended 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 Montréal and Québec City facilities were inspected by Health Canada's Health Products and Food Branch Inspectorate in the fall of 2011. The Health Canada inspectors issued one observation during the inspection of the Québec City facility and the GLOBULE Centre at the Laurier Québec shopping mall received a perfect score. Six observations were issued for the Montréal facility and one observation for the Centre Laval GLOBULE Centre.

The inspectors praised Héma-Québec for the quality of its practices and the professionalism of its employees. All of the observations issued were category 3 (low risk for the donor and the recipient of the blood or blood components). For each observation issued, corrective measures have already been or will shortly be taken.

## Inspections for accreditation by the American Association of Blood Banks

Héma-Québec successfully passed an inspection by the American Association of Blood Banks (AABB) in the fall of 2011. The agency evaluated the quality system as well as Héma-Québec's blood bank operations.

## Regulatory training



Under the supervision of the Quality and Standards division, regulatory training is an essential element of Héma-Québec's mission. It is among the obligations that must be met in order to comply with best practices. It is also an essential condition for maintaining the optimal quality and safety of our products. It covers the regulatory training needs of two-thirds of Héma-Québec's employees.

In 2011–2012, the Regulatory Training department held close to 90,000 hours of training for newly hired employees and individuals returning from leave, as well as to support the implementation of new technology. Moreover, several training activities are required in order to assess existing skills and to update employees' with regard to modifications to procedures.

## ENSURING A SUFFICIENT SUPPLY OF LABILE BLOOD PRODUCTS

### BOOM IN DEMAND IN 2011

Summer can be problematic in terms of blood product supply. And the demand was particularly intense in the summer of 2011, with a 5% increase over 2010. During this period, Héma-Québec had to collect 6,000 additional blood donations in order to satisfy hospitals' demand.

Moreover, the pressure on demand continued until the end of the year. In all, more than 246,000 bags of packed red blood cells were delivered during the course of the year, for a cumulative increase of 9,663 bags of packed red blood cells, namely 4.1% more than the previous year.

## AWARENESS CAMPAIGN DIRECTED AT CULTURAL COMMUNITIES

The chances of finding a compatible donor increase significantly if the search is focused on the blood of people belonging to the same ethnic community. In addition to the ABO system, which is well represented in all types of humans, there are some 30 other blood groupings on the surface of red blood cells. Each group can be found in varying proportions from one ethnic group to another, but there are more similarities within groups.

In order to respond to the need for blood groups that are specific to certain populations, Héma-Québec continued its efforts to raise awareness of blood donation among cultural communities in 2011–2012. Thirty-three blood drives were organized for this target group, eight more than the previous year. These blood drives drew 1,646 donors, an increase of 28% compared with 2010–2011.

All of the efforts deployed were beneficial for the collective blood supply, increasing the proportion of donors from cultural communities from 1% in 2010–2011 to 4.7% in 2011–2012.

## ACQUISITION OF A SECOND MOBILE BLOOD DRIVE UNIT

Héma-Québec is constantly seeking to find ways to increase the efficiency of its supply methods. As a result, it acquired a second mobile blood drive unit in May 2011 in order to reach donors in locations which have so far been inaccessible to traditional blood drives.

The new mobile unit, worth \$550,000, was acquired as a result of the generosity of numerous partners, including the Héma-Québec Foundation, Couche-Tard, and RBC Royal Bank. It can accommodate up to 75 donors per day, compared with 40 for the first mobile unit.

In 2011–2012, the first mobile unit was used to collect donations from 7,110 donors in 191 days of blood drives. The second unit accommodated 7,959 blood donors in 144 days of blood drives. Thus, the number of collections made annually through this type of blood drive more than doubled during the last year. Héma-Québec believes that this number could almost triple once the new mobile unit is used to maximum capacity.

## STUDY ON THE CAPACITY OF THE GLOBULE CENTRES

In 2011–2012, Héma-Québec observed a levelling off in the growth in volume of blood donations from its GLOBULE Blood Donor Centres. As a result of this observation, the Planning and Supply team conducted a study to determine whether this was a temporary loss of impetus on the part of its donor base or a permanent situation.

An examination of the data compiled in 2011 revealed that, overall, the tendency observed could be the result of a migration of whole blood donors to apheresis donation in recent years. Moreover, this phenomenon appears to be temporary since the study indicates that there is a possibility for growth in the zones closest to the centres.

Furthermore, it has been noted that the populations living near the three GLOBULE Centres are very diverse. For that reason, in the case of the Versailles and Laval GLOBULE Centres, Héma-Québec will concentrate on targeting these areas' dominant cultural communities more directly. At the Laurier Québec GLOBULE Centre, the strategies that have been used successfully to date will be maintained and new approaches will be tested in the vicinity of the centre.

## STUDY CONCERNING THE MOTIVATION TO DONATE BLOOD

A large proportion of donors stop giving blood for no apparent reason. A donor is considered inactive if she or he has not given blood for more than two years. Each year, these people represent approximately 20% of the donor pool. Convincing these donors to start giving blood again could represent a major and effective contribution to the blood supply.

Based on work done in recent years by the Medical Affairs division with respect to motivating people to donate blood, a campaign intended to reactivate inactive blood donors was studied. The campaign involved sending various motivational messages to donors by mail and measuring the impact on their return to active status.

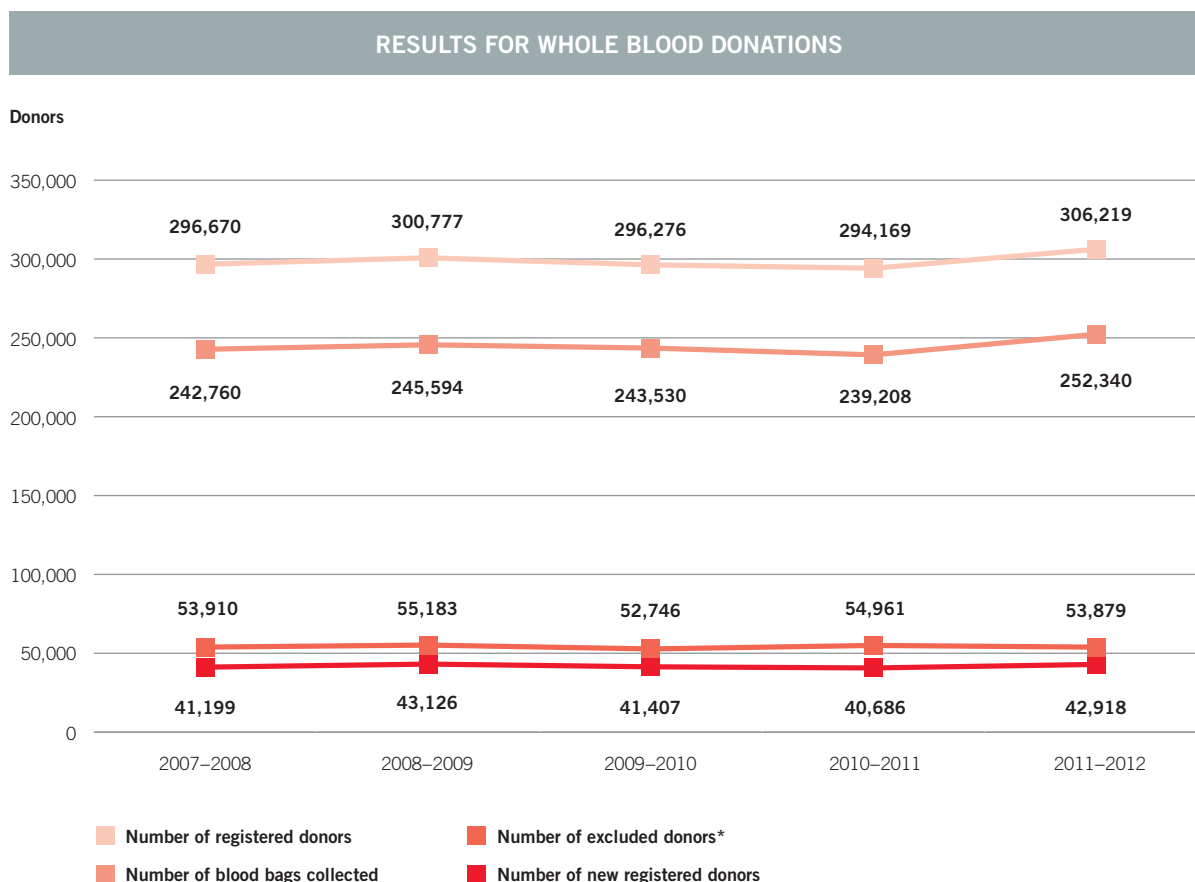
Following this study of 7,000 donors, the results indicate that certain messages intended to increase blood donations had a significant impact. An approach focused on positive self-image following a blood donation seems particularly promising. The results of the study will be used to implement new strategies to motivate inactive donors to donate again.



New mobile blood collection unit.

## RESULTS

### Whole blood donations

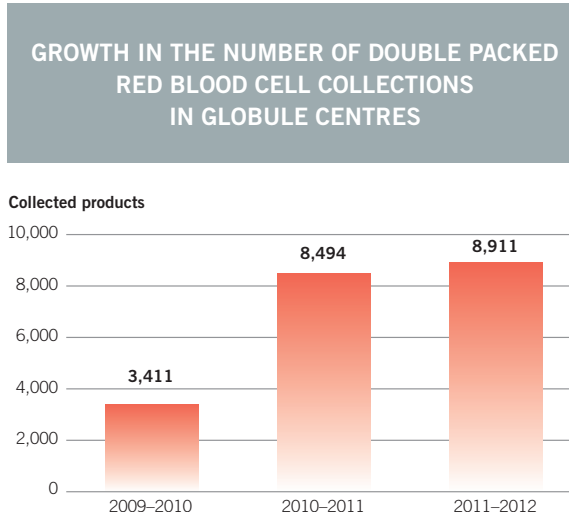


\*Excluded donors refer to registered donors from whom no blood was collected, but for whom a prohibition was issued the same day or within the seven days of the registration. The donors in this category also include registered donors who were not prohibited but whose donation was non completed due to departure, a vein problem or discomfort.

### Growth of double packed red blood cell collections

Double red blood cell collections increased slightly compared with the previous year, from 8,494 to 8,911. A double red blood cell collection means that the donor can make a double donation of red cells with a single collection. This is particularly useful for increasing the reserves of red blood cells for blood groups that are rare but for which there is a large demand due to their high compatibility. This is the case specifically for Rh negative blood types which are present in only 15% of the Québec population.

Until now, double red blood cell collections were handled solely in the GLOBULE Blood Donor Centres. Now, for the first time this year, they were made possible in the mobile

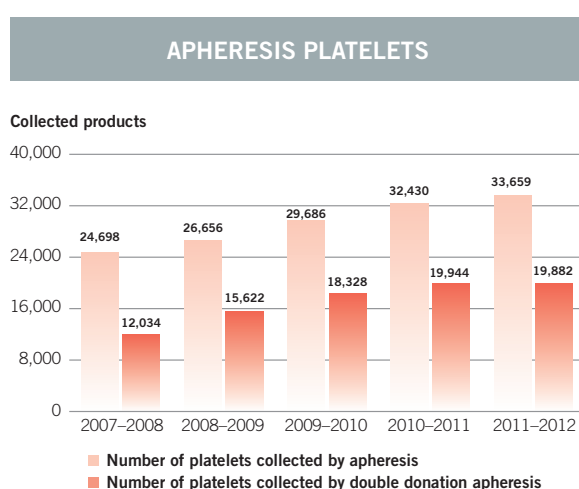




blood drive units as part of a pilot project during a Laval blood drive.

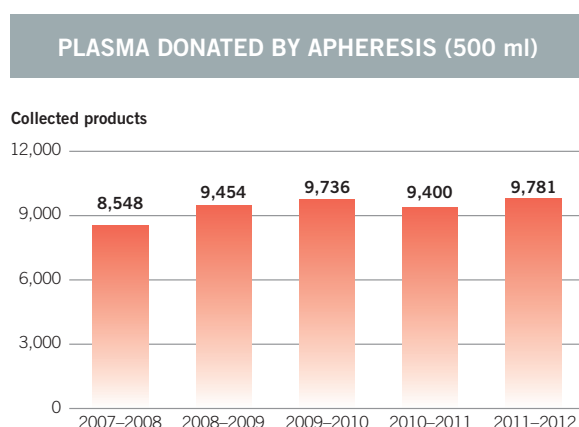
## Developments in apheresis donations

Apheresis collection techniques are at the heart of the platelet supply strategy. In particular, apheresis serves to reduce the number of donors while increasing the quantity of products collected. Since it is possible for the donor to make a double donation, 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.



The number of platelets collected by apheresis has been increasing constantly since 2007-2008. This year, 42% of people donating platelets through apheresis chose to make a double donation. This supply strategy once again meets the increased demand of the hospitals.

The advantages of apheresis are just as significant for the plasma supply. The number of apheresis collections has been maintained at a stable level that meets the needs of the hospitals.



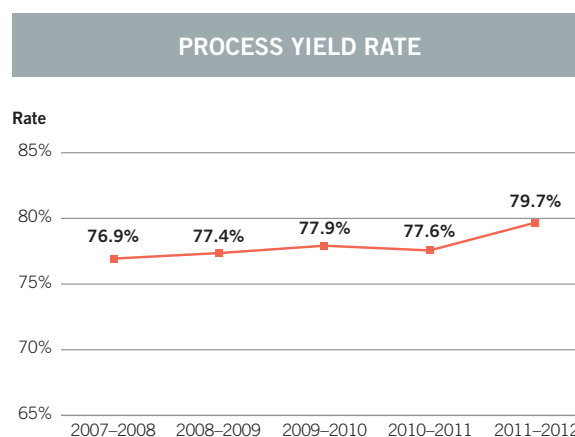
## Process yield

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 donations made at the GLOBULE Blood Donor Centres or with the mobile units, an important component of Héma-Québec's supply strategy.

Several benchmarks for assessing the performance of the supply strategy are compiled to obtain a measure of the overall process yield. In particular, the process yield rate includes the following benchmarks:

- the mobile blood drives' yield rate;
- the rate of red blood cells lost during production;
- the red blood cell expiry rate.

The overall process yield helps, for example, to evaluate the results of blood drives based on fixed objectives, namely 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, the consequences of donor exclusions, the effect of various product rejections on product availability and the expiry of the products collected.



The improvement in the process yield rate over the past year increased the capacity to meet the hospitals' needs, at a better cost.

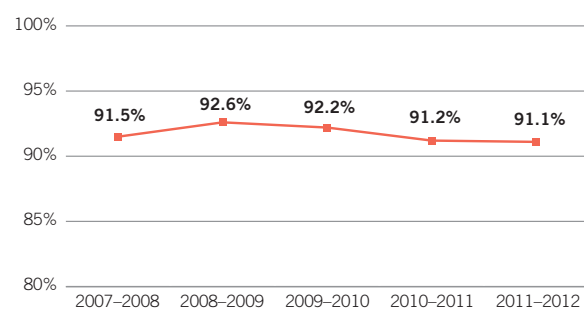
## Yield of mobile blood drives

The yield rate of mobile blood drives is a measure of the number of individuals who actually give blood vs. the targeted objectives (see graph 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 yield rate of the mobile blood drives remained above 91% again this year. The 0.1% difference compared with last year can be accounted for specifically by the slight increase in the number of targeted blood drives in 2011–2012. The advantage of targeted blood drives is that they collect blood from specific blood groups, thereby ensuring the diversity of the collective blood reserve. However, the targeted blood drives draw only a small pool of donors at a time, which reduces the overall yield of the mobile blood drives slightly in terms of the number of donors who give blood per blood drive.



Mobile blood drive.

## Effectiveness of the GLOBULE Blood Donor Centres

The GLOBULE Blood Donor Centres accommodate an average of 1,500 donors per week. They 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.

### EFFECTIVENESS OF THE GLOBULE BLOOD DONOR CENTRES

	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
Whole blood	29,596	31,698	34,751	30,473	32,139
Platelets by apheresis	24,698	26,656	29,686	32,430	33,659
Plasma by apheresis – 500 ml	8,548	9,454	9,736	9,400	9,781
Packed red blood cells by apheresis	–	–	3,411**	8,494**	8,911**
Plasma by apheresis – 250 ml (including MC*)	–	–	1,827**	9,836**	10,947**
Granulocytes	213	69	164	90	58
<b>Total volumes collected</b>	<b>63,055</b>	<b>67,877</b>	<b>79,575</b>	<b>90,723</b>	<b>95,495</b>

\* MC: multiple collection donations.

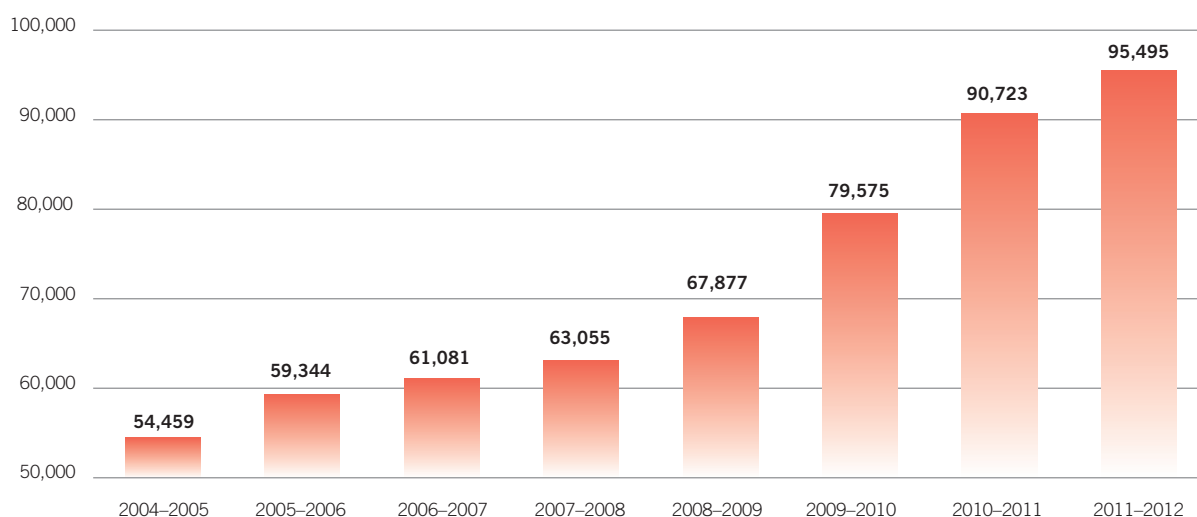
\*\* This type of donation started in 2009–2010.



GLOBULE Blood Donor Centre in Laval.

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

#### Collected products

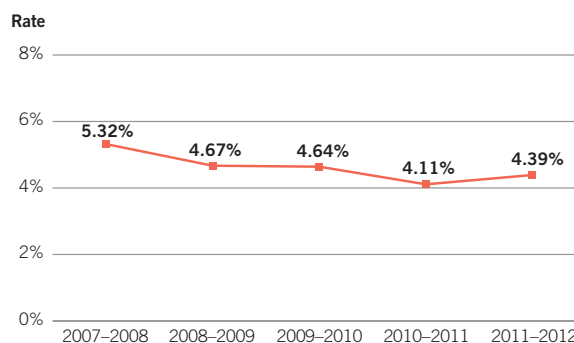


The number of collections in the GLOBULE Blood Donor Centres increased for all products.

#### Yield of processing methods

The yield of the processing methods has a direct impact on the process yield rate. The rates for red blood cells lost during production, the expiry of red blood cells and the expiry of the equivalent platelets remained low again this year as indicated in the following graphs.

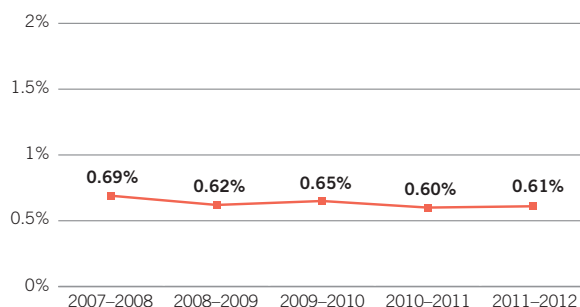
#### RATE OF PACKED RED BLOOD CELLS LOST DURING PRODUCTION



The rate of packed red blood cells lost during production has remained stable for close to four years.

## EXPIRY RATE OF PACKED RED BLOOD CELLS

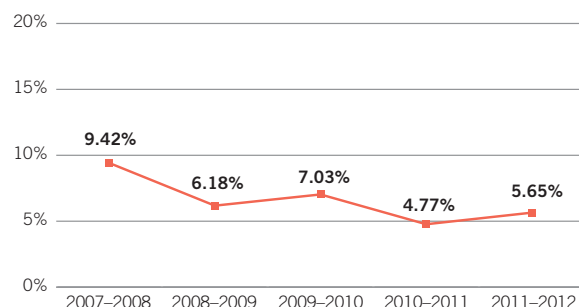
Rate



The packed red blood cell expiry rate remained below 1%. This is the result of maintaining good inventory management practices as implemented.

## EXPIRY RATE FOR EQUIVALENT PLATELETS

Rate



Sound management practices, combined with a targeted supply for hospitals, helped keep the expiry rate very low. It should be noted that the lifespan of platelets is only five days.

## LABILE BLOOD PRODUCTS DELIVERED TO HOSPITALS

## LABILE BLOOD PRODUCTS DELIVERED TO HOSPITALS

	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
<b>Total packed red blood cells</b>	<b>227,581</b>	<b>231,958</b>	<b>233,446</b>	<b>236,699</b>	<b>246,363</b>
Platelet pools <sup>1</sup>	–	–	–	3,387	7,609
Whole blood platelets	31,631	33,503	31,770	21,396	0
Platelets collected by apheresis	23,636	25,153	27,990	30,550	31,762
Equivalent platelets (pools + apheresis X 5) <sup>2</sup>	118,180	125,765	139,950	169,685	196,855
<b>Total platelets</b>	<b>149,811<sup>4</sup></b>	<b>159,268<sup>4</sup></b>	<b>171,720<sup>4</sup></b>	<b>191,081<sup>3</sup></b>	<b>196,855<sup>2</sup></b>
Plasma from whole blood – 250 ml	51,045	53,199	53,040	41,771	32,992
Plasma collected by apheresis – 250 ml	–	–	1,397	8,997	10,163
Plasma collected by apheresis – 500 ml	7,583	6,877	7,341	6,047	6,083
Plasma equivalent (apheresis 500 ml X 2)	15,166	13,754	14,682	12,094	12,166
<b>Total plasma<sup>5</sup></b>	<b>66,211</b>	<b>66,953</b>	<b>69,119</b>	<b>62,862</b>	<b>55,321</b>
<b>Granulocytes</b>	<b>205</b>	<b>69</b>	<b>164</b>	<b>90</b>	<b>40</b>
<b>Cryoprecipitates</b>	<b>15,824</b>	<b>17,426</b>	<b>20,508</b>	<b>20,913</b>	<b>20,744</b>
<b>Cryoprecipitate supernatants</b>	<b>7,546</b>	<b>9,358</b>	<b>6,742</b>	<b>4,278</b>	<b>6,966</b>
<b>GRAND TOTAL</b>	<b>467,178</b>	<b>485,032</b>	<b>501,699</b>	<b>515,923</b>	<b>526,289</b>

<sup>1</sup> Platelets from whole blood collected in a pool (a pool is equivalent to five buffy coats).

<sup>2</sup> In 2011–2012, the “total platelets” corresponded to the sum of the “platelet pools” and the “platelets collected by apheresis” multiplied by five.

<sup>3</sup> In 2010–2011, the “total platelets” corresponded to the sum of the “platelet pools” and the “platelets collected by apheresis” multiplied by five, plus the “platelets from whole blood.”

<sup>4</sup> From 2007–2008 to 2009–2010, the “total platelets” corresponded to the “platelets collected by apheresis” multiplied by five, plus the “platelets from whole blood.”

<sup>5</sup> The “total plasma” is the sum of the “plasma from whole blood”, the “plasma collected through apheresis – 250 ml” and the “equivalent plasma (apheresis X 2).”



## DONOR RETENTION

### The new advertising campaign reaches more people

Héma-Québec launched a new awareness campaign in the fall of 2011 in which it is blood product recipients' turn to speak. In the 30-second videos, produced under the supervision of the Marketing and International Affairs department, five people relate their experiences and thank people for giving them blood. These advertisements are different from those of recent years, which focused on donors. A poster component was also designed, reminding the public about the constant need for blood.

This new campaign increased our advertising visibility. This year, 49% of Québec adults recalled having seen a televised Héma-Québec ad in the weeks preceding the survey, an increase of six percentage points compared with 2011 (43%).

### Blood product donor recognition

The generosity and commitment of donors provide the foundation for Héma-Québec's success in fulfilling its first mission. Every year, recognition evenings are organized to thank those who have given 100 and more donations and to highlight their indispensable support for the cause of blood donation.

In all, five recognition evenings were coordinated by the External Communications department in various Québec regions. Of the 992 donors invited, 638 took part in these evenings.




Marilyne, recipient.

### National Blood Donor Week

Every year, during *National Blood Donor Week*, Héma-Québec honours the numerous supporters of the cause who save lives through their generosity. Thus, several actions were taken by the Public Affairs and Marketing division as part of this fourth annual event, which took place from June 13 to 19.


Héma-Québec deployed new radio messages as well as a new advertising campaign, which actress Julie Perreault, humourist Rachid Badouri and author and performer Louis Morissette generously supported. Throughout the summer, they served as ambassadors for the cause of blood donation and the public had an opportunity to see their faces on road signs and bus shelters.



## Thanks to all donors and volunteers.

**National Blood Donor Week**  
June 13 to 19, 2011

**GIVE BLOOD. GIVE LIFE.**



Author and performer Louis Morissette generously agreed to act as ambassador for the summer 2011 advertising campaign.

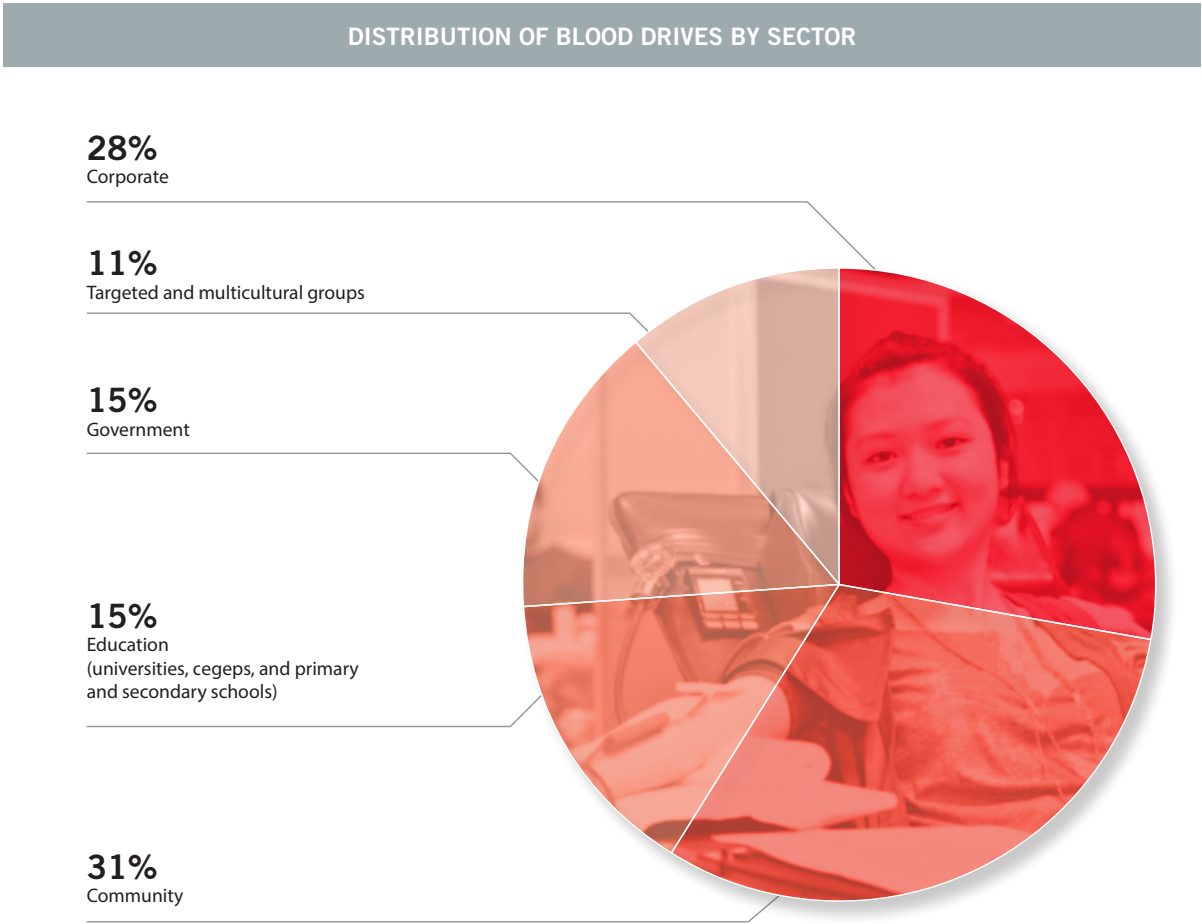
### Blood drives in Cegeps and Universities

Since its inception, Héma-Québec has relied on the support of the Association of Blood Donation Volunteers (ABDV), a group representing blood donation volunteers in 13 regions in Québec. In addition to fully assuming its role as a liaison 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 achieved excellent results. In all, 26,779 donors were accommodated in the province’s cegeps and universities in 2011–2012. Moreover, the yield rate of campus blood drives was 94%, greater than the average for regular mobile blood drives, which was 91.1% this year.

BLOOD DRIVES IN CEGEPS AND UNIVERSITIES					
	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
BLOOD DRIVES	173	221	202	215	229
GOALS	21,985	27,240	26,025	26,810	28,420
REGISTERED DONORS	21,936	26,694	25,264	25,697	26,779
Overall achievement of goals (%)	99.8%	98%	97.1%	95.8%	94.2%

Several factors account for the slight decrease in the achievement of goals. This year, as a result of the student strike, blood drives were cancelled on several campuses.



# STABLE PRODUCTS

THE STABLE PRODUCTS DEPARTMENT 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.

## DEVELOPMENT OF A SOURCE OF FRACTIONATION

During 2011–2012, the Stable Products department developed a new source of fractionation for cryoprecipitate supernatants and other types of plasma produced by Héma-Québec. The project concluded with the signing of a fractionation service agreement with CSL Behring.

## STABLE BLOOD PRODUCT SUPPLY STRATEGY

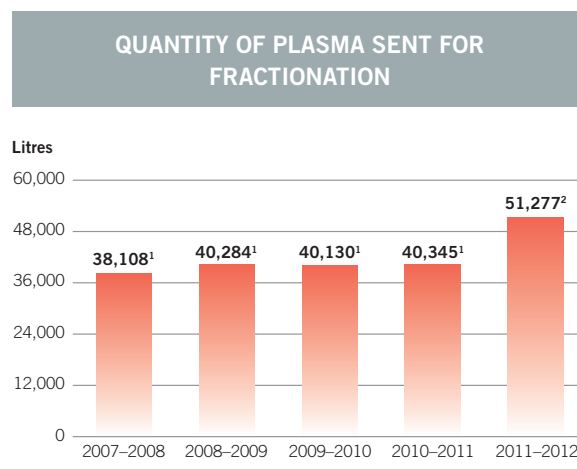
Following an evaluation of the various supply strategies, a decision was made to extend:

- the principal contracts for the purchase of recombinant Factor VIII to 2015;
- the principal contracts for the supply of stable products to 2017. Moreover, as of 2013–2014 and until 2017, all fractionation services will be provided by CSL Behring. This agreement will enable Héma-Québec not only to obtain the best value from the cryoprecipitate supernatants but also to obtain an additional product from its plasma and become self-sufficient with respect to the von Willebrand factor.

These various contracts are complemented by financial conditions that are very advantageous for the Québec health care system. The new agreements also preserve the availability of products approved by Health Canada for practitioners and their patients; such products satisfy the highest standards in terms of safety and effectiveness.

Before signing these contracts, Héma-Québec ensured a diligent consultation with stakeholders. It made sure that it obtained the viewpoints of groups representing patients, namely the Canadian Immunodeficiencies Patient Organization as well as the Canadian Hemophilia Society. It also consulted the directors of hemophilia centres and physicians on the *Comité consultatif en médecine transfusionnelle à Montréal* (CCMTM) and the *Comité consultatif en médecine transfusionnelle à Québec* (CCMTQ). Moreover, the notion of the interchangeability and bioequivalency of the various IgIV formulations was reconfirmed by the *Comité consultatif national de médecine transfusionnelle* (CCNMT) and approved by Québec's *ministère de la Santé et des Services sociaux*.

## QUANTITY OF PLASMA SENT FOR FRACTIONATION



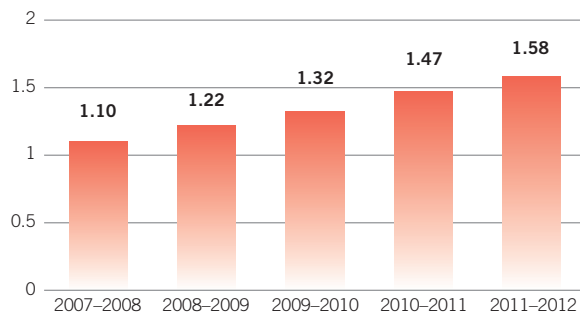
<sup>1</sup> This volume includes recovered plasma and source plasma sent to Grifols.

<sup>2</sup> This volume includes recovered plasma and plasma sent to Grifols, as well as frozen plasma and cryoprecipitate supernatant sent to CSL Behring.

## DELIVERIES OF STABLE PRODUCTS TO HOSPITALS

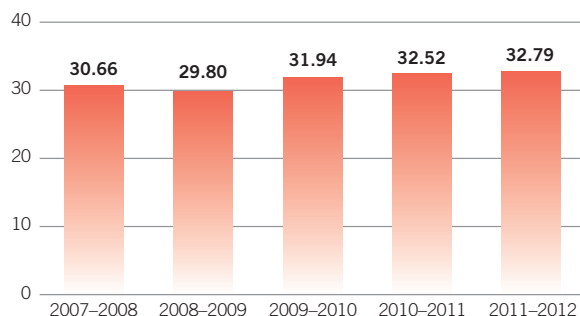
### DISTRIBUTION OF INTRAVENOUS (IGIV) AND SUBCUTANEOUS (IGSC) POLYVALENT IMMUNOGLOBULINS

Grams (in millions)



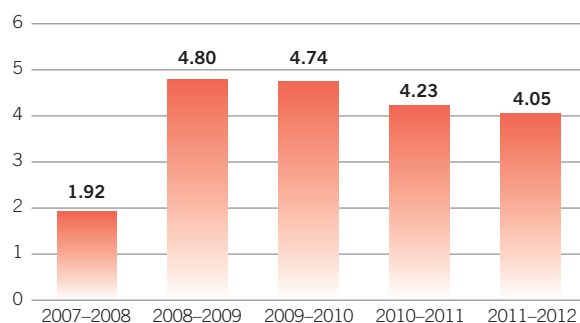
### DELIVERIES OF RECOMBINANT FACTOR VIII

International units (in millions)



### DELIVERIES OF FACTOR VIII PLASMA

International units (in millions)



# REFERENCE AND STEM CELL LABORATORY

## ISBT 128 STANDARD IMPLEMENTED IN THE BUFFY COAT IMMUNOLOGY LABORATORY

Following on the heels of the measures implemented to maximize the safety of its supplies, Héma-Québec extended its application of the ISBT 128 international labelling standard to the buffy coat immunology laboratory (HLA-platelets) in February 2012. This is one of the first laboratories in the field of buffy coat immunology to apply this standard in North America.

This has improved the management of HLA typing of patients and donors listed in the *Stem Cell Donor Registry* since using a scanner to enter the bar codes from the labels reduces the number of errors that could be committed during data entry. Moreover, it guarantees greater efficiency in the traceability of tests. The result is improved quality test management and safety.

## MAINTENANCE OF ISO 15189 CERTIFICATION

The Reference and Stem Cell Laboratory (RSCL) must be certified under ISO 15189 for its medical biology tests (erythrocyte immunology, platelet immunology and HLA typing). In January 2012, the documents required to maintain this certification were sent to the *Bureau de normalisation du Québec* (BNQ). The certification was renewed.

## AMERICAN SOCIETY FOR HISTOCOMPATIBILITY AND IMMUNOGENETICS ACCREDITATION

The Reference and Stem Cell Laboratory (RSCL) must be certified by the American Society for Histocompatibility and Immunogenetics (ASHI) for its HLA genotyping activities.



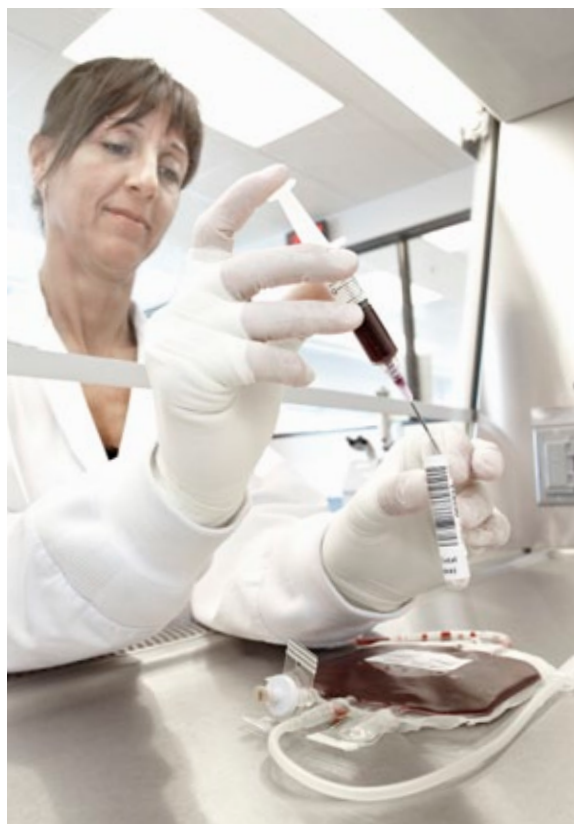
Every year, the certified laboratory performs a “self-evaluation” and produces a file that is then evaluated by the ASHI. Moreover, every second year, auditors come to inspect the premises.

The accreditation was maintained in June 2011. The RSCL submitted a new file in March 2012 for the laboratory audit scheduled for June 2012.

### GROWTH IN THE NUMBER OF TESTS PERFORMED BY THE REFERENCE AND STEM CELL LABORATORY

The Reference and Stem Cell Laboratory continues to satisfy increasing numbers of requests with respect to *erythrocyte immunology case studies* (+15%), *erythrocyte genotyping tests* (+31%), *HLA typing* (+4%) and *platelet immunology case studies* (+5%).

The strong growth in demand for *erythrocyte genotyping tests* can be explained by the fact that one-quarter of the *erythrocyte immunology case studies* now requires this type of testing. This is in keeping with the Reference and Stem Cell Laboratory's mission to play a specialized role.



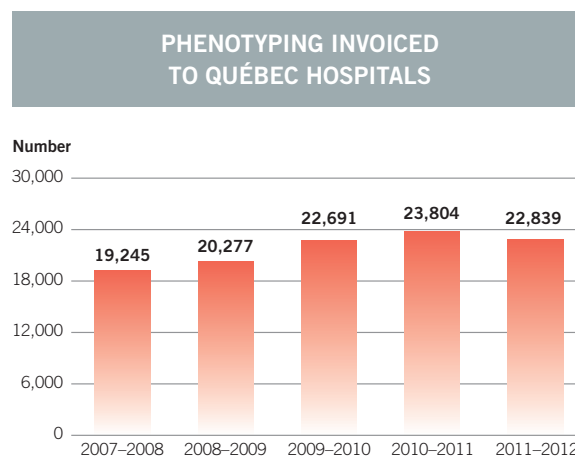
Julie Carrier, technician at the Reference and Stem Cell Laboratory.

NUMBER OF SPECIALIZED ANALYSES PERFORMED					
	2007–2008	2008–2009	2009–2010	2010–2011	2011–2012
Erythrocyte immunology	1,519	1,261	1,621	1,435	1,654
Platelet immunology	267	344	333	374	394
Erythrocyte genotyping	1,324	2,103	3,243	3,488	4,574
HLA A, B, C, DR, DQ typing <sup>1</sup>	–	4,434	5,224	5,672	5,925

<sup>1</sup> Results are only provided for the last four years due to a modification in the compilation method from previous years.



The demand for erythrocyte genotyping tests is booming.



# HUMAN TISSUES

## ENSURING A SAFE SUPPLY OF HUMAN TISSUES

### RENEWAL OF ISO 13485 CERTIFICATION

ISO 13485 certification is required to obtain the right to collect, process and distribute heart valves. This certification is a prerequisite for Health Canada approval. A certification renewal audit was conducted in February 2012. Only one minor observation was noted during the audit. The proposed correction was approved and the senior auditor recommended the renewal of the certification.

### AMERICAN ASSOCIATION OF TISSUE BANKS ACCREDITATION

The American Association of Tissue Banks (AATB) audits the facilities every third year. Accreditation was renewed following the January 2011 inspection. The inspector noted one observation and the corrective measure proposed by Héma-Québec was accepted. The Human Tissues team worked all year to meet the March 31, 2012, deadline.

### HEALTH CANADA INSPECTION OF THE BANQUE D'YEUX DU QUÉBEC

In January 2012, Health Canada audited the facilities and the operations of the *Banque d'yeux du Québec* (BYQ) at the *Hôpital Maisonneuve-Rosemont* (HMR). The inspector noted 11 observations. The corrections proposed for these observations were sent to the inspector in March 2012.

Since January 1, 2012, Héma-Québec has served as the central facility for Health Canada with respect to the activities of the two Québec eye banks, namely that of the HMR in Montréal and that of the *Centre universitaire d'ophtalmologie* (CUO) in Québec City.

### QUALITY CONTROL

In order to ensure compliance with current safety standards, samples of human tissues collected undergo sterility tests. Moreover, the samples collected after processing are used to check the quality and compliance of tissue processing and disinfecting methods.

QUALITY CONTROL OF HUMAN TISSUES			
Products	Tests performed	Number of products tested	Rejections (unacceptable % of micro-organisms)
Skin tissue	Pre-processing microbiological culture	135	3.7%
	Post-processing microbiological culture	130	5.4%
Musculoskeletal tissue <sup>1</sup>	Pre-processing microbiological culture	855	3.5%
	Post-processing microbiological culture	415	0.5%
Heart tissue <sup>2</sup>	Pre-processing microbiological culture	110	12.7%
	Post-processing microbiological culture	162	9.3%

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

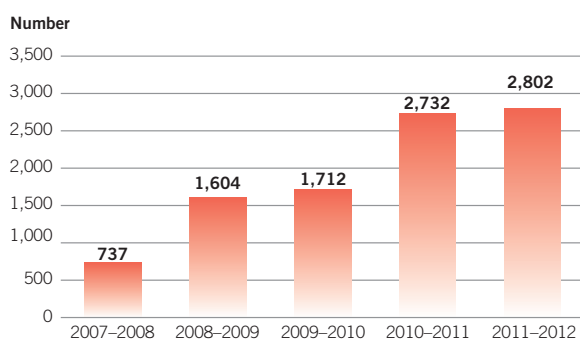
<sup>2</sup> Optimization of the heart valve disinfection process helped to reduce their rejection rate compared with previous years.

Quality control is performing certain tests with respect to human tissues. These tests will serve to check the quality and compliance of processing methods.

## HUMAN TISSUE DISTRIBUTION

The distribution of human tissues manufactured by Héma-Québec increased by 2.6% in the last year (see graph below). Over a period of five years, it has increased 380%. However, the total number of human tissues distributed was 3,318 in 2011-2012, compared with 3,708 for the previous year (see table below). This decrease in the total distribution can be attributed to a large extent to a significant decrease in imports. Héma-Québec will continue its efforts to ensure a sufficient supply of quality human tissues manufactured in Québec.

### DISTRIBUTION OF TISSUES MANUFACTURED BY HÉMA-QUÉBEC



Human tissue donor François's parents, Normande et Rock.

HUMAN TISSUE DISTRIBUTION					
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Heart valves and vein allografts without valves	33	35	58	66	49
Skin tissue	337	948	926	1,632	1,322
Tendons	1	125	108	229	207
Spongy bones, including lyophilized (freeze-dried)	245	299	299	419	460
Compact bones and femoral heads	114	183	170	219	256
HUMAN TISSUE distribution sub-total – Héma-Québec	730	1,590	1,561	2,565	2,294
Imported	146	376	664	544	259
<b>TOTAL HUMAN TISSUE DISTRIBUTION</b>	<b>876</b>	<b>1,966</b>	<b>2,225</b>	<b>3,109</b>	<b>2,553</b>
OCULAR TISSUE DISTRIBUTION					
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Local corneas	–	–	151*	170	429
Imported corneas	–	–	255*	429	257
Sclera	–	–	–	–	79*
<b>TOTAL OCULAR TISSUE DISTRIBUTION</b>			<b>406</b>	<b>599</b>	<b>765</b>
<b>DISTRIBUTION GRAND TOTAL</b>	<b>876</b>	<b>1,966</b>	<b>2,631</b>	<b>3,708</b>	<b>3,318</b>

\*Corresponds to the year during which distribution started.

## ENSURING A SUFFICIENT SUPPLY



### THE HUMAN TISSUES TEAM IS 10 YEARS OLD

In December 2011, the Human Tissues department celebrated its tenth anniversary as part of Héma-Québec. A logo was created for the event and will be used throughout the anniversary year. Various activities also highlighted this milestone in its history.

The activities of the *Centre de conservation des tissus humains du Québec* (CCTHQ) were merged with Héma-Québec in 2001. Today, in addition to collecting ocular tissue to be used for corneal transplants, Héma-Québec also collects and supplies hospitals with skin grafts, heart valves and musculoskeletal tissues such as tendons and bones. Although it is not the exclusive supplier of human tissues for Québec hospitals, it delivers more products to them every year.

### THE WAITING LIST FOR CORNEA TRANSPLANTS DECREASES

The waiting list for Quebecers needing a cornea transplant was reduced by more than one-quarter this year. Specifically, the number of people on the waiting list decreased from 730 to 536 in one year. This progress is the result of a new supply process and marked efficiency in the field of cornea production.

The partnership initiated in 2009 between the *Banque d'yeux du Québec* at the *Hôpital Maisonneuve-Rosemont* and Héma-Québec is bearing fruit. These figures indicate that Héma-Québec's contribution in this field ensures that the needs of patients waiting for a cornea transplant are better served.

Héma-Québec has been responsible for assessing donors, collecting eyes and handling supervisory activities for three years. It is also responsible for allocating the corneas to the surgeons. It fulfils this mandate in keeping with a partnership agreement signed with the *Hôpital Maisonneuve-Rosemont* to manage the *Banque d'yeux de la région de Montréal*.

### NEW PARTNERSHIP WITH THE CENTRE UNIVERSITAIRE D'OPHTALMOLOGIE'S EYE BANK

In order to build on the success obtained through its association with the *Banque d'yeux de la région de Montréal*, Héma-Québec signed a similar partnership agreement with the *Banque d'yeux du Centre universitaire d'ophtalmologie* (CUO) in Québec City in January 2012.

Moreover, over the coming year, Héma-Québec plans to offer a new type of product to ophthalmologists who specialize in cornea transplants, namely the pre-cut cornea. This product, which enables surgeons to reduce operating time, is currently being imported from the United States. Héma-Québec wishes to more specifically meet the needs of corneologists here, while ensuring a quality inventory that is sufficient for the Québec population.

### RISE IN REFERRALS BY HEALTH-CARE PERSONNEL

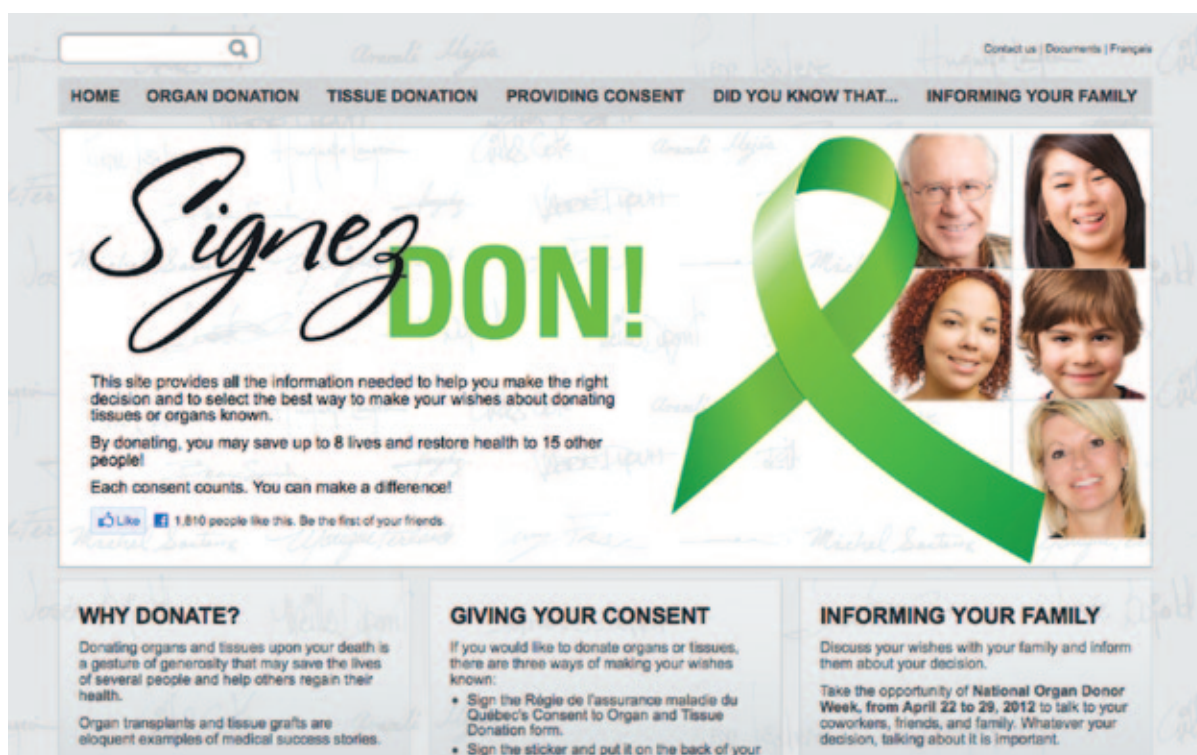
Human tissues were collected from close to 785 donors last year. Moreover, more than 1,571 referrals were received from hospitals, helping to increase the level of products manufactured by Héma-Québec (see graph on page 27).

#### Second donor referral pilot project

The human tissue donor referral pilot project initiated by Héma-Québec at the *Hôpital l'Enfant-Jésus de Québec*, last year, helped that hospital improve its referral rate by more than 58% for the first nine months of the pilot project (from January to September 2011). Based on these results, a second donor referral pilot project was implemented, in September 2011, at the *Hôpital de la Cité-de-la-Santé de Laval*.

This human tissue donor referral strategy targets partner hospitals, using the same model used for the cord blood supply. A Héma-Québec employee, who is present in the hospital, raises the awareness of families with respect to human tissue donation and helps the health-care personnel support and guide the families throughout the process. The results of this project should be disclosed in June 2012.





Home page of the [www.signezdon.gouv.qc.ca](http://www.signezdon.gouv.qc.ca) site dedicated to the promotion of organ and tissue donation.

## ORGAN AND TISSUE DONATION CONSENT REGISTRY

In February 2011, Québec established the *Registre des consentements au don d'organes et de tissus* in order to facilitate both the registration and recording of consents for organ and tissue donations as well as the work of Transplant-Québec and Héma-Québec, which coordinate these donations.

Following the creation of this registry and in keeping with Section 204.1 of the *Act respecting health services and social services*, efforts have been made by the various stakeholders – namely Héma-Québec, the *Association québécoise d'établissements de santé et de services sociaux* (AQESSS) and Transplant-Québec – to produce a document entitled *Procédure type pour le don de tissus*. This document explains to hospital personnel the procedure for organ and human tissue donation.

As of March 31, 2012, there were close to 400,000 registrations. The increase in the number of registrations means that more patients waiting for a transplant will have a better chance of recovering their health and improving their quality of life.

## DESIGN OF A DISTRIBUTION BOX FOR HUMAN TISSUES

A new distribution box was created for the delivery of human tissues. Its colours and graphic design make it quickly distinguishable from boxes containing blood products. The visual concept developed uses the green ribbon associated with human tissues in an effort to harmonize all of the articles distributed to hospitals for this sector. It also bears the new signature “A Legacy of Life” now associated with human tissue donation.



New distribution box for the delivery of human tissue.

# HEMATOPOIETIC STEM CELLS

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

### QUÉBEC'S PUBLIC CORD BLOOD BANK DIVERSIFIES

Since the public cord blood bank was created in 2004, Héma-Québec has managed to make close to 6,500 bags of cord blood eligible and available. Nevertheless, although the cultural communities represent an increasing proportion of Québec's population, the cord blood in the reserves comes mainly from Caucasian women.

Héma-Québec has had to modify its recruiting strategy and focus on increasing donations from ethnic groups, so as to have a diversified bank of cord blood that adequately meets the needs of all Quebecers.

With this in mind, the public cord blood bank signed an agreement with the *Hôpital du Sacré-Cœur de Montréal* (HSCM) in April 2011, since a large number of the women who give birth there are of ethnic origin.

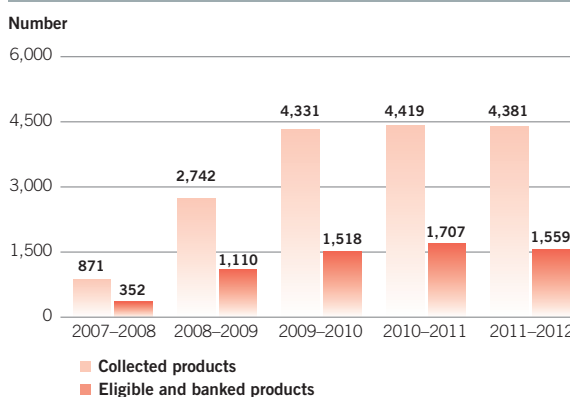
### NEW COLLECTIONS

As at March 31, 2012, the addition of the cord blood collection program at the *Hôpital du Sacré-Cœur de Montréal* (HSCM), combined with awareness-raising efforts for future mothers and the obstetrical personnel at partner hospitals, had already served to increase the registration of mothers from cultural communities from 14% to 21%.

In all, 1,559 new bags of cord blood were added to the bank this year. This represents a stable volume compared with the previous year. Héma-Québec has fulfilled its mandate perfectly: the objective was no longer to increase volumes, but to obtain better ethnic representation of the cords collected.

The objective is to maintain a collection eligibility rate comparable to that of other cord blood banks around the

### ACTIVITIES OF QUÉBEC'S PUBLIC CORD BLOOD BANK



world, namely approximately 40%. In order to achieve this, Héma-Québec provides training for personnel working in delivery rooms on the procedures to be followed when collecting cords. Efforts in this respect are ongoing; the rate was 36% in 2011–2012 (39% in 2010–2011).



Cord blood container.



## DELIVERIES OF CORD BLOOD UNITS

Héma-Québec delivered cord blood units intended for eight recipients during the year.

STEM CELL QUALITY CONTROL					
	Test performed	Number of products	Compliance percentage	Acceptable value	Acceptable percentage
Stem cells (post-treatment)	Sterility	1,881	98%*	No contamination	100% of bag tested

\* The stem cell collection method is more susceptible to contamination. However, the results observed are fully comparable to results obtained by other cord blood banks. Quality control is performing certain tests with respect to stem cells. These tests will serve to assess the quality and compliance of the processing methods.

## RECORD NUMBER OF REGISTRATIONS FOR THE *REGISTRY OF LIFE*

The implementation of the mouth swab in February 2011 had the desired effect. Thousands of registrations for the *Stem Cell Donor Registry* were added after it was introduced. During 2011–2012, 5,865 new individuals (1,874 in 2010–2011) completed the registration process, namely 3,991 more than during the previous year.

## CHANGES TO THE *REGISTRY OF LIFE* REGISTRATION CRITERIA

Concerned about rejuvenating its bank of stem cell donors, Héma-Québec revised the “age” criteria for registration in the *Stem Cell Donor Registry* during the course of the year, changing it from 18–50 years old to 18–35 years old. It is now in line with Europe, where the maximum age for registration is 35 years.

It should be noted that, everywhere in the world, stem cell donor registries are dealing with lists of registered people who are 50 years of age or older. This situation is of concern in terms of succession planning since donors only remain on these lists until the age of 60 and because the younger the donor is, the better the chances of survival for the recipient.

## OTHERHALF NATIONAL PROGRAM

OtherHalf – Chinese Stem Cell Initiative and Héma-Québec joined forces to launch the first ever recruiting day for donors of stem cells within Québec’s Chinese community. This event took place on March 31, 2012, in Montréal’s China Town, with the support of the Stem Cell Donor Registry department and the Public Affairs and Marketing division.

The results were very fruitful, generating registration in the *Registry of Life* of 233 potential donors from Montréal’s Chinese community, thanks to the involvement of community leaders. Currently, the Chinese population represents only 0.06% of the Québec registry and close to 3% of the *Bone Marrow Donors Worldwide* database. Of the patients of Chinese origin who need an unrelated donor, fewer than 20% find a compatible donor.

In March 2012, more than 30 Chinese patients in Canada were desperately looking for stem cell donors in order to survive. Since the chances of finding a donor and recipient who are compatible are greater when both come from the same ethnic group, it is vitally important to recruit donors of Chinese origin.

## RECOGNITION OF DONORS OF STEM CELLS AND HUMAN TISSUES

A recognition evening, organized specifically for unrelated donors of stem cells, was held in October 2011 to highlight their extraordinary generosity and altruism. Eight bone marrow donors and two cord blood donors were honoured during this event.

It was also an opportunity for a couple of major burn victims and the family of a young corneal transplant recipient to testify as to their good fortune in having had access to a tissue donation.

The contribution of personnel from the hospitals that are partners with the public cord blood bank and the staff members who take part in the human tissue donation process was also highlighted during this ceremony. The evening was coordinated by the Human Tissues Operations department.



CATHERINE,  
RECIPIENT



nd

# 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 Internal Communications team plays a proactive role, taking part in each major project in order to inform all employees adequately and offer them a complete vision of what is going on and what affects them at Héma-Québec.

This year, the arrival of a new President and CEO, Dr. Jean De Serres, required a contribution on the part of the Internal Communications team to present him to the staff. Targeted communications aimed at employees, as well as meetings with various sectors, including employees in the field, were prepared.

The team also played an active role in planning the communications pertaining to the internal launch of the 2012-2015 strategic plan, accompanying the President and CEO in the preparation of meetings with managers in Montréal and Québec City, as well as with union representatives.

Under the guidance of the Information Security Committee, employees were reminded about the awareness-raising campaign on the importance of protecting personal information and confidential documents.

Finally, throughout the year, the Internal Communications team distributed a total of 41 *Express d'Héma* information bulletins and published three issues of the internal newsletter, *Les Mots d'Héma*. The newsletter was produced with the collaboration of writers from all sectors of the organization.

## CREATION OF AN INTRANET SITE

The development and deployment of the *L@rtère* intranet site, piloted by the Information Technology division, required several months of dialogue with all Héma-Québec divisions. The Internal Communications team played an important role in the last phase of the project, implementing an editorial policy, ensuring the quality of the content and organizing the launch in February 2012.



Front page of Héma-Québec's staff newspaper, March 2012 issue.

The new Web site ensures a more efficient management of documents by limiting the number of versions in circulation and increases security by reducing the risk of lost documents. It has become the preferred means and source of communication for everything that concerns Héma-Québec's staff and is an integral part of the employee communications strategy. All in all, it centralizes information, provides an efficient search tool and reduces bulk emailing. It provides quicker and easier access to unregulated reference information, thereby facilitating day-to-day work for personnel.



Applications : Formulaires : Politiques et directives : Héma-Québec sur le Web : Taille du texte: A - A - A

HÉMA-QUÉBEC Produits sanguins Cellules souches Tissus humains L'artère Bienvenue

Annuaire des employés Nom, prénom ou poste. Rechercher dans le portail Rechercher sur ce site...

MA VIE AU TRAVAIL SERVICES ET SOUTIEN DOCUMENTS DE RÉFÉRENCE ACTUALITÉS ET ÉVÉNEMENTS À PROPOS D'HÉMA-QUÉBEC

**LES RECEVEURS ONT BESOIN DE VOUS...**  
Héma-Québec lancera sa nouvelle campagne publicitaire le 10 octobre prochain.

**CAMPAGNE D'ENTRAIDE 2011**  
Faites preuve de générosité en participant à la campagne d'entraide 2011.

**EXERCICE DES MESURES D'URGENCE**  
Le 19 octobre prochain se tiendra l'exercice annuel des plans de mesures d'urgence.

**David Nelson Carlo Marie Laurence Kathleen Simone Daniel**  
ont besoin de vous

**DONNEZ DU SANG. DONNEZ LA VIE.**

**SERVICES ET SOUTIEN**

- Achats et magasins
- Déplacements
- Services informatiques

**LIENS UTILES**

- Info Transports (Québec 511)
- Prévisions météo
- Site Web Héma-Québec

**MA VIE AU TRAVAIL**

- Offres d'emploi
- Assurances collectives
- Formation et développement

**DOCUMENTS DE RÉFÉRENCE**

- Annuaire
- Horaires
- Documents contrôlés

**FIL DE NOUVELLES**

**Nominations**  
Spécialiste de l'approvisionnement  
Cliquez ici pour plus de détails

**À PROPOS D'HÉMA-QUÉBEC**

- Groupes et comités

**Réserve de sang du Québec**

ÉTAT DE LA RÉSERVE	GROUPES SANGUINS DONT L'INVENTAIRE EST PLUS FAIBLE
9,0 JOURS	B - 6,4 JOUR(S)
	O - 6,6 JOUR(S)
	A - 6,8 JOUR(S)
ÉTAT DE LA RÉSERVE PONDÉRÉE	
8,3 JOURS	
Niveau optimal = 6 jours	

Accueil Ma vie au travail Services et soutien Documents de référence Actualités et événements À propos d'Héma-Québec

Home page of Héma-Québec's intranet site.

This site was developed in keeping with the results of a survey on employees' needs. Introductory workshops were offered to optimize its use. Ultimately, the site will be available to employees working off site.

## IMPROVED RECOGNITION PROGRAM

The employee service recognition program recognizes employees for their dedication and their loyalty. It highlights the work of those who have completed a multiple of five years of service with Héma-Québec.

Several discussion groups were organized in December 2011 and January 2012 in order to improve this program. Staff members from various sectors took part in these meetings to make their expectations and their impressions of the recognition program and associated activity known.

These discussion groups confirmed that the service recognition program is clearly appreciated by staff. The participants' opinions and suggestions will be used to improve the program.

# STAFF TRAINING

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

The Human Resources Training and Development department ensures that employees acquire, develop and maintain the skills needed to perform their functions. Training and development activities provided are intended to maximize their individual contribution with a view to supporting the organization's strategic objectives.

In 2011–2012, 103 training or development activities were offered to Héma-Québec staff. This represents some 300 group and 80 individual training sessions.

In all, more than 10,000\* hours of non-regulatory training were offered. These training activities can be classified into five major categories, as shown in the graph below.

BREAKDOWN OF THE NUMBER OF HOURS OF TRAINING BY ACTIVITY CATEGORY\*

**39%**

Migration (Windows 7 + Office 2010)<sup>1</sup>

**10%**

Group training

**12%**

Individual training  
(public session)

**15%**

Customer service  
(nurses)

**24%**

Training for managers



\* This number does not take into account academic training or activities organized on employee time, such as "Preparing for an active retirement."

<sup>1</sup> Training was provided to facilitate employees' adaptation during the migrations from Windows XP to Windows 7 and from Microsoft Office 2002 to Office 2010.

The overall satisfaction rate for the training activities as a whole was 95%, and the participation rate was 93%.





Sébastien Vertefeuille, during a blood donation at a mobile blood drive.

### **CUSTOMER SERVICE TRAINING FOR BLOOD DRIVE STAFF**

In May 2011, training summarizing the main principles of the customer service approach promoted by Héma-Québec was developed for new employees at the blood drives and the GLOBULE Blood Donor Centres, as well as for employees returning from extended leaves. This one-hour video training will be offered to staff starting in fall 2012.

During the months of February and March 2012, 18 groups of nurses were given customer service training. Lasting seven hours, this training addressed the needs previously identified by nurses in discussion groups. Results: the comments received indicate a satisfaction rate of 95%.

### **DIVERSITY MANAGEMENT TRAINING FOR EXECUTIVES**

As part of the training and development provided to executives, eight management activities were organized in 2011-2012. Among other things, the managers received one day of training on Héma-Québec's cultural diversity management policy to help them become familiar with and adopt the benchmarks of this new management tool.

Using simulation exercises, role playing and case studies, this training focused on the foundations of the policy. It gave management personnel an opportunity to develop skills for intervening in specific situations concerning diversity, creating an inclusive work environment conducive to the development of intercultural settings and identifying various cultural characteristics. This training complements our employment equity program.

# FOSTERING A STIMULATING AND HARMONIOUS WORK ENVIRONMENT

## WORK-LIFE BALANCE MEASURES

The work time organization program continued to grow in 2011–2012. The number of participants increased from 166 last year to 179 this year.

A survey was conducted in September 2011 to evaluate the work time organization program. The response rate was 56%, with 336 of the 600 questionnaires sent to employees and managers completed. For more than 75% of respondents, the work time organization program is a measure that promotes staff retention at Héma-Québec.

The Work-Life Balance Advisory Committee (WLBAC) is currently assessing the feasibility of extending the work time organization program to work environments where conditions are more favourable for success.

## DEPLOYMENT OF A CULTURAL DIVERSITY MANAGEMENT POLICY

Héma-Québec implemented a cultural diversity management policy in the summer of 2011. This policy provides clear benchmarks for supporting management practices as well as donor relations. Specifically, it covers male/female equity, the process for hiring and retaining employees, the language used in the workplace and reasonable accommodation.

It promotes both openness to diversity and respect for the values of Héma-Québec. The first objective is to maintain, or even increase, Héma-Québec's cultural parameters. Moreover, it is intended to make Héma-Québec perform even better in the pursuit of its mission, which is essential to the health of Quebecers.

A deployment plan was implemented in February 2012 to promote the transition from knowledge to intercultural skills. All management employees have received one day of training on the policy, reasonable accommodation and the resulting legal obligations. This workshop focused on the role of the manager and the management style to be adopted in a context of cultural diversity.

The implementation of this policy is the logical continuation of the employment equity program implemented in 2009–2010, which was the first step towards greater openness in the hiring process and opportunities for all.

## PREPARATION OF A BIOLOGICAL AND CHEMICAL SAFETY MANUAL

In 2011–2012, the Biosafety Committee continued its work on preparing the biological and chemical safety manual started the previous year. This manual covers elements corresponding to the requirements of the *Act*

## NEW COLLECTIVE AGREEMENT RATIFIED

An agreement in principle was concluded on February 12, 2012, by Héma-Québec and the Canadian Union of Public Employees (local 1987), which represents 138 employees at the Québec City facility. The collective agreement will last five years effective as of the signing date, scheduled for mid-May 2012.

Another collective agreement is about to be finalized between the employer and the *Alliance du personnel professionnel et technique de la santé et des services sociaux*. This union represents 51 employees at the Québec City facility.

In all, nine collective agreements govern the working conditions of all Héma-Québec unionized personnel. Seven of them were renewed in 2010–2011.

respecting occupational health and safety, Laboratory Biosafety Guidelines and the Human Pathogens and Toxins Act.

During the preparation of the safety manual, a risk analysis was conducted and certain measures were modified. Since March 2012, several trainers have presented the manual and the modifications made to the safety measures during training sessions that will continue until June 2012. The safety manual is scheduled to go into effect for summer 2012.

### OPTIMIZATION OF HUMAN RESOURCES BUSINESS PROCESSES

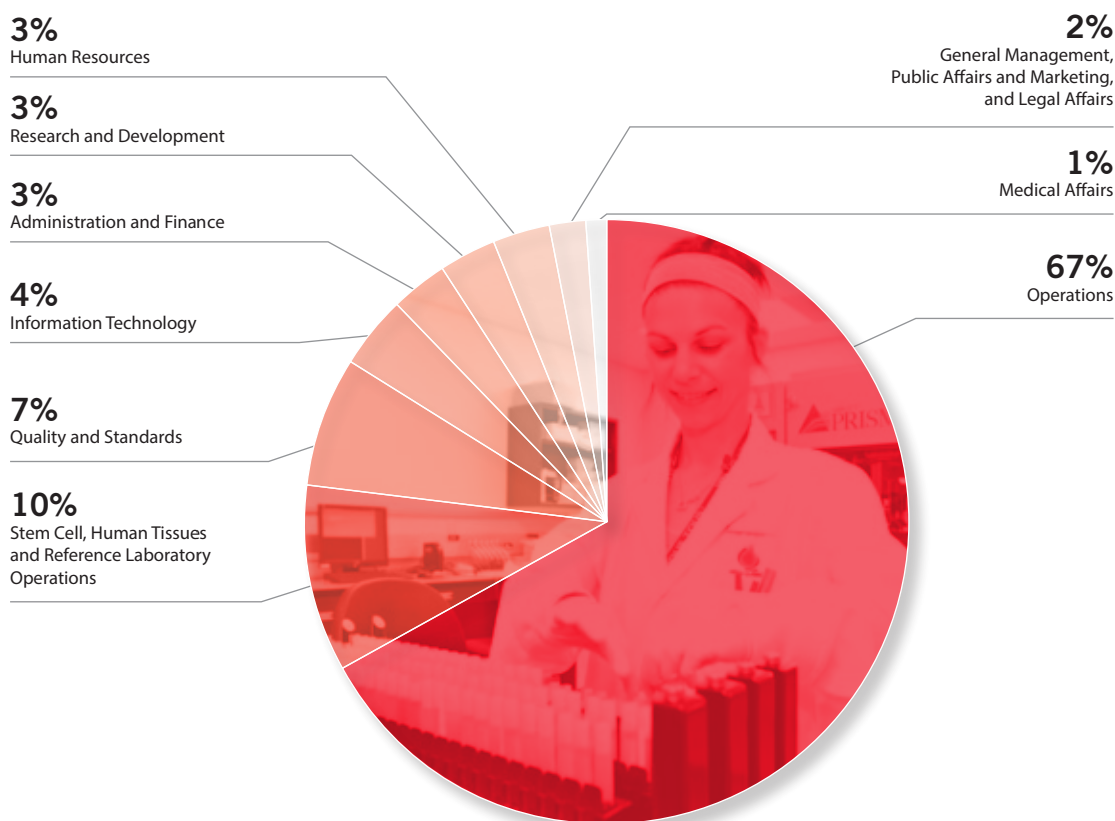
The Human Resources team continued to revise its procedures and business rules in cooperation with the Management Information Systems department. By auto-

matizing the closing of the files of employees who leave, it has managed to reduce the time for entering administrative data significantly. Now, an email is automatically sent to those concerned informing them that the file has been closed. The management of certain reports, such as the position registry, has also been automated. This tool allows managers to obtain information quickly about the positions under their supervision.

### ENHANCEMENT OF THE EMPLOYEE WELCOME PROGRAM

The Human Resources team organized discussion groups with employees and managers to determine their opinions with respect to the current welcome practices so as to enhance and upgrade them. These meetings identified possibilities for improvement.

#### BREAKDOWN OF EMPLOYEES PER AREA OF ACTIVITY



As at March 31, 2012, Héma-Québec had a total of 1,339 employees.



DELANO,  
RECIPIENT



# 3<sup>rd</sup>

## GOAL

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

# MAINTAINING HOSPITAL TRUST AND SATISFACTION

## USER COMMITTEES

User committees encourage constructive discussion between Héma-Québec, hospital blood bank staff and those responsible for transfusion safety. They are essential for transmitting and upgrading knowledge about new products and techniques and for sharing information about various medical matters. More than 110 people from 64 hospitals took part in one-day discussion sessions in November 2011.

## PERFORMANCE LEVEL OF HOSPITAL SERVICES

In an effort to provide excellent customer service, Héma-Québec has developed benchmarks to measure the proportion of orders that are completed on the desired date and in the desired quantity. The benchmarks identified concern essentially packed red blood cells, plasma (250 ml) and platelets by apheresis.

Overall, it appears that for 2011–2012, 97% of packed red blood cell and plasma (250 ml) orders and 98% of orders for platelets by apheresis were completed on the same day and in the desired quantities. In March 2012, this rate was over 99% for all products ordered.

## ERYTHROCYTE SEROLOGY COURSE

Since April 2011, Héma-Québec has been offering the second component of the Erythrocyte Serology Course intended for hospital blood bank laboratory technicians. The theoretical component of the Erythrocyte Serology Course (Level 1), previously offered in the classroom, was made available on-line in the fall of 2010. Moreover, the English version of this Level 1 course was put on-line in January 2012. Financial assistance from the Héma-Québec Foundation and Grifols made it possible for Héma-Québec to put the French and English versions of the Erythrocyte Serology Course (Level 1) on-line.

# MAINTAINING DONOR TRUST AND SATISFACTION

## IMPROVEMENT IN SERVICES OFFERED TO PLASMA DONORS

Héma-Québec submitted a request to Health Canada to have frequent plasma donors who wish to make a donation at the Laurier Québec GLOBULE Blood Donor Centre examined by a nurse rather than a physician. Health Canada acknowledges that Héma-Québec nurses are perfectly qualified to perform this examination and approved the request. The new procedure has been in effect since January 2012.

Previously, frequent plasma donors could only be accommodated on days on which the physician was on duty but, since nurses have been responsible for the examina-

tion, they enjoy greater flexibility with respect to making appointments. This modification has therefore improved both efficiency and customer service.

## EASIER ACCESS FOR DEAF PEOPLE

Further to a request from Héma-Québec, Health Canada authorized the use of Québec Sign Language (LSQ) or American Sign Language (ASL) interpreters for deaf donors.

Using a telephone relay system, deaf people can now make appointments to donate blood. An interpreter is made available to them at the scheduled time. The inter-



prester accompanies the donor throughout the process, from registration, to the interview with the nurse, to the donation, to the rest area.

Héma-Québec worked with the *Centre québécois de la déficience auditive* and the Québec's various regional interpretation services to develop this supportive process. Héma-Québec employees who accompany these donors have also been given training to ensure a better understanding of their reality.

### STUDY OF THE IMPACT OF COMMUNICATIONS MADE TO DONORS WITH FALSE POSITIVE RESULTS

Since May 2010, Héma-Québec has been informing donors with false positive results or inconclusive results during certain screening tests that they are excluded on a temporary basis – rather than on a permanent basis, as was the case in the past – and that they may be reinstated following supplementary tests. The Medical Affairs team conducted a study to compare the impact of the notice transmitted by the nurses to the donors before and after May 2010.

Two groups of donors, one notified before May 2010 and the other after, completed a questionnaire. These groups were matched in terms of sex, age and the results of the confirmation test so as to isolate the impact of the communication. The results show that the perceived quality of the communication and the overall attitude towards blood donation have improved significantly. However, the psychological distress caused by the notice and the wish to donate again was the same for the two groups.

### HÉMA-QUÉBEC SUPPORTS LIFTING THE PERMANENT EXCLUSION OF HOMOSEXUALS

Blood donation eligibility criteria are safety measures established by the scientific community and regulatory agencies. Health Canada determines the national standards that Héma-Québec must apply. Héma-Québec, moreover, equally prioritizes donor and recipient safety. Thus, certain individuals may be excluded on a temporary or permanent basis for various reasons.

The blood donation file remains one of the essential means for ensuring maximum safety of the blood supply. For several years now, men have been asked the following question: "Have you had sex with another man, even once, since 1977?" This same question is asked by all organizations in North America that collect blood. A

similar question is asked in a very large majority of industrialized countries elsewhere in the world.

Like the vast majority of experts in transfusion safety, Héma-Québec believes that it is legitimate and necessary to prohibit blood donation on the part of certain groups that are at risk for transmitting infections through transfusion. Even today, the frequency of HIV infection is much greater in homosexuals than in the general population. The prevalence of HIV is more than 10% in this group, compared to less than 1% in the case of heterosexuals and lesbians.

However, Héma-Québec believes that, as a result of recent scientific data and the progress made with respect to transfusion safety, the exclusion policy applied to men who have or have had sex with another man could be relaxed.

Thus, Héma-Québec supports lifting the permanent exclusion currently in effect and applying a temporary five-year exclusion for men who have or have had sex with another man. Héma-Québec is of the opinion that this change is scientifically justified and that it does not endanger the very high safety level of blood products. For this reason, it has submitted a request to Health Canada to reduce the exclusion period to five years.

In keeping with Canadian regulations, Héma-Québec cannot unilaterally modify the criteria applied to ensure blood safety. To date, Health Canada has opted to maintain the permanent exclusion of men who have or have had sex with another man.

### STUDY ON ABNORMAL PULSE RATES OF BLOOD DONORS

In the past, Héma-Québec temporarily excluded donors if their pulse was too fast, too slow or irregular. The purpose was to avoid possible complications in donors suffering from underlying heart problems. There were, however, no data indicating any risk in collecting blood from donors with a pulse that is "non-standard."

In June 2007, this exclusion policy was abandoned with the approval of Health Canada, who requested that Héma-Québec nevertheless continue to take donors' pulses. The Medical Affairs team has studied the impact of this new policy on donor safety. The results indicate that blood can be collected from an individual who is eligible in keeping with current practice but whose pulse is non-standard, without any danger. In fact, the results indicate that the risk of cardiac complications does not

increase when blood is collected from an individual whose pulse is non-standard, compared to the previous situation when a temporary exclusion was applied.

The study conducted by Héma-Québec's Medical Affairs team also revealed that the cardiac health of blood donors, even those with a non-standard pulse, is at least as good as if not better than that of the general population. Thus, there is no reason to measure and evaluate the pulse of potential donors. Héma-Québec is still waiting for approval from Health Canada to stop taking the pulse of blood donors.

### IMPROVING THE ESTHETIC APPEARANCE OF BLOOD DRIVES

The way in which a blood drive site is organized may have an impact on the blood donation experience. While it is important to meet the specific needs of a blood drive and accommodate the given space, the site must also be friendly and welcoming for blood donors and personnel. With this in mind, the Supply department initiated a review of the esthetic aspect of its blood drives. The modifications considered include changing computer workstations and the screened cubicles. The screened cubicles should be replaced over three years.

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## MAINTAINING VOLUNTEER TRUST AND SATISFACTION

### RECOGNITION EVENINGS FOR PERMANENT VOLUNTEERS

The organizing committees and their teams of volunteers hold numerous blood drives every year and contribute to maintaining the collective blood reserve at an optimal level.

The recognition evenings, intended specifically for volunteers and blood drive organizers, are held in Montréal and Québec City during *Volunteer Action Week*. The two evenings were attended by 1,019 volunteers and honoured the specific contributions of 198 of them.

### REGIONAL PUBLIC MEETINGS

The annual round of regional public meetings (RPMs) is both an opportunity to highlight the priceless contribution of volunteers in the regions and a chance for Québec blood donation partners to share.

During these activities, 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 and the Operations division are very involved in these discussions with 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 effort in support of the cause of blood donation. In all, 1,501 people attended one of the ten meetings held in all regions of Québec.

# MAINTAINING TRUST IN AND SATISFACTION WITH THE REFERENCE AND STEM CELL LABORATORY

## AMERICAN SOCIETY FOR HISTOCOMPATIBILITY AND IMMUNOGENETICS ACCREDITATION

The Reference and Stem Cell Laboratory (RSCL) must be certified by the American Society for Histocompatibility and Immunogenetics (ASHI) for its HLA genotyping activities.

Every year, the certified laboratory performs a “self-evaluation” and produces a file that is then evaluated by ASHI auditors. Moreover, every second year, ASHI auditors come to inspect the premises.

The accreditation was maintained in June 2011. The RSCL submitted a new file in March 2012 for the on-site audit scheduled for June 2012.

## NATIONAL MARROW DONOR PROGRAM INVESTIGATIONAL NEW DRUG

Héma-Québec submitted a request to the National Marrow Donor Program (NMDP) to have bags of cord blood from the public cord blood bank distributed in the United States. The NMDP approved the request.

## FOUNDATION FOR THE ACCREDITATION OF CELLULAR THERAPY ACCREDITATION

In order to increase its offer of cord blood for transplants, Héma-Québec was accredited by the Foundation for the Accreditation of Cellular Therapy (FACT). In September 2011, four FACT inspectors audited the cord blood bank facilities and operations. Several minor observations, noted during the audit, have been corrected. In February 2012, the cord blood bank was officially certified (see “Only Netcord-FACT accredited cord blood bank in Canada” on page 68).

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# MAINTAINING HÉMA-QUÉBEC'S CREDIBILITY

## NO-FAULT COMPENSATION PLAN

The no-fault compensation plan for potential victims of blood transfusions, human tissue grafts and stem cells distributed by Héma-Québec came into effect on May 31, 2011.

Québec is the first Canadian province to adopt such a plan, which is essentially intended to guarantee equitable compensation for all. It should be noted that this measure is the first recommendation contained in the report of the Commission of Inquiry on the Blood System in Canada.

Under the plan proposed by the Québec government, eligible individuals will receive compensation without having

to go through the legal process. These people will enjoy faster and easier universal access to compensation.

This measure will also result in substantial savings in terms of insurance premiums.

### UNRESERVED OPINION BY THE AUDITOR

Every year, the Auditor General of Québec (AGQ) audits Héma-Québec's financial statements. The results of each audit are indicated in a document entitled "independent auditor's report," which is published with the financial statements. In keeping with the usual formula, the audit of the financial information is intended to "provide reasonable assurance that the financial statements are accurate in all material respects."

When the auditor ascertains a departure from the *Canadian Public Sector Accounting Standards*, he must express a reservation in his report. The reservation may take one of the following forms: a qualified opinion, an adverse opinion, or a denial of opinion. As in the case of previous fiscal years, at its fiscal year end on March 31, 2012, Héma-Québec received an opinion from the AGQ without reservation.

### REVIEW OF THE EMERGENCY MEASURES PLAN

In May 2011, the Industrial Security team revised the emergency measures plans for the various facilities. This revision gave rise to a crisis management plan, which governs all of the organization's emergency measures.

This new plan, implemented at an executive level, is structured to support the various teams deployed when an event interrupts the organization's operations or functions in a critical manner. It is intended to reduce the impacts and consequences of an event on the organization's employees, activities, reputation and physical facilities. It is also intended to facilitate a return to normal activities and operations at the end of an event.

This plan was tested in the fall, during a drill conducted at the Québec City facility, in the new crisis management room established for this purpose. During the drill, members of the management committee, accompanied by their replacements, had to resolve various emergency situation scenarios presented to them.

### EXPENSE REVIEW PROCESS IMPROVEMENT

The Accounting department improved the processes for reviewing expenses and for expense claims incurred by certain volunteers. It also implemented direct deposit for the payment of expenses, which is more efficient and effective, eliminating the printing of approximately 3,000 cheques per year, to the satisfaction of its internal clients.

### CONTRIBUTION OF THE EXTERNAL COMMUNICATIONS TEAM

#### New President and Chief Executive Officer

With the arrival of Dr. Jean De Serres as President and CEO, both the Internal Communications department and the External Communications department were needed to prepare and disseminate various communications, including a YouTube video, a post card sent from Dr. De Serres to all members of staff, and a tour organized for Dr. De Serres to meet Héma-Québec employees, volunteers and partners and present the new strategic plan.

#### Creation of an advisory committee on brand image and a policy concerning the use of social media

An advisory committee on Héma-Québec's brand image was created in 2011–2012. The committee, coordinated by the Public Affairs and Marketing division, included Martine Carré, member of Héma-Québec's Board of Directors, Louise Champoux-Paillé, President of the *Cercle des administrateurs de sociétés certifiées*, and Miville Mercier, President of the Association of Blood Donation Volunteers. The committee produced a *Policy on contributions to events*. This policy is a reworking of the former *Policy on sponsorships*. It is intended to provide a strategic framework for contributions to events that Héma-Québec may solicit or grant. It was presented to the Board of Directors and approved in March 2012.

At the same time, Héma-Québec created a policy on the use of social media. As a result of the lightning speed at which new technologies are transforming the communications world, new management tools are required. The new policy was developed in keeping with this spirit. It is intended for all employees, explains the principles governing the management of social media and provides a framework for their use. The Public Affairs and Marketing division and the External Communications department are responsible for transmitting and updating this new policy.

## Increased presence on the Web

Héma-Québec multiplied its presence in social media over the past year with its advertising campaign for young people: *What was your first time like?* (see following text), and its application *Friend for life*. The application enables supporters of blood donation to post a virtual pin on their Facebook profile, through [www.friendforlife.ca](http://www.friendforlife.ca).

Although the Héma-Québec virtual community is still young, it is very dynamic. It passed the threshold of 8,000 Facebook friends and 900 Twitter subscribers in March 2012. At the same time, its YouTube videos were viewed more than 26,000 times.

A completely new video section was created to bring together all of Héma-Québec's audiovisual productions and televised advertisements. It was launched at the same time as the first campaign. Moreover, a video was added to the *Upcoming blood drives* section on the Web site. Now a spokesperson welcomes and guides donors.

Finally, digital communications are constantly growing in scope, witness the sustained increase in the number of visits to the Web site (see the table *A few statistics* on page 48). It should be noted that the Web site was the principal point of contact for the *Stem Cell Donor Registry* recruiting campaign. In fact, it is through the site that people sign up for the registry.

The screenshot shows the 'VIDEOS' section of the Héma-Québec website. At the top, there is a navigation bar with links: Héma-Québec, Careers, Publications, Research and development, Hospitals, Foundation, and Français. Below this is a secondary navigation bar with links: DONATE, LEARN, GET INVOLVED, and VIDEOS (which is highlighted). A search bar is also present. The main content area features a large video player with the title 'WHAT WAS YOUR FIRST TIME LIKE?' and a woman in a red shirt. To the right of the video player is a text block: 'There's a first time for everything... Before your first blood donation, it's normal to ask yourself questions or to be scared: of the needle, of contracting an illness, of not being able to go through with it or, quite simply, not having the time. Be brave and discover the experiences of other active—or soon-to-be active—donors!'. Below the video player are social media links for Facebook, Twitter, and Google+. At the bottom, there are four smaller video thumbnails with titles: 'Nirvair does it twice rather than once', 'Christopher loves to experiment', 'Marie-Pierrette's challenge', and 'Maria Lisa didn't want to do it on her own'. Each thumbnail has a 'Like' button and a 'Watch the video' link.

Videos section of Héma-Québec's Web site.



Marie-Pierrette, one of the characters of Héma-Québec's Web 2.0 advertising campaign entitled *What was your first time like?*

### New social media advertising campaign

In order to rejuvenate Quebecers' collective blood reserve – for which the average donor age is 42 – Héma-Québec has made the next generation of donors a priority with its Web 2.0 advertising campaign *What was your first time like?*

Ten video vignettes produced by Public Affairs and Marketing, with financial support from Desjardins and the Héma-Québec Foundation, were disseminated from November 2011 to February 2012. They presented donors either overcoming their fears or about to, in order to defuse fears about donating blood. The people who took part in the project were actual donors.

Recruiting, developing loyalty in and retaining blood donors are major challenges for Héma-Québec, which must also deal with stagnation in the number of donations per person. Very present in cegeps and universities, through the support of the Association of Blood Donation Volunteers, Québec's supplier of blood products has managed to reach an important pool of candidates aged 18 to 29. Nearly 25% of donors are in this age group today, compared with 17% in 2005.

### Electronic communications still on the rise

The number of requests for information by email has been growing over the years. In 2011–2012, an average of 172 emails per month were handled personally by the External Communications team, for a total of 2,065 email exchanges, 217 more than last year.

In 2011–2012, most of the requests handled came from donors inquiring about their eligibility to give blood, reporting a change in address and asking about stem cell donations.

### Community communications

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

#### A FEW STATISTICS FOR 2011–2012

- 107 interviews with the media
- 14 press releases issued
- Close to 40,000 monthly visits on average to Héma-Québec's Web site (an increase of 33% compared with 2010–2011)

### Visits of Montréal and Québec facilities

The External Communications team welcomed 247 visitors from 34 delegations who came to visit the Montréal or Québec City facilities. Most of these visitors had their first opportunity to assess the blood processing and qualification work done within Héma-Québec's walls and in the GLOBULE Centres.



### Héma-Québec renews its automobile fleet

Héma-Québec's new vehicles now bear the new visual signature designed by the Marketing and International Affaires department. The first renewed vehicles took to the road in February 2011 and the metamorphosis continues as old vehicles are replaced.

Héma-Québec acquired new 21-passenger and 31-passenger vehicles, 6-wheel and 10-wheel tractors

and trailers. The latter, which are smaller, replace the old straight trucks. They are equipped with an electrical platform, which means that the motor no longer has to be left running when in use. All of the vehicles are equipped with an exhaust gas filtration system.

The rejuvenation of the automobile fleet was necessary since most of the vehicles had very high kilometrage or no longer satisfied Héma-Québec's needs.

Héma-Québec revamped the visual signature of its vehicle fleet.



## SUSTAINABLE DEVELOPMENT – A DAILY OBJECTIVE

Through the *Government Sustainable Development Strategy 2008-2013*, the Québec government is challenging all departments and public agencies to 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 hereafter.

### GOVERNMENT OBJECTIVE NO. 1

**Make people increasingly aware of the sustainable development concept and principles. Promote knowledge and experience sharing in this area and assimilate the knowledge and knowhow facilitating its implementation.**

Several staff awareness-raising actions were taken to achieve this objective:

- production of a newsletter for employees presenting the achievements under Héma-Québec's sustainable development plan;
- publication on the intranet of the directions, objectives and actions taken by Héma-Québec in sustainable development;

- several information sessions held concerning the strategic plan, one aspect of which is sustainable development;
- presentation of Héma-Québec's sustainable development action plan in the welcome manuals as well as during activities to integrate new employees.

#### 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 undertaken to achieve this objective. These include continued regular meetings with health and safety committees and all of the unions as well as the increased presence of the health and safety advisor at blood drives in order to resolve specific problems without delay. An ergonomic analysis of workstations is now possible for office employees who request it. Other work method analyses and revisions were conducted for specific tasks within Héma-Québec, such as equipment set-up for the donor selection interviews conducted by nurses and product labelling workstations at the Québec City facility.

For preventive purposes, Héma-Québec offers flu vaccinations to all employees every year. A medical/sanitation program was also implemented. As part of that program, Hepatitis B vaccinations are offered to employees who handle blood products.

A hotline was implemented for managers whose employees are experiencing psychological or work adjustment issues and who are seeking problem solving methods. This service is offered through Héma-Québec's employee assistance program.

#### GOVERNMENT OBJECTIVE NO. 6

##### **Apply environmental management measures and an ecoresponsible 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, following on from those of past years, to incorporate sustainable development criteria in all Héma-Québec activities. Sustainable development clauses are systematically added to all calls for tenders and contracts issued by the various departments, when applicable. Needless to say, contracts dealing with recycling and the environment must include sustainable development clauses.

Héma-Québec encourages the purchase of recycled equipment and ensures *Energy Star* compliance when selecting and purchasing new equipment. Old equipment is sent to a company that dismantles it and recycles the materials.

#### 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 undertaken to achieve this objective:

- implementation of Helios energy management software that serves to reduce and control energy costs through monthly consumption tracking;
- renewal of the RECYC-Québec Level 3 certification for the Montréal facility;
- 90% reduction in photocopies through the implementation of various controlled document management measures;
- further to the partnership agreement between Héma-Québec, the *Centre des technologies de l'eau* and the *Ville de Montréal*, measures were identified to save drinking water at the Montréal facility;

- submission of a file to the Canada Green Building Council in March 2011 to obtain LEED Gold certification for the Montréal facility master plan's new facilities;
- green Committee staff awareness-raising initiatives on energy savings to be achieved both at work and at home (recovery of paint and computer equipment, sharing week, promotion of organic products, using less drinking water);
- implementation of a computerized management module in call centres to promote a paperless environment.

## GOVERNMENT OBJECTIVE NO. 14

### Focus on family life and facilitate conciliation of work, school and personal life.

Various measures were initiated to improve work-life balance. Here are a few of them:

- a survey was conducted to determine employees' and managers' perceptions of the work time organization program (for more details see *Work-life balance* measures on page 38);
- the Work-Life Balance Advisory Committee (WLBAC) is currently assessing the feasibility of extending the work time organization program to work environments where conditions are the most favourable for success.

Moreover, certain provisions are intended to help employees plan their retirement:

- training on active retirement was offered;
- gradual retirement program (phased departure) was extended to all eligible employees;
- employees can now access their retirement plans on the Web site through the new intranet portal created in 2011–2012. It should be noted that this site was designed in 2010–2011 to allow employees to view the amounts accumulated in their pension and simulate various scenarios.

## GOVERNMENT OBJECTIVE NO. 24

### Increase citizens' involvement in their community.

In order to achieve this objective, Héma-Québec has, among other things, increased its blood donation promotion activities in schools with the "BLOOD RED!" education kit. It also pursued its awareness-raising activities, in collaboration with the Association of Blood Donation Volunteers (ABDV), among cegep and university students.

In 2011–2012, 19,865 donors were accommodated at the 154 blood drives organized in primary and secondary schools. In cegeps and universities, 28,420 donors took part in 229 blood drives. Compared to 2010–2011, 27 additional blood drives were organized in schools, accommodating 5,052 more donors.

Maintaining the number of active volunteers at blood drives and Héma-Québec as a whole is also a priority. Working with the ABDV volunteers, Héma-Québec multiplied the presence of ABO stands in public places. In this vein, ABDV volunteers took part in the *Eurêka – La science met son nez dehors!* festival in the Vieux-Port de Montréal, in June 2011. More than 620 people visited the ABDV stand to learn their blood group and close to 450 children were entertained while learning about blood during workshops inspired by the "BLOOD RED!" education kit.

Moreover, the Planning and Supply department gave a conference on sickle-cell anemia to Montréal area ABDV volunteers to make them aware of the importance of blood donation in cultural communities.

DENIS,  
RECIPIENT





# 4<sup>th</sup> GOAL

THE NEED TO  
UPDATE OUR  
SYSTEMS AND  
TECHNOLOGIES





# IMPLEMENT A QUALITY MANAGEMENT INFORMATION SYSTEM

## IMPLEMENTATION OF THE FIRST TWO MODULES OF SMARTSOLVE



The first phase of the implementation of the computerized quality management information system (SIGQ) was deployed in 2010–2011 and should be completed in 2012–2013. It includes the cascading implementation of four modules of the SmartSolve suite. These modules cover document management (SmartDoc), regulatory training (SmartTrain), quality control (SmartCAPA) and audits (SmartAudit).

The deployment of SmartDoc in the fall of 2011 enabled the organization to transition from paper to electronic management of all standard operating procedures (SOPs). In all, more than 4,500 paper documents were computerized and the time required to obtain the final approval of a document decreased from several days to a few hours, particularly as a result of the electronic signature process. In fact, the system has enabled Héma-Québec to reduce the number of print-outs from 40,000 to 5,000. The remaining copies are essentially produced for mobile blood drives, which do not have access to the network.

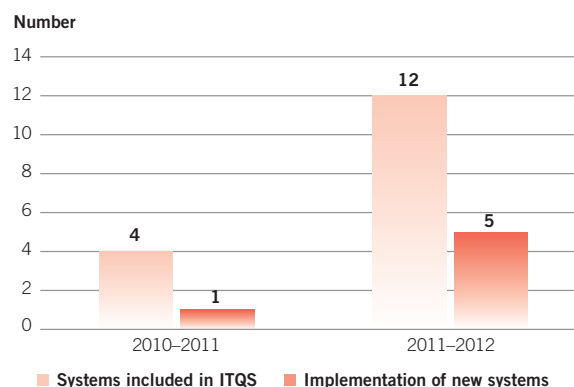
Process efficiency has improved throughout the organization. For the staff, the most appreciated benefit is electronic access to all the controlled forms and standard operating procedures in effect.

The second module, SmartTrain, was deployed in March 2012. This application has greatly improved the management of regulatory training files and reduced the need to print approximately 10,000 documents per year. Moreover, these documents no longer have to be filed and stored. As a result, training officers have more time to spend on their primary mission: training support.

## THE INFORMATION TECHNOLOGY QUALITY SYSTEM GAINS GROUND

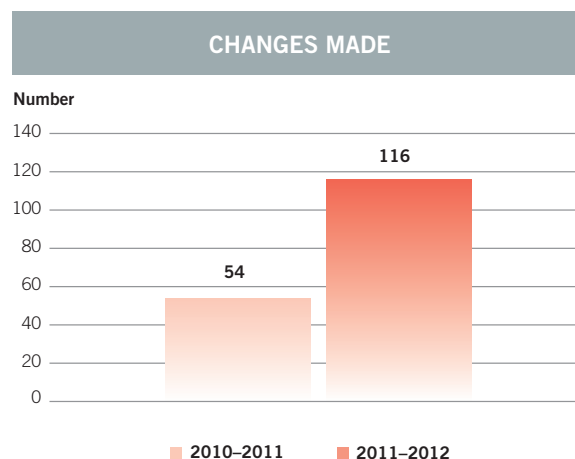
The information technology quality system (ITQS – SQTI in French) is a reference guide on Héma-Québec's policy concerning an integrated approach to the management of risk for the entire life-cycle of the systems. Following its creation in 2006, it was essentially used to validate the five computer systems managed by the Production Information Systems department.

### COMPUTER SYSTEMS AND ITQS



In 2011-2012, the Information Technology division devoted a great deal of effort to extending its methodology to the entire department. Thus, 12 computer systems have been fine-tuned using ITQS.

This integration of the ITQS was made possible through a collaboration between the Systems Quality team and the owners and users of the applications. It more than doubled the number of changes made, while maintaining an excellent level of computer system quality.



## IMPLEMENT AN INFORMATION SYSTEM FOR THE MEDICAL AFFAIRS LABORATORIES

### IMPLEMENTATION OF EDGELAB

The second phase of the implementation of the Medical Affairs laboratories information system (SILAM) was completed with the deployment of Edgelab in February 2012. This step involved computerizing the buffy coat immunology laboratory (HLA and platelets).

From now on, HLA typing of patients and donors in the *Stem Cell Donor Registry* will be transmitted by computer, which results in a real-time communication flow to other systems or organizations. Moreover, the ISBT 128 international labelling standard was included in the system (read *ISBT 128 Standard implemented in the buffy coat immunology laboratory* on page 24), which guarantees effective traceability of tests and reduces the risk of error during data entry. All in all, efficiency and productivity of laboratory operations has improved.



In March 2012, the SILAM team started the human tissues phase. The final phase of the project will concern the activities of the erythrocyte immunology laboratories. Almost all of the operations of the Stem Cell, Human Tissues and Reference Laboratory Operations division will be computerized as a result.

NIKITA,  
RECIPIENT





# 5<sup>th</sup> GOAL

THE ONGOING  
PURSUIT OF  
GREATER  
EFFICIENCY

# FOSTER GREATER EFFICIENCY

## ANALYSIS OF POTENTIAL EFFICIENCY GAINS

As part of its strategic plan, Héma-Québec identified production activities that need to be upgraded in order to enhance efficiency. Following this, an in-depth analysis served to target several improvements. They will be made in 2012–2013 and will result in efficiency gains in the vicinity of \$1.7 million.

## REPLACEMENT OF THE NUCLEIC ACID TESTING EQUIPMENT

In January 2012, the Product Qualification team started the project to replace the nucleic acid testing (NAT) analyzers. This test is used to detect the human immunodeficiency (HIV), Hepatitis B (HBV), Hepatitis C (HCV) and West Nile (WNV) viruses in blood samples. The contract with the current supplier, Roche Diagnostics, ends in 2013. Héma-Québec therefore issued a public call for tenders in order to award the next contract. A five-year contract, which will start next year, has been signed with Novartis Diagnostics.



Novartis nucleic acid testing analyzers.

## IMPLEMENTATION OF A COMPUTERIZED MANAGEMENT SYSTEM FOR THE CALL CENTRES

In 2011–2012, the Management Information Systems department developed and implemented a marketing management computer system that updates and generates the just-in-time donor lists used by volunteers working in Héma-Québec's call centres. As a result, the calls are distributed faster, the risk of error has been reduced significantly and the environment has become paperless. Finally, an interface was also developed to enable a visually impaired employee to use the system. All the employees assigned to use this module have been trained.

## REVISION OF GLOBULE CENTRE BUSINESS PROCESSES

Major ongoing improvement activities resulted in a revision of the business processes in the GLOBULE Blood Donor Centres in Montréal and Québec City, using the Kaizen method. The objective is to improve the efficiency of each, reduce the time donors spend in the centres and therefore increase the capacity to receive donors.

## RECOVERY PLANS FOR COMPUTER SYSTEMS

In order to be able to pursue or resume operations within the required timeframe in the event of a computer failure or a disaster, Information Technology developed a tested strategy, equipping the computer systems that are considered critical for Héma-Québec's operations with recovery systems. These systems, which have been installed at the Québec City facility, are constantly updated by the production systems installed in the Montréal facility. The various recovery plans are frequently simulated, ensuring optimal readiness in case of major problems.

## IMPLEMENTATION OF COMPUTER CHANGES

The volume of computer changes implemented grew from 23 changes implemented on average per month, in 2010–2011, to 30 over the past year, for an increase





Gérard Cawthorn, call centre agent.

of 30%. This is the result of the implementation of several new business solutions (EdgeCell, SmartSolve, etc.) and the required maintenance for the deployment of corrective actions for the entire infrastructure. In order to minimize the impact on users, changes are implemented primarily on weekends.

## COMPUTER SERVICE CENTRE

Over the past year, the Service Centre handled an average of 413 incident resolution requests per month (an incident is an interruption or deterioration of a computer service), for an increase of 20% compared to 2010–2011. The increase was caused by the deployment of SmartSolve and Office 2010: more than 300 additional users use these tools. The average resolution time is 2.3 days per incident. This is a significant improvement compared with 3 days for 2010–2011.

Moreover, the Service Centre handled 260 service requests per month (new user, move, installation of

software, replacement of cell phones, etc.). The average resolution time for service requests was 5.6 days compared with 8.6 days in 2010–2011. This is primarily a result of an improvement in service delivery processes.



View of the SmartDoc application, the first module of the SmartSolve suite, which allows electronic access to all documents pertaining to standard operating procedures in one place.

## EXTENDED USE OF WEB CONFERENCING

The WebEx system is used to conduct meetings online, simultaneously share documents and produce multimedia presentations. With this system, Héma-Québec's business partners and employees can meet more easily and at a lower cost. When this application was launched, in March 2011, the Users' Committee was already using this tool. Thus, those responsible for transfusions and blood bank staff at the various Québec hospitals were able to communicate with Héma-Québec staff without having to travel to Montréal or Québec City.

In 2011–2012, the tool won over new fans:

- monthly meetings – of a group of information technology experts in the field of transfusion medicine – bringing together participants from various countries;
- project meetings bringing together suppliers of international services and project teams;
- several online training sessions, thereby limiting the travel of employees and trainers;
- weekly service meetings involving the Montréal and Québec City facilities.

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# MAINTAIN COMPETITIVE COSTS FOR PRODUCTS AND SERVICES

## BENCHMARKING EXERCISE

In order to maintain optimal quality, Héma-Québec is constantly striving to achieve the best performance at the best cost. To do this, it maintains contact with organizations operating in the same field. Once again this year, the Finance and Administration division compared its costs with those of Canadian Blood Services (CBS) and America's Blood Centers (ABC), among others. This analysis allows participating organizations to compare business practices, establish benchmarks and improve on an ongoing basis. For example, they can compare the costs of products or services, wages, the number of full-time equivalent (FTE) employees and the debt rate.

recent version of the SAS® Activity-Based Management application used to calculate costs per activity.

As a result of these improvements, Accounting can now publish the actual rates on a quarterly basis rather than every six months, and in a much shorter period of time. This resulted in greater flexibility and a better response time for simulations, improving the decision-making process.

The Management Accounting team then revised and updated the formulas for calculating and breaking down costs per activity for labile products. It also finalized and implemented the method for establishing costs per activity for the human tissues sector.

## REVISION OF THE JOB COSTING METHOD PER ACTIVITY

After assessing the capacity of its current tools, the Accounting department, together with the Information Technology division, resized the server and installed a more

## RATES MAINTAINED BELOW THE RATE OF INFLATION

The Finance and Administration division presented the 2013–2014 rates for labile and stable products to the

*ministère de la Santé et des Services sociaux (MSSS), SigmaSanté and the Supply Management and Financing Committee (SMFC) in November 2011 and had them approved. Héma-Québec managed to maintain the rate increase below inflation, contributing to the collective effort.*

## COST REDUCTION

The latest calls for tenders, contract renewals or extension options with suppliers resulted in a savings of several tens of millions of dollars over the coming years. These

fruitful negotiations covered: nucleic acid tests (NAT), the supply of stable products, plasma fractionation, and support services for the definition of needs for group insurance plans, among others. At present, during this period of fiscal austerity, Héma-Québec has maintained and intensified its efforts to increase savings.

As in the case of past fiscal years, rigorous monitoring of costs has enabled Héma-Québec to show a surplus and issue billing credits to hospitals for labile and stable blood products.



Héma-Québec managed to maintain the rate increase below inflation, thereby contributing to the collective effort.



JUSTIN,  
RECIPIENT,  
WITH HIS MOTHER  
LYANNE





GOAL

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



# DEVELOPING THE NEXT GENERATION

## TRAINING THE NEXT GENERATION INTERNALLY

### TRANSFERRING KNOWLEDGE AND EXPERTISE

*The organization's sustainability and the transfer of staff knowledge and expertise* is a strategic issue that is particularly important for Héma-Québec. Thus, close to 110 managers took part in workshops on the theme “*Organizational Alzheimer's, transfer for continuity*” during the managers' and supervisors' forums held in April and May 2011. Simulations of cases of transfers with and without planning gave managers an opportunity to determine the issues concerning organizational memory when key employees leave and to identify concrete solutions to ensure continuity.

### BASIC TRAINING IN TRANSFUSION MEDICINE

The basic training program in transfusion medicine, piloted in 2010–2011, was so successful that the management committee approved its renewal. Thus, other employees will benefit from the knowledge of our experts in this field. The program includes seven training modules for eligible employees at the Montréal and Québec City facilities. From now on, they can register for all of the modules or the sessions of their choice based on their fields of interest and the value this knowledge adds to their functions

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## STUDENT TRAINING

The Research and Development division is responsible, in large part, for training a qualified future generation in the fields of blood and transfusion medicine.

### TRAINING OF GRADUATE-LEVEL UNIVERSITY STUDENTS

Héma-Québec plays an active role in the training of graduate-level university students. The following table presents the number of students trained in 2011–2012.

STUDENTS AND INTERNS TRAINING		
Students/trainees category	Total	Scholarship recipients
MSc	10	10
PhD	6	5
Postdoctoral trainees	3	3
Other trainees	13	10



2011–2012 Francine-Décary award given to Mathilde Brien.

### FRANCINE-DÉCARY AWARD GIVEN TO MATHILDE BRIEN

Every summer, the research and development laboratories welcome about ten undergraduate-level university students for a practicum lasting a few months. At the end of their practica, the students are invited to present their research results to the staff. The Francine-Décary award, named in honour of the organization's first President and CEO, is then awarded for the best presentation.

The 2011–2012 recipient is Mathilde Brien, a student in microbiology at the bachelor's level at Université Laval. Ms. Brien completed her practicum under the supervision of Louis Thibault, Manager of Operational Research, and worked on a project entitled "The effects on bacterial growth of keeping packed red blood cells at room temperature."

### APPRENTIS EN BIOSCIENCES PROGRAM

The Research and Development division used a financial contribution from the Héma-Québec Foundation to again take part in the INRS-Institut Armand-Frappier's *Apprentis en biosciences* program in 2011–2012. This program introduces upper secondary school students to the world of research by offering one-week stays in a scientific environment. During the year, three students from the Québec City region took part in the program. Héma-Québec has made a commitment to enable 25 students to take part in the program by 2014.

LUDOVIC, RECIPIENT,  
WITH HIS PARENTS,  
MARTIAL AND MARIKA





7<sup>th</sup>

GOAL

THE NEED TO  
PURSUE INNOVATION  
INITIATIVES



# INNOVATION IN PRODUCTION

## FIRST TO OFFER LYOPHILIZED BONE IN CANADA

Since October 2011, Héma-Québec has been manufacturing and distributing lyophilized spongy bone to hospitals that perform orthopedic surgery. It is the first Canadian tissue bank to offer this product to Québec and Canadian hospitals. The lyophilization of spongy bone facilitates transportation, preservation and management of the inventory, since this product can be kept at ambient temperature, compared with  $-80^{\circ}\text{C}$  for frozen bone.

Since August 2011, Héma-Québec has also been providing spongy bone chips to the province's orthopedic surgeons. As in the case of lyophilized bones, the spongy bone chip is frequently used for orthopedic surgery.

Moreover, a new digitized x-ray service has also been offered to orthopedic surgeons since September 2011. It enables doctors to see a bone in three dimensions, from different angles, and therefore determine the structure and exact dimensions before planning surgery. The x-rays are sent to the surgeons by email. Héma-Québec is thus helping orthopedic surgeons reduce their operating time and choose the bones that are best suited for their operations.

## ONLY NETCORD-FACT-ACCREDITED PUBLIC CORD BLOOD BANK IN CANADA

The Héma-Québec public cord blood bank is the first Canadian public bank to obtain NetCord-FACT accreditation. These international standards cover the collection, processing, analysis, storage, selection and distribution of cord blood. They are defined by recognized specialists, in keeping with the most recent knowledge in the field of cord blood banks. In cell therapy, NetCord-FACT accreditation is an essential qualification.

This accreditation positions Héma-Québec among leaders in the field of cord blood. It demonstrates

Héma-Québec's readiness to make every effort to achieve a superior quality medical and laboratory practice in the field of cell therapy and its ability to help sick people around the world who need transplants from related and unrelated allogenic donations. NetCord-FACT accreditation is a reference model used by physicians.

## CREATION OF AN ADVISORY COMMITTEE FOR THE PUBLIC BREAST MILK BANK PROJECT

One year after informing the *ministère de la Santé et des Services sociaux* (MSSS) of its interest in assuming the management and operation of a public breast milk bank for Québec, Héma-Québec is still waiting for a decision.

In the wake of the feasibility study conducted in 2010–2011, Héma-Québec continued its preparatory work in 2011–2012. Various processes and technologies used in breast milk banks around the world were studied with the help of pediatricians, microbiologists, neonatologists, nurses and dietitians, in order to verify that Québec's experts in the field agree with what should be proposed, in the event of a positive response from the MSSS.

A 15-member advisory committee was set up. Québec's four university hospitals (CHU) sit on this committee. The members met for the first time on March 30, 2012.

## IMPLEMENTATION OF A NEW INTERNAL AUDIT METHOD

In 2011–2012, the Audits department implemented a new internal audit method, namely process audits. In the context of internal audits, the process approach is in line with quality improvement initiatives. It involves making the organization's major processes more apt to satisfy clients and regulatory processes by having the various process stakeholders take part in the objective.

The new, optimized internal audit process meets the organization's current needs while improving the efficiency



of its processes. The results are applied to the organization and contribute to concrete improvements in Héma-Québec's processes and activities.

### INTEGRATION OF VIRTUAL CLASSES

The Regulatory Training team innovatively integrated on-line training into its work methods through the WebEx

application. In particular, the tool enabled several employees to study from the comfort of their homes before heading off to a blood drive. In a similar manner, training officers were able to give the course to evening, night and weekend staff, from their homes. In addition to generating savings, on-line training helps improve employees' quality of life (see *Extended use of Web conferencing* on page 60).

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## INNOVATION IN RESEARCH AND DEVELOPMENT

### TWO NEW PATENTS

Héma-Québec intends to have all of Québec society benefit from the concrete results of its technological research and development by obtaining patents for technologies with a promising commercial potential, among other things. In this respect, we were able to consolidate our portfolio in 2011–2012, with two new patents granted to Héma-Québec.

First of all, European patent EP1743024 "Method of expanding cord blood cells", issued on September 28, 2011, covers a method for the accelerated expansion of hematopoietic stem cells from cord blood. The method also increases megakaryocyte and platelet yield. An equivalent patent was obtained in the United States in 2008.

Canadian patent CA2738176 "Method for polyclonal immunoglobulin G production by human B cells", issued January 10, 2012, covers a technology for selecting and expanding human B lymphocytes and producing polyclonal immunoglobulin with strong affinity. This technology, for which patents have been applied for in other countries, is likely to be of interest to companies in the biopharmaceutical and cell therapy sectors. Obtaining these two patents is in keeping with the 2012–2015 strategic plan, which aims, among other things, to accentuate our efforts to enhance the value of technologies developed at Héma-Québec.

### CREATION OF A BUSINESS DEVELOPMENT DEPARTMENT

The research and development strategy plan initiated in 2010–2011 resulted in an in-depth consideration of the direction of research projects. This examination led to the abolition of the position of research and development quality control specialist. From now on, quality control expertise needs will be submitted to the Quality and Standards division.

Moreover, a new structure was created, the Research and Development Business Development department. This department is an essential element in ensuring the promotion of the expertise and intellectual property developed over the years by Héma-Québec scientists.

In this vein, Héma-Québec licensed two monoclonal antibodies it developed to researchers at the *Institut de recherche en biotechnologie*. It also allowed a scientist from the Warsaw medical institute, in Poland, to use a cell line it had created and which is essential for the culture of B cells.

## ACQUISITION OF AN IMAGING SYSTEM

The constant progress in digital technology has obvious impacts, both in daily life and at work. In order to remain at the forefront in this field, the Research and Development team recently acquired an image analysis system designed specifically for biomedical research. This equipment will enhance the accuracy of digital imaging data and improve the quality of experimental results produced by the Research and Development division.

## ENHANCED STRATEGIC, SCIENTIFIC AND TECHNOLOGICAL MONITORING

The Research and Development team increased its capacity to conduct strategic, scientific and technological monitoring activities through the acquisition of Thomson Innovation user licences. This is a database covering patents, scientific literature and strategic information from the business sector.

This tool can be used to develop a portrait of the technological landscape, the principal organizations, companies and research centres, and the principal stakeholders and decision-makers in a technological field of interest. The information obtained through these analyses reinforces the capacity to identify new business opportunities and partnerships. This acquisition fits in with our desire to increase business development and promote technologies developed at Héma-Québec.

## IMPLEMENTATION OF A WEATHER COMMITTEE

The Research and Development division decided to increase the delegation of responsibilities at several levels. This was done out of a desire for change and clearly represents the organization's overall philosophy. This desire was materialized through the creation of a *Weather* committee. The committee owes its name to the fact that it serves to evaluate the climate within the division, in particular by collecting suggestions for improvements from students, research assistants and scientists. The information collected will ensure better communication.

## REORGANIZATION OF CELL ENGINEERING ACTIVITIES

Following a reorganization of the Cellular Engineering department's activities, in keeping with the strategic plan, efforts focused on research on therapeutic immunoglobulins and their mechanisms were reduced in order to make way for additional research work on hematopoietic stem cells and on the production of cells intended for cell therapy.

Finally, we wish to acknowledge the contribution of members of the Cellular Engineering department to the training of Héma-Québec personnel, technologists from various hospitals in Québec and university students on topics affecting our areas of expertise, including immunochemistry and the immune system.

## VISIBILITY OF RESEARCH PROGRAMS

OUTCOME OF RESEARCH AND DEVELOPMENT ACTIVITIES				
Program	Scientific articles published	Patents granted	Presentations and guest lectures	Graduating students
CELLULAR ENGINEERING				
Immunoglobulins	10	1	24	–
Stem cells and platelets	8	1	11	2 (1 MSc, 1 PhD)
<b>Total</b>	<b>18</b>	<b>2</b>	<b>35</b>	<b>2</b>
OPERATIONAL RESEARCH				
Operational testing group	1	–	14	–
Screening group	1	–	11	1
<b>Total</b>	<b>2</b>	<b>–</b>	<b>25</b>	<b>1</b>

## OPERATIONAL RESEARCH

Operational research includes two research groups, namely the operational test group (OTG) and the screening group.

The OTG works with Operations and Medical Affairs on the operational evaluation of new technology and equipment used in the collection, processing and distribution of blood components, as well as the optimization of the quality of blood components. Over the past year, the OTG completed a total of 11 technical evaluation and study reports on the quality of blood components.

In addition to providing support to the Research and Development division for requests for equipment and for the maintenance of laboratory equipment, the operational research team takes part in training trainees and graduates every year, in collaboration with the Operations division. It also takes part in disseminating research at Héma-Québec. In all, it contributed to two scientific publications, 17 presentations at conferences and eight guest lectures and workshops.

Moreover, it is responsible for the *Research Donor Registry*. Thanks to this registry, the team was able to advance several research projects again this year (see following text for more details about these projects). This registry is, in fact, a bank of blood donors who want to help with the advancement of research. Their contribution involves either making a blood donation for research or volunteering to take part in a study.

### Optimization of processing processes

In 2011–2012, the operational test group (OTG) conducted several research projects intended to optimize the processing of blood products. Among other projects, it studied the possibility of reducing, from five to four, the number of buffy coats required to obtain the therapeutic dosage, in order to optimize the production of platelet concentrates. The OTG also characterized the residual quantity of red blood cells in platelet concentrates and checked the impact of the repeated exposure of packed red blood cells to room temperature on their quality parameters.

Moreover, in collaboration with the Operations and Quality and Standards divisions, the group took part in establishing standards for the plasma volume and content of packed red blood cells, in addition to studying the impact of the new Health Canada criteria on the hemolysis of packed red blood cells. Several of these projects were presented to Héma-Québec's user committees as well as at international conferences.

Following the integration of the activities of the bioproduction unit, in March 2011, the OTG worked with the Quality and Standards, Stem Cells, Human Tissues and Reference Laboratory team on a major revision of the production processes for the 16 genotyping kits manufactured for the Stem Cell and Reference Laboratory (SCRL). This revision reduced production costs by approximately 70%. The group also validated and transferred a new molecular test for screening for Dombrock system antibodies to the SCRL.

## SCREENING GROUP

### The screening group's expertise is recognized outside Québec

The screening group is responsible for developing reagents and typing kits for donors, recipients and emerging pathogens. In 2011–2012, the team continued its work to support the Stem Cell and Reference Laboratory (SCRL), conducting molecular analysis of more than 135 files of patients waiting for transfusions. The group's expertise is now recognized beyond Québec. This year, in partnership with the Sunnybrook blood bank in Toronto, it performed molecular analyses for two very complex files of patients requiring transfusions.

Moreover, a particular effort was made with respect to recruiting and genotyping donors from various cultural communities. Donors of rare blood types were identified, thereby increasing the reserve of frozen rare blood types in order to better respond to the hospitals' demand. Several molecular analyses were also performed on blood donors in order to identify bags of compatible blood to be transfused for patients who had developed antibodies against particular structures of red blood cells. This identification is usually performed using serological techniques, but in some cases, these serological reagents are simply not available on the market. For this reason, molecular biology can serve to quickly identify bags of compatible blood, thereby facilitating the transfusion physicians' work and improving patient prognosis.

In a context of ongoing improvement and innovation, the team joined forces with a group of researchers at *Université Laval* in Québec City. A new approach based on nanotechnology will reduce the molecular biology analysis time by several hours. The first results obtained are very encouraging.

UZEMA,  
RECIPIENT







# 8<sup>th</sup> GOAL

THE PURSUIT OF  
OPPORTUNITIES  
FOR PARTNERSHIP  
DEVELOPMENT



# BROADENING HÉMA-QUÉBEC'S INFLUENCE

## CELL AND TISSUE THERAPY MOTIVATION PROJECT

The development of expertise in standardized production in the field of cell and tissue therapies offers a great deal of potential for treating numerous diseases.

Research in the field of cell and tissue therapies is very dynamic and Québec has a few centres that are leaders in this field. Unfortunately, very few initiatives make it to the clinical stage or, in other words, for use with patients. Héma-Québec intends to make its expertise and resources in cell and tissue production, in cord blood banking, and in quality control matters available so that more promising projects can bear fruit. This project will ensure that Québec discoveries get to the patient faster. Indirectly, it should stimulate research in Québec.

In order to determine the directions to be taken, Héma-Québec met with many Québec stakeholders in the field to present its *Healing, one cell at a time* project, which was received enthusiastically.

## NATIONAL ORGAN AND TISSUE DONATION WEEK

For the 2011 *National Organ and Tissue Donation Week*, Héma-Québec took part in three main activities to remind people about the importance of consenting to organ and tissue donation.

Once again this year, it took part in the awareness-raising campaign organized jointly with the *ministère de la Santé et des Services sociaux*, the *Régie de l'assurance maladie du Québec* (RAMQ), Transplant-Québec and the *Chambre des notaires du Québec*. This campaign, which takes place over five weeks, is intended to support the *Registre des consentements au don d'organes et de tissus*, created on February 28, 2011, and promote the new site: [www.signezdon.gouv.qc.ca](http://www.signezdon.gouv.qc.ca).

Moreover, for the second consecutive year, Héma-Québec conducted organ and tissue donation awareness-raising activities for blood donors who attended blood donor clinics during the week of April 18.

Finally, members of the human tissues team made the most of this week to present a completely new communication tool, the *Guide for families and loved ones*, produced by the Marketing and International Affairs department, to hospital staff who deal with families of potential donors.

## COLLABORATION WITH THE ÉTABLISSEMENT FRANÇAIS DU SANG

In May 2011, during discussions coordinated by the Marketing and International Affairs department, six members of the *Établissement français du sang* visited Héma-Québec's facilities for five days. They were accommodated as part of a discussion and benchmarking program on the marketing of blood donation. This international collaboration was started in 2007 and has been very useful for both parties to date.

## VISIT BY A CHINESE DELEGATION

Héma-Québec welcomed 16 representatives from the Chinese blood bank at its Montréal facility in November 2011. These visitors wanted to learn about the blood bank marketing system used in Québec as well as about methods for processing and evaluating products. In their eyes, Héma-Québec is a leader in these fields on a global level. This visit was organized at the request of the Montréal Jewish General Hospital.

## HÉMA-QUÉBEC HELPS THE PEOPLE OF HONDURAS

Héma-Québec gets involved in helping the international population in various ways. In the fall of 2011, it gave surplus medical supplies to Honduras. They had been acquired as

part of the preparations for the flu pandemic. They were sent to the Valle de Angeles hospital and offered free of charge to patients requiring care. This hospital and the Consulate General for the Republic of Honduras in Montréal were very appreciative of this gesture.

# AWARDS AND DISTINCTIONS

## DR. GILLES DELAGE, WINNER OF THE 2011 ORTHO AWARD

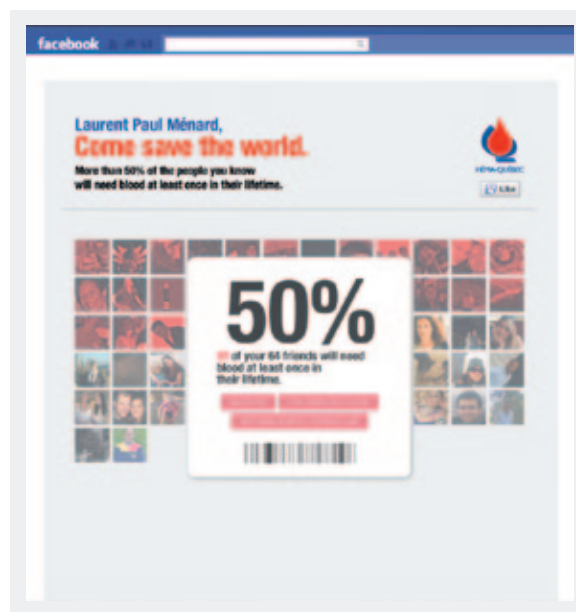
In May 2011, the vice-President of Medical Affairs in Microbiology, Dr. Gilles Delage, received the 2011 Ortho Award in Toronto as part of the Canadian Society for Transfusion Medicine conference.



Dr. Gilles Delage, winner of the 2011 Ortho award.

## HÉMA-QUÉBEC REWARDED FOR COME SAVE THE WORLD

Thanks to *Come save the world*, an advertising campaign produced by Ig2 and launched in social media in the fall of 2010, Héma-Québec received a certificate of excellence in the Impact category of the STRAT 2011 competition. Organized by the *Association des professionnels de la communication et du marketing* (APCM), STRAT is the only competition in Québec that rewards strategic excellence in marketing communication. It honours teams that stand out, specifically as a result of their unique approach to the market, the quality of their planning and, of course, the results they obtain.



Screen capture of the *Come save the world* Web campaign.

# PUBLICATIONS, PARTICIPATIONS, COMMITTEES

## PUBLICATIONS

**Pineault N** (2011). Young maybe, but surely not immature. *Blood*, 117(15): 3940-3941.

**Çelebi B, Mantovani D, Pineault N** (2011). Irradiated mesenchymal stem cells improve the *ex vivo* expansion of hematopoietic progenitors by partly mimicking the bone marrow microenvironment. *Journal of Immunological Methods*, 370(1-2): 93-103.

**Delage G, Thibault L, Strobl F** (2011). Workflow analysis and performance evaluation of an automated blood testing system. *IVD Technology*, 17(4): 44-49.

**Néron S, Roy A, Dumont N, Dussault N** (2011). Effective *in vitro* expansion of CD40-activated human B lymphocytes in a defined bovine protein-free medium. *Journal of Immunological Methods*, 371(1-2): 61-69.

**Aubin É, Paquin Proulx D, Trépanier P, Lemieux R, Bazin R** (2011). Prevention of T cell activation by interference of internalized intravenous immunoglobulin (IVIg) with MHC II-dependent native antigen presentation. *Clinical Immunology*, 141(3): 273-283.

**Samson M, Jung D** (2011). Intracellular trafficking and fate of chimeric adenovirus 5/F35 in human B lymphocytes. *The Journal of Gene Medicine*, 13(09): 451-461.

**Padet L, St-Amour I, Aubin É, Bazin R** (2011). Neutralization of mitogenic lectins by IVIg prevents T cell activation: Does IVIg really have a direct effect on T cells? *Clinical & Experimental Immunology*, 166(3): 352-360.

**Çelebi B, Mantovani D, Pineault N** (2011). Effects of extracellular matrix proteins on the growth of hematopoietic progenitor cells. *Biomedical Materials*, 6(5): 055011.

**Bousquet M, St-Amour I, Vandal M, Julien P, Cicchetti F, Calon F** (2011). High-fat diet exacerbates MPTP-induced dopaminergic degeneration in mice. *Neurobiology of Disease*, 45(1): 529-538.

**Néron S, Côté G, Dumont N, Roy A, Fecteau JF, McNeil MÈ** (2011). Contribution of CD40-activated naïve B lymphocytes in the modulation of CD27+ memory B cell growth and differentiation. In Bernhardt, LV, editor of the collection, *Advances in Medicine and Biology*, vol. 25. (pp. 143-167). Hauppauge, NY: Nova Science Publishers, Inc.

**Nadeau PJ, Roy A, Gervais St-Amour C, Marcotte MÈ, Dussault N, Néron S** (2011). Modulation of CD40-activated B lymphocytes by N-acetylcysteine involves decreased phosphorylation of STAT3. *Molecular Immunology*, 49(04): 582-592.

**Pineault N, Boyer L** (2011). Cellular based therapies to prevent or reduce thrombocytopenia. *Transfusion*, 51(s4): 72S-81S.

**Çelebi B, Pineault N, Mantovani D** (2011). The role of collagen type I on hematopoietic and mesenchymal stem cells expansion and differentiation. *Advanced Materials Research*, 409: 111-116.

**Robert A, Cortin V, Garnier A, Pineault N** (2011). Megakaryocyte and platelet production from human cord blood stem cells. In Gibbins JM, Mahaut-Smith MP, Platelets and Megakaryocytes: Volume 3, Additional Protocols and Perspectives, *Methods in Molecular Biology*, vol. 788 (pp. 219-247). Hertfordshire, UK: Humana Press/ Springer Science+Business Media, LLC.

**Cayer MP, Samson M, Bertrand C, Dumont N, Drouin M, Jung D** (2011). Suppression of protein phosphatase 2A activity enhances Ad5/F35 adenovirus transduction efficiency in normal human B lymphocytes and in Raji cells. *Journal of Immunological Methods*, 376(1-2): 113-124.

**Dussault N, Dumont N, Néron S** (2011). Modulation of human B lymphocyte differentiation by therapeutic immunoglobulins: from protein to mRNA levels. *Open Journal of Immunology*, 1(03): 65-73.

**Trépanier P, Aubin É, Bazin R** (2012). IVIg-mediated inhibition of antigen presentation: Predominant role of naturally occurring cationic IgG. *Clinical Immunology*, 142(3): 383-389.

**Çelebi B, Mantovani D, Pineault N** (2012). Insulin-like growth factor binding protein-2 and neurotrophin-3 effects on hematopoietic progenitor cells. *Cytokine*, 58(3): 327-331.

**St-Louis M, Richard M, Côté M, Long A** (2011). Weak D type 42 cases found in individuals of European descent. *Immunohematology*, 27(1): 20-24

**Leysi-Derilou Y, Duchesne C, Garnier A, Pineault N** (2012). Single-cell level analysis of megakaryocytic growth and development. *Differentiation* 83(4): 200-209.

## INSTITUTIONAL AND SCIENTIFIC PRESENTATIONS

**RESEARCH DAY, PHARMACY FACULTY,  
UNIVERSITÉ LAVAL, QUÉBEC CITY, CANADA,  
APRIL 28, 2011**

*Oral presentation*

**St-Amour I, Ringuette-Goulet C, Paré I, Bazin R, Calon F.** "Anomalies immunologiques de la souris 3XTg-AD"

**SOCIÉTÉ FRANÇAISE DE TRANSFUSION  
SANGUINE CONGRESS AND EDUCATIONAL  
SESSIONS, LYON, FRANCE, MAY 3-6, 2011**

*Guest lecture*

**Pepin M.** "Succès d'une campagne de sensibilisation de l'importance du don de sang auprès des communautés culturelles"

*Poster*

**Daigneault S.** "Le don de sang fait son entrée en classe"

**3<sup>rd</sup> SYMPOSIUM ON NEURODEGENERATIVE  
DISEASES, QUÉBEC CITY, CANADA, MAY 4-5,  
2011**

*Oral presentation*

**St-Amour I, Ringuette-Goulet C, Paré I, Bazin R, Calon F.** "Immunologic abnormalities in a triple transgenic mouse model of Alzheimer disease"

**7<sup>th</sup> ANNUAL PROTEIN ENGINEERING SUMMIT,  
BOSTON, UNITED STATES, MAY 9-13, 2011**

*Poster*

**Tremblay T, Bazin R.** "Problems associated with the purification and analysis of the MKD6 mouse IgG2a due to self-aggregation"

**79<sup>th</sup> CONGRESS OF THE ASSOCIATION  
FRANCOPHONE POUR LE SAVOIR – ACFAS,  
COLLOQUE 109 – LES CELLULES SOUCHES  
POSTNATALES : ÉTAT DE L'ART ET PERCÉES  
RÉCENTES, SHERBROOKE, CANADA,  
MAY 9-13, 2011**

*Oral presentation*

**Pineault N.** "Utilisation de cellules souches hématopoïétiques pour la production de plaquettes et de globules rouges *in vitro*"

**CANADIAN SOCIETY FOR TRANSFUSION  
MEDICINE CONFERENCE, TORONTO, CANADA,  
MAY 12-15, 2011**

*Posters*

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

**Émond H, Boyer L, Pineault N.** "Expansion of hematopoietic progenitors to improve platelet recovery"

**Nadeau P, Roy A, Gervais St-Amour C, Néron S.** "Distinctive effects of various antioxidants on phenotypes of CD19+ and IgG+ B cells"

**Thibault L, Béliveau L, Jacques A, Beauséjour A, de Grandmont MJ, Ducas É, Tremblay J, Daoud H, Richard**

**M, Germain M.** "Warm antibiotic decontamination of heart valves: Effects on their structural characteristics"

**Thibault L, de Grandmont MJ, Beauséjour A, Ducas É, Jacques A, Richard M, Daoud H.** "Platelet concentrates: How many red blood cells are still in the bag?"

**Thibault L, Delage G, Jacques A, Potteiger T, Douglas T, Sample J, de Grandmont MJ, Strobl FJ, Bernier F.** "Workflow analysis of pooled and individual blood donor testing using the Procleix Tigris system"

**Thibault L, Jacques A, de Grandmont MJ, Beauséjour A, Thibault S.** "Compatibility of the Atreus/OrbiSac component bags with three commonly used transfusion sets"

**Thibault L, Jacques A, Tremblay M, Bourgeois R, Ducas É, Rousseau MC, Côté C, Boyer G, Boisclair P.** "Producing platelet concentrates made by pooling only four buffy coats with the new Atreus/OrbiSac system: An evaluation"

#### *Guest lectures*

**Éthier C.** "Interactive case studies"

**St-Louis M.** "Blood group genotyping: What and Why?"

**Bazin R.** "Does IVIg affect antigen presentation?"

**Pineault N.** "Bioreactors: Growing platelets *in vitro*"

**St-Louis M.** "Fetal DNA assessment in maternal blood"

**St-Louis M.** "Molecular genotyping"

**St-Louis M.** "The scientific basis of red cell antigen genotyping"

#### *Oral presentation*

**St-Amour I, Ringuette-Goulet C, Paré I, Calon F, Bazin R.** "Immunologic abnormalities in a triple transgenic mouse model of Alzheimer disease"

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### 98<sup>th</sup> ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS (AAI), SAN FRANCISCO, UNITED STATES, MAY 13-17, 2011

#### *Posters*

**Padet L, Bazin R.** "Modulation of MHC II and costimulatory molecules expression on monocytes by intravenous immunoglobulins"

**Trépanier P, Bazin R.** "Inhibition of antigen cross-presentation by intravenous immunoglobulins"

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### AMERICAN SOCIETY OF GENE & CELL THERAPY 14<sup>th</sup> ANNUAL MEETING, SEATTLE, UNITED STATES, MAY 18-21, 2011

#### *Oral presentation*

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

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### 11<sup>th</sup> ANNUAL SYMPOSIUM OF PROTÉO, QUÉBEC CITY, CANADA, MAY 20, 2011

#### *Posters*

**Padet L, St-Amour I, Aubin É, Bazin R.** "IVIg-PHA interaction: Role of glycans in F(ab')<sub>2</sub> region"

**Trépanier P, Bazin R.** "Therapeutic potential of cationic proteins in inflammatory disorders: An alternative to IVIg"

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### 6<sup>th</sup> ANNUAL CANADIAN NEUROSCIENCE MEETING, VANCOUVER, CANADA, MAY 20-23, 2011

#### *Poster*

**St-Amour I, Ringuette-Goulet C, Paré I, Bazin R, Calon F.** "Immunologic abnormalities in a triple transgenic mouse model of Alzheimer disease"



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**29<sup>th</sup> ANNUAL MEETING OF THE CANADIAN BIOMATERIALS SOCIETY, VANCOUVER, CANADA, JUNE 1-4, 2011**

*Oral presentation*

**Çelebi B, Pineault N, Mantovani D.** "Irradiated bone marrow mesenchymal stem cells improve the expansion of human hematopoietic and megakaryocyte progenitors in co-culture"

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**CONGRESS OF THE ORDRE PROFESSIONNEL DES TECHNOLOGISTES MÉDICAUX DU QUÉBEC (OPTMQ), RIMOUSKI, CANADA, JUNE 16-18, 2011**

*Guest lectures*

**Baillargeon N.** "Les différentes difficultés rencontrées lors d'identification d'anticorps"

**Boutin D.** "L'implantation de la formation continue au travail, une expérience vécue"

**Gagné L-P.** "Étude de faisabilité sur l'implantation d'une banque publique de lait maternel au Québec"

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**INTERNATIONAL SOCIETY FOR STEM CELL RESEARCH 9<sup>th</sup> ANNUAL MEETING, TORONTO, CANADA, JUNE 15-18, 2011**

*Poster*

**Çelebi B, Boily Y, Pineault N.** "Osteoblasts derived from MSC promote cell cycle entry of CD34+ cells and expansion of hematopoietic progenitors"

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**THERMEC' 2011 – INTERNATIONAL CONFERENCE ON PROCESSING & MANUFACTURING OF ADVANCED MATERIALS, QUÉBEC CITY, CANADA, AUGUST 1-5, 2011**

*Oral presentation*

**Çelebi B, Pineault N, Mantovani D.** "The role of collagen type I on hematopoietic and mesenchymal stem cells expansion and differentiation"

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**GROUPE DE RECHERCHE EN TRANSFUSION SANGUINE (GRTS) ANNUAL SCIENTIFIC CONFERENCE, MONTRÉAL, CANADA, SEPTEMBER 21, 2011**

*Oral presentation*

**Blais Y.** "Perspectives of Héma-Québec on Transfusion Research"

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**EUROPEAN BIOTECHNOLOGY CONGRESS 2011, ISTANBUL, TURKEY, SEPTEMBER 28-OCTOBER 1, 2011**

*Oral presentation*

**Çelebi B, Mantovani D, Pineault N.** "NT-3 and IGFBP-2 increase the expansion of umbilical cord blood hematopoietic progenitors"

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**12<sup>th</sup> INTERNATIONAL CONGRESS OF HUMAN GENETICS (ICHG), MONTRÉAL, CANADA, OCTOBER 11-15, 2011**

*Poster*

**Samson M, Bessette AM, Drouin M, Cayer MP, Jung D.** "Ex vivo adenoviral-mediated gene therapy: Phosphatase inhibitors improve gene transduction"

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**AMERICAN SOCIETY OF HUMAN GENETICS (ASHG) 61<sup>st</sup> ANNUAL MEETING, MONTRÉAL, CANADA, OCTOBER 11-15, 2011**

*Poster*

**Samson M, Bessette AM, Drouin M, Cayer MP, Jung D.** "Ex vivo adenoviral-mediated gene therapy: Phosphatase inhibitors improve gene transduction"

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**AMERICAN SOCIETY FOR HISTOCOMPATIBILITY AND IMMUNOGENETICS (ASHI) 37<sup>th</sup> ANNUAL MEETING, NEW ORLEANS, UNITED STATES, OCTOBER 17-21, 2011**

*Poster*

**Richard L, Trudel E, Fournier D, Roy D, Chevrier M-C.** "A rare DRB1 allele identified in a cord blood unit and the mother"

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**AABB 64<sup>th</sup> ANNUAL MEETING AND CTTXPO, SAN DIEGO, CALIFORNIA, UNITED STATES, OCTOBER 22-25, 2011**

*Guest lecture*

**Pineault N.** "A cellular therapy to prevent thrombocytopenia"

*Oral presentations*

**Agbato I, Koué M, de Grandmont M, Beauséjour A, Nadeau P, Thibault L, Kouassi É.** "Serotonin maintains erythrocyte membrane protein band 3 integrity but does not affect routine *in vitro* parameters during storage at 4°C in additive solution AS-3"

**Thibault L, Béliveau L, Jacques A, Beauséjour A, de Grandmont M, Ducas É, Tremblay J, Daoud H, Richard M, Germain M.** "Effects of warm antibiotic decontamination on structural characteristics of heart valves"

**Thibault L, Dion J, Tremblay M, de Grandmont M, Germain M.** "Red blood cell hemolysis at the end of storage: Challenging the new standard"

*Posters*

**Bédard C, Nolin M, Deschênes É, Caron B, St Louis M, Chevrier M, Constanzo-Yanez J, Thibault L.** "Validation of a blood group genotyping assay"

**Éthier C, Couture C, Royer K, Collin H, Cormier N, St-Louis M.** "Anti-Lub immunoglobulin M adsorbed by REST<sup>TM</sup>"

**de Grandmont M, Beauséjour A, Daoud H, Richard M, Côté C, Ducas É, Thibault L.** "Assessment of blood donor eligibility using the HemoCue Hb 301 analyzer"

**de Grandmont M, Beauséjour A, Ducas É, Jacques A, Richard M, Daoud H, Thibault L.** "Quantification of residual red blood cells in platelet concentrates derived from buffy coat and apheresis"

**Perreault J, Cayer M, McKinnon L, Éthier C, Constanzo-Yanez J, St-Louis M.** "Finding rare blood donors among cultural communities"

**St-Amour I, Paré I, Ringuette-Goulet C, Calon F, Bazin R.** "Peripheral immunity of the triple transgenic mouse model of Alzheimer disease"

**St-Louis M, Constanzo-Yanez J, Éthier C, Perreault J.** "A RhD positive sample with a RHD-RHCE hybrid gene"

**Thibault L, Jacques A, Ducas É, Beauséjour A.** "Overnight storage of whole blood: A new cooling system for extreme temperature conditions during transport"

**Tremblay M, Dion J, Morin M, de Grandmont M, Thibault L.** "Validation of buffy coat platelet production with the Atreus and OrbiSac blood processing devices"

**Tremblay M, Morin M, de Grandmont M, Thibault L.** "Validation of a new active cooling system for transport and overnight storage of whole blood"

**Trépanier P, Bazin R.** "IVIg reduces the activation of helper and cytotoxic T cells by inhibiting antigen presentation and cross-presentation"

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**LEADERS FORUM, SALON SUR LES  
MEILLEURES PRATIQUES D'AFFAIRES,  
MONTRÉAL, CANADA, NOVEMBER 10, 2011**

*Guest lecture*

**Pepin M.** "Écueils, défis et succès"

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**20<sup>th</sup> ANNUAL CONGRESS OF THE EUROPEAN  
ASSOCIATION OF TISSUE BANKS (EATB) AND  
6<sup>th</sup> WORLD CONGRESS ON TISSUE BANKING,  
BARCELONA, SPAIN, NOVEMBER 9-11, 2011**

*Oral presentations*

**Tremblay J.** "Antibiotic decontamination of heart valve allografts: historical trends before and after the implementation of a higher temperature of incubation"

**Tremblay J.** "CV tissue banking: methods used in Québec"

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**INTERNATIONAL CONFERENCE AND  
EXHIBITION ON CELL SCIENCE & STEM CELL  
RESEARCH, PHILADELPHIA, PENNSYLVANIA,  
UNITED STATES, NOVEMBER 29 TO  
DECEMBER 1<sup>st</sup>, 2011**

*Guest lecture*

**Pineault N.** "Overcoming impaired platelet engraftment in umbilical cord blood transplantation"

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**CCA 2011 CYTOMETRY AND MICROSCOPY  
SYMPOSIUM, TORONTO, CANADA, NOVEMBER  
24-25, 2011**

*Oral presentations*

**Roy A.** "Monitoring the emergence of newly formed plasma cells following long-term culture of human B lymphocytes"

**Simard C.** "A brief practical introduction to fluorescent cell bar coding"

*Posters*

**Roy A, Itoua Maïga R, Simard C, Néron S.** "Monitoring the emergence of newly formed plasma cells following long-term culture of human B lymphocytes"

**Simard C, Néron S.** "Fluorescent cell bar coding: A simple method to help in multiple myeloma diagnostics and prognostics"

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**ASSOCIATION DE THÉRAPIE GÉNÉRIQUE DU  
QUÉBEC (ATGQ) 10<sup>th</sup> CONGRESS, QUÉBEC  
CITY, CANADA, NOVEMBER 18, 2011**

*Posters*

**Bessette AM, Samson M, Jung D.** "Intracellular trafficking of Ad5/F35 in B lymphocytes"

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

**Padet L, Lessard AJ, Bazin R.** "IVIg inhibits T cell activation in an *in vitro* model of allograft rejection"

**Samson M, Bessette AM, Drouin M, Cayer MP, Jung D.** "Ex vivo adenoviral-mediated gene therapy: Phosphatase inhibitors improve gene transduction"

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**AMERICAN SOCIETY FOR CELL BIOLOGY 2011  
ANNUAL MEETING, DENVER, COLORADO,  
UNITED STATES, DECEMBER 3-7, 2011**

*Poster*

**Çelebi B, Boily Y, Mantovani D, Pineault N.** "Improved expansion of hematopoietic progenitors with osteogenically differentiated BM MSCs conditioned medium"

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**MOUVEMENT QUÉBÉCOIS DE LA QUALITÉ  
ANNUAL MEETING, MONTRÉAL, CANADA,  
JANUARY 19, 2012**

*Guest lecture*

**Lafrenière G.** "Partage et découvertes sur les meilleures pratiques d'affaires"

## MASTER'S THESES

**St-Laurent J.** “Caractérisation et identification d’antigènes érythrocytaires liant les anticorps de type HTLA.” Thesis presented to the Faculty of Graduate Studies of *Université Laval* in partial fulfilment of the requirements for the degree of Master of Science (M.Sc.) in the Biochemistry master’s program. Department of Biochemistry, Microbiology and Bio-computing, Faculty of Science and Engineering, *Université Laval*, Québec City, Québec, Canada, 2011.

**Tremblay Rochette J.** “Une niche pour la différenciation : la réponse *in vitro* des lymphocytes B à mémoire aux cytokines de leur environnement.” Thesis presented to the Faculty of Graduate Studies of *Université Laval* in partial fulfilment of the requirements for the degree of Master of Science (M.Sc.) in the Biochemistry master’s program. Department of Biochemistry, Microbiology and Bio-computing, Faculty of Science and Engineering, *Université Laval*, Québec City, Québec, Canada, 2011.

## DOCTORAL THESIS

**Aubin É.** “Effet de préparations thérapeutiques d’immunoglobulines humaines sur la réponse immunitaire.” Doctoral thesis presented to the Faculty of Graduate Studies of *Université Laval* in partial fulfilment of the requirements for the degree of Doctor of Philosophy (Ph.D.) in the Biochemistry doctoral program. Department of Biochemistry, Microbiology and Bio-computing, Faculty of Science and Engineering, *Université Laval*, Québec City, Québec, Canada, 2011.

## PATENTS

**Dupuis N, Proulx C.** (2011) Method of Expanding Cord Blood Cells. European patent EP 1 743 024 issued September 28, 2011.

**Néron S, Roy A, Fecteau JF.** Method for polyclonal immunoglobulin G production by human B cells. Canadian patent No. 2 738 176, issued January 10, 2012. Héma-Québec, *Université Laval*, assignees.

## PARTICIPATION IN EXTERNAL COMMITTEES

**Yves Blais, Vice-President, Research and Development**

Member of the Technoparc Montréal advisory committee (2012)

**Hugo Fournier, Operations Manager, Human Tissues**

Member of the American Association of Tissue Banks (AATB) Finance committee (2011–2012)

**Simon Fournier, Vice-President, Information Technology**

Member of the American Technical Advisory Group (ATAG) of the International Council for Commonality in Blood Banking Automation (ICCBBA), the organization that manages the ISBT 128 standard for the codification of blood products, stem cells and tissues (2001– )

Member of the International Mak User Group (IMUG) Board of Directors (2011– )

**Smaranda Ghibu, Vice-President, Legal Affairs**

President of the International Society of Blood Transfusion (ISBT) Ethics committee (2010– )

Member of the ABO Working Group on risk-based decision making for blood safety (2012– )

**Donald Gironne, Senior Specialist, Production Software**

Technical expert of the American Technical Advisory Group (ATAG) of the International Council for Commonality in Blood Banking Automation (ICCBBA), the organization that manages the ISBT 128 standard for the codification of blood products, stem cells and tissues (2012–2014)

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

Member of the Foundation for America's Blood Centers Board of Directors (2009–2012)

**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 for the Safety of Blood and Labile Blood Products (2002– )

CSA: Member of the Technical Committee for the Safety of Cells, Tissues and Organs for Transplantation (2009– )

**Jacynthe Tremblay, Manager, Product Development (human tissues)**

Member of the American Association of Tissue Banks (AATB) Microbiological Surveillance Task Force (2008– )

Member of the American Association of Tissue Banks (AATB) Processing and Distribution Council (2011– )

Member of the North American Tissue Technical Advisory Group (NATTAG) of the International Council for Commonality in Blood Banking Automation (ICCBBA), for the development of ISBT 128 nomenclature for heart valve allografts (2011– )

**EXTERNAL TRAINING ACTIVITY**

**DEPARTMENT OF BIOCHEMISTRY,  
MICROBIOLOGY AND BIO-COMPUTING,  
UNIVERSITÉ LAVAL, QUÉBEC CITY, CANADA,  
APRIL 8 AND 12, 2011**

**Néron S.** BCM-1002: "Techniques immunochimiques. Two-hour course offered to students in the first year of the biochemistry and microbiology bachelor's program.

**OTHER ACTIVITIES**

**Blais, Y.** "Recherche et développement d'Héma-Québec". Presentation made to the advisory committee of Technoparc Montréal, Montréal, March 30, 2012.

**Blais, Y.** "Héma-Québec technologies". Presentation made as part of a *Mission Inde* meeting, Montréal, May 30, 2011.

**Boutin, D.** "Moniteur de stage: rôles, responsabilités et compétences", *Revue Le LabExpert*, vol. 1, no 3, September 2011 (pp. 6-15).

**Lapierre, J.** "Stable product supply strategic plan". Presentation made as part of a Blood Safety and Supply Committee meeting of the Canadian Hemophilia Society, Mississauga, June 11, 2011.

**St-Louis, M.** "Red blood cell genotyping". Web conference presented to employees of Canadian Blood Services (CBS) as well as hematology clinicians throughout Canada, February 7, 2012.



# ADMINISTRATION

## BOARD OF DIRECTORS

### STRUCTURE

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

The make-up of the Board of Directors was modified somewhat over the past year. Suzanne Turmel, who was acting as the hospital representative (*Association québécoise d'établissements de santé et de services sociaux* – AQESSS), left the Board. Her replacement has not yet been appointed.

Moreover, the Board decided to add a new observer, Christine Beaubien. She was appointed by the *Institut des administrateurs de sociétés* (IAS) as part of a pilot project under which the IAS designates board members as observers to boards which are already well established and have adopted healthy governance practices. The observer acquires pertinent experience and Héma-Québec benefits from her specific expertise. Ms. Beaubien is known for her knowledge in information technology, a field which is not represented among current Board members. This expertise is particularly useful in dealing with the challenges raised by the *Act respecting the governance and management of the information resources of public bodies and government enterprises*.

Moreover, the Board members evaluated the Board's functioning. This led to suggestions for improvements in matters of governance and better definitions of the role and responsibilities of the Board and its committees.

### THE BOARD'S MANDATE

The Board initiates and adopts the strategic plan, in addition to reviewing 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, a Compensation and Human Resources Committee and an Information Resources Committee.

## BOARD OF DIRECTORS AS AT MARCH 31, 2012

### BUSINESS COMMUNITY

*Chair*

**Jean-Pierre Allaire, FCPA, FCA**

Corporate Director

**André Légaré**

President

*André Légaré et Associés inc.*

### HÉMA-QUÉBEC

*Secretary*

**Dr. Jean De Serres**

President and Chief Executive Officer

Héma-Québec

### HOSPITALS

*Vice-Chair*

**René Carignan, CPA, CA**

Associate Executive Director – Finance,  
Administrative and Clinical Support  
McGill University Health Centre

### RECIPIENTS

**Martine Carré**

Director

Leucan

### TRANSFUSION MEDICINE

**Dr. Annie Lagacé**

Anesthesiologist

*Hôpital du Sacré-Cœur de Montréal*

**Dr. Martin A. Champagne**

Oncohematologist

*Centre hospitalier de Verdun*

(continued on page 85)

Moreover, it receives recommendations from three advisory committees:

- the Safety Advisory Committee;
- the Scientific and Medical Advisory Committee;
- the Recipient Representatives Advisory Committee.

This year, the Board reviewed the mandates of its advisory committees. This review was conducted in cooperation with each of the committees concerned and with the Governance Committee.

### Strategic planning

Following an organizational assessment conducted at the start of the year, the President and CEO presented the broad outlines of a new strategic plan last summer. The Board members adopted the new plan in January 2012. The resulting action plans will be presented at the start of the 2012–2013 year. While building on past experience in matters of safety, quality and sufficiency, the plan will focus on various changes intended to make the organization a model in quality, efficiency and innovation.

### 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

The risk management policy, which was implemented in 2003 and is reviewed regularly, is integrated into the management cycle and guides all the activities in accordance with the strategic plan. In the wake of the new strategic plan and committee mandate updates, the risk management policy was also reviewed. The new version will go into effect for 2012–2013. Risk management is now better integrated in the strategic objectives; the roles and responsibilities of the Board, its committees and management are defined in it and, finally, it lists the guiding principles of risk management.

With respect to its role of overseeing risk management, the Board is supported by the Audit Committee for financial and operating risks and by the Safety Advisory Committee for risks concerning product safety. It receives reports from these two committees periodically. As of next year,

## BOARD OF DIRECTORS AS AT MARCH 31, 2012 (CONT'D)

### DONORS

#### Hélène Darby

Member, Eastern Townships chapter  
Association of Blood Donation  
Volunteers

### PUBLIC HEALTH

#### Dr. Marc Dionne

Scientific Director  
*Institut national de santé  
publique du Québec*

### ACADEMIC

#### Dr. Serge Montplaisir

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  
*Association de l'anémie falciforme du  
Québec* (the Québec association for  
sickle cell disease)

the Compensation and Human Resources Committee will also monitor the risks associated with its field of expertise.

## 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 of Directors. 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 95).

## BOARD COMMITTEES

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

### EXECUTIVE COMMITTEE

If necessary, the Committee meets between regular Board meetings to make decisions for which it is responsible. The Committee met twice this year and its decisions were approved by the Board.

### 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, every two years, it submits an evaluation of how the Board operates. The most recent evaluation confirmed that the directors are still satisfied with the manner in which the Board operates. Along these lines, the Committee suggested implementing evaluations for all board committees.

This year, the Committee dedicated a great deal of effort to defining skill profiles for the directors. The exercise was intended to prepare for the replacement of those who will leave the board in 2012–2013 and to ensure that all of the skills required to guide management with respect to the strategic directions of the new plan are available. With this in mind, the Board added a new observer with a background in information technology and created an

### EXECUTIVE COMMITTEE AS AT MARCH 31, 2012

#### MEMBERS

**Jean-Pierre Allaire FCPA, FCA**

Chair of the Board of Directors

**René Carignan, CPA, CA**

Vice-Chair of the Board of Directors

**Dr. Jean De Serres**

Secretary of the Board of Directors

**Dr. Marc Dionne**

Director

**Hélène Darby**

Director

### GOVERNANCE COMMITTEE AS AT MARCH 31, 2012

#### MEMBERS

*Chair*

**Hélène Darby**

**Martine Carré**

**André Légaré**

### AUDIT COMMITTEE AS AT MARCH 31, 2012

#### MEMBERS

*Chair*

**René Carignan, CPA, CA**

**Dr. Serge Montplaisir**

**André Légaré**

### COMPENSATION AND HUMAN RESOURCES COMMITTEE AS AT MARCH 31, 2012

#### MEMBERS

*Chair*

**Martine Carré**

**Jean-Pierre Allaire, FCPA, FCA**

**André Légaré**

**Dr. Serge Montplaisir**

Information Resources Committee. Finally, a succession plan for the Board chair was also implemented so as to ensure a harmonious transition when the current chair retires.

## AUDIT COMMITTEE

The Audit Committee oversees the organization's financial management, internal controls and risk management. Each year, it examines the budget and product pricing and recommends approval to the Board of Directors. It also supervises the external and internal audits 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 monitors and follows up on major projects in progress, namely the computerized quality management system (SIGQ) and the medical affairs laboratories information system (SILAM) project. In the case of the latter project, the second deployment phase was completed on time and with a budget surplus.

Moreover, with a view to continuously improving efficiency, the Committee also examined the production costs for various products. This examination will continue next year. The Committee also recommended that the Board establish a borrowing plan with the *ministère des Finances* for 2012–2013. Moreover, it reviewed various individual files, including the supply strategy for stable products and the strategy for implementing methods to reduce pathogens. The insurance coverage was reviewed. Lastly, at the end of the year, the Committee reviewed the new risk management policy.

## COMPENSATION AND HUMAN RESOURCES COMMITTEE

The Committee examines directions and strategies pertaining to human resources. 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 the vice-presidents, as well as their performance and compensation.

The Committee also monitors individual human resources files, including the collective agreement negotiations that ended during the year and the implementation and maintenance of pay equity.

## RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE AS AT MARCH 31, 2012

*Chair*

**Michel Morin**

COCQ-Sida

**Martine Allard**

**Jacques Dagnault**

Canadian Immunodeficiencies  
Patient Organization,  
Québec branch

**Marius Foltea**

**Pascal Mireault**

Canadian Hemophilia Society,  
Québec branch

**Gaston Martin**

Canadian Transplant Association

**Wilson Sanon**

**Marika Mouscardy**

*Association d'anémie  
falciforme du Québec*  
(the Québec association for  
sickle cell disease)

**Claudette Pitre-Robin**

Leucan

**Hélène Darby**

**Martine Carré**

Board observers

As is the case every year, the Committee examined the employees' pension fund performance, the fund portfolio managers' performance and the actuarial assessments. Moreover, this year, certain changes were made with respect to the pension plans to increase the employees' contributions and provide for progressive retirement in certain cases.

Lastly, the Committee reviewed its mandate in order to specify the roles and responsibilities of the President and CEO, the Committee and the Board. Moreover, a performance and risk management benchmark component was included. The Committee also made a commitment to review human resources policies.

## 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 Safety Advisory Committee's recommendations before they are brought before the Board.

During the past year, the Committee examined its role and suggested modifications to its mandate. It also discussed its structure and the recruitment of new members.

It supported the recommendation of the Safety Advisory Committee to change the dates for West Nile Virus (WNV) screening tests and to continue to monitor the dengue fever epidemic in Puerto Rico.

It also monitored several files. These included the possibility of modifying the questionnaire for donors who have travelled to certain African countries. Given the fact that screening tests have been used for several years to detect HIV-O, the questions about trips to African countries where this virus is present are unnecessary. Another file monitored by this committee concerns the search for a malaria screening test for blood donors that could be approved by Health Canada and would serve to reduce the number of donors who are excluded, despite the fact

## SAFETY ADVISORY COMMITTEE AS AT MARCH 31, 2012

### PUBLIC HEALTH

*Chair*

**Dr. Bryce Larke**

Virologist

Virology, ProvLab,  
Edmonton, 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 Centre  
Amsterdam, Netherlands

(continued on page 89)



that they are in good health, because they have travelled to risk zones.

### 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 risk. This committee monitors all existing and emerging pathogens.

This year, the Committee monitored numerous files with a view to maintaining or improving product safety and quality. Thus, it monitored Chagas disease, malaria, HIV-O and dengue fever files. Moreover, it recommended changes to the protocol for West Nile Virus (WNV) screening tests to the Board, who approved the modifications. In terms of donor safety, the Committee is closely monitoring scientific developments on the impact of giving blood on iron reserves.

### Scientific and Medical Advisory Committee

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

The Committee reviewed and formulated recommendations concerning the research and development strategic plan. It continues to monitor research projects as needed. Members discussed their roles and responsibilities and made several comments concerning their mandate. As indicated previously, this mandate was formally modified by the Board of Directors.

### Research Ethics Committee

The mandate of the Research Ethics Committee (REC) is to assess the compliance of research projects with ethical regulations, monitor them from an ethics standpoint and ensure the protection of the rights, safety and well-being of all participants in research projects.

This year, the Committee approved four new projects and renewed 16 others. No particular incident was brought to its attention. Lastly, the members highlighted the quality of the documentation submitted to them, specifically the consent forms, which respect legal and ethical rules in the field.

## SAFETY ADVISORY COMMITTEE AS AT MARCH 31, 2012 (CONT'D)

### 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

### BOARD OBSERVERS

#### Dr. Marc Dionne

Scientific Director  
*Institut national de santé publique*  
Québec City, Canada

#### Dr. Patricia Pelletier

Assistant Professor  
Department of Medicine  
McGill University  
Montréal, Canada

## SCIENTIFIC AND MEDICAL ADVISORY COMMITTEE AS AT MARCH 31, 2012

### IMMUNOLOGY

#### Chair

#### **Yves St-Pierre**

Professor  
INRS - *Institut Armand-Frappier*  
Laval, Canada

#### **Srinivas V. Kaveri**

Director  
*Centre de Recherche des Cordeliers*  
Team 16 - INSERM - U 872  
Paris, France

### DIAGNOSTIC TECHNOLOGY

#### **Michel Houde**

Senior Consultant, certification of  
medical instruments and business  
support  
BCF Certification inc.  
Montréal, Canada

### TRANSFUSION MEDICINE

#### **Dr. Jean-François Hardy**

Chairholder  
ABDV-Héma-Québec – Bayer  
chair in Transfusion Medicine,  
*Université de Montréal*

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

## SCIENTIFIC AND MEDICAL ADVISORY COMMITTEE AS AT MARCH 31, 2012 (CONT'D)

### BIOTECHNOLOGY

#### **Bernard Massie**

Director  
Bioprocess Centre, National Research  
Council of Canada (Biotechnology  
Research Institute)  
Montréal, Canada

### INDUSTRIAL RESEARCH

#### **Denis Riendeau**

Scientific Consultant and Adjunct  
Professor,  
Department of Biochemistry  
*Université de Montréal*  
Montréal, Canada

### HEMATOPOIESIS

#### **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 Researcher, 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

(continued on page 91)

## SCIENTIFIC AND MEDICAL ADVISORY COMMITTEE AS AT MARCH 31, 2012 (CONT'D)

HÉMA-QUÉBEC BOARD  
OBSERVER

### **Dr. Serge Montplaisir**

Professor  
Department of Microbiology and  
Immunology  
*Université de Montréal*  
Montréal, Canada

## RESEARCH ETHICS COMMITTEE AS AT MARCH 31, 2012

LAW

*Chair*

### **Suzanne Courchesne**

Attorney  
Borden Ladner Gervais  
Montréal, Canada

LAW, SUBSTITUTE LEGAL  
EXPERT

### **Mélanie Champagne**

Attorney  
Borden Ladner Gervais  
Montréal, Canada

RESEARCH SPECIALISTS

### **Clermont Dionne**

Population Health Research Unit  
*Centre de recherche*  
*du CHA de Québec*

### **Michel Vincent**

*Centre de recherche sur la fonction,*  
*la structure et l'ingénierie des protéines*  
*Université Laval*

### **Jacques J. Tremblay**

*Centre de recherche du CHUQ*  
(CHUL), Ontogeny and reproduction  
Québec, Canada

BLOOD DONORS

### **Pierre McDuff**

Association of Blood Donation  
Volunteers  
Montréal, Canada

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 five laws that include accountability obligations for the annual report:

- the *Sustainable Development Act* (for more information see *Sustainable Development – a daily objective* on page 49);
- 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 and the protection of personal information* (see hereafter);
- 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 page 93);
- the *Politique gouvernementale relative à l'emploi et à la qualité de la langue française dans l'administration* (policy on the use and quality of French within the government) (see page 93).

### ***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*, Héma-Québec's directors adopted a governance structure and director code of ethics in 1999. It was reviewed in depth in 2006. Since then, it is reviewed annually by the Gover-

nance Committee and the directors sign a form every year certifying that they are committed to respecting it. Finally, an audit of the directors' declarations of interests is undertaken at the beginning of each Board meeting and it is included in the minutes.

Moreover, 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 95.

### ***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

Three requests for access to information were received between April 1, 2011, and March 31, 2012. One involved human resources, another concerned the contracts awarded by Héma-Québec and a third involved research and development files. The requests were handled within the required time periods: two within 20 days and the other within 30 days. One request was accepted in its entirety, another was partially accepted (refusal pursuant to sections 22 and 59 of the *Act respecting access to documents held by public bodies and the protection of personal information* since it concerned information belonging to a third party and information containing industrial secrets) and one was refused (pursuant to section 27 of the *Act respecting access to documents held by public bodies and the protection of personal information* since it concerned information which, had it been disclosed, would have revealed a contract negotiation strategy).

## INFORMATION SECURITY COMMITTEE

Created in 2008, the Information Security Committee oversees the measures implemented to protect 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 its activities, the Information Security Committee conducted an awareness raising campaign on the protection of personal information for employees of Héma-Québec at the end of March 2012 to remind them of good practices in the matter. Posters on the theme “Information security: a shared responsibility” were posted and distributed to the employees via the intranet. Moreover, a presentation was made to managers on the importance of reporting security incidents, all in keeping with the organization’s policies.

### ***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 0.75% for its executive, professional, technical and administrative support staff for 2011–2012.

### ***Policy on the use and quality of French within the government***

Héma-Québec designated a representative for the *Office de la langue française* and established a permanent committee as stipulated in the policy. In 2012, the Committee will draft and distribute a linguistic policy in keeping with the government policy.



# MANAGEMENT COMMITTEE



## EXECUTIVE MANAGEMENT COMMITTEE MEMBERS (FROM LEFT TO RIGHT)

**Marco Décelles, CPA, CMA**

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

**Marc Germain, MD, PhD**

*Vice-President, Medical Affairs*

**Simon Fournier, DEC**

*Vice-President, Information Technology*

**Manon Pepin, BA**

*Vice-President, Public Affairs and Marketing*

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

*President and Chief Executive Officer*

**Suzanne Rémy, MSc, MBA**

*Vice-President, Quality and Standards*

**Roger Carpentier, CRIA**

*Vice-President, Human Resources*

**Smaranda Ghibu, BCL, LLB**

*Vice-President, Legal Affairs*

**Yvan Charbonneau, Eng.**

*Vice-President and Chief Operating Officer*

**Yves Blais, PhD, MBA**

*Vice-President, Research and Development*

**Guy Lafrenière, CPA, CMA, MBA**

*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 Honorable 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 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; 2011–2012 was no exception.



# FINANCIAL STATEMENTS

**FOR THE YEAR ENDED MARCH 31, 2012**

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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 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 generally accepted auditing standards. His report states the nature and scope of the audit and expresses his opinion.



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**Guy Lafrenière**, CPA, CMA, MBA  
Vice-President, Administration and Finance



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**Jean De Serres**, MD, MSc, MBA  
President and Chief Executive Officer

Montréal, June 13, 2012

## INDEPENDENT AUDITOR'S REPORT

To the National Assembly

### Report on the financial statements

I have audited the accompanying financial statements of Héma-Québec, which comprise the statement of financial position as at March 31, 2012, the statements of operations and accumulated surplus, changes in net debt and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information in the notes thereto.

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

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian Public Sector Accounting Standards, 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 my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I 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 I 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, 2012 and the results of its operations, changes in net debt and its cash flows for the year then ended in accordance with Canadian 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.



**Michel Samson**, CPA auditor, CA  
Acting Auditor General of Québec

Montréal, June 13, 2012



# FINANCIAL STATEMENTS

## STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS FOR THE YEAR ENDED MARCH 31, 2012 (in thousands of dollars)

	2012	2011
<b>REVENUES</b>		
Blood products	\$302,312	\$298,520
Grants from the Government of Québec	34,077	32,235
Human tissue	2,467	2,517
Interest on bank deposits	322	200
Other	2,780	2,781
	<b>341,958</b>	<b>336,253</b>
<b>EXPENSES [note 3]</b>	338,949	333,296
<b>ANNUAL SURPLUS (before undernoted)</b>	<b>3,009</b>	<b>2,957</b>
Credits issued to Québec hospital centres pertaining to previous year [note 4]	(2,957)	(2,903)
<b>ANNUAL SURPLUS</b>	<b>\$52</b>	<b>\$54</b>
ACCUMULATED SURPLUS, BEGINNING OF YEAR	\$3,872	\$3,818
<b>ACCUMULATED SURPLUS, END OF YEAR</b>	<b>\$3,924</b>	<b>\$3,872</b>

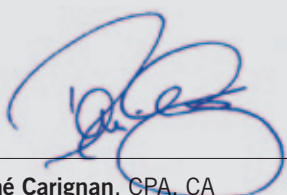
The accompanying notes are an integral part of the financial statements.

**STATEMENT OF FINANCIAL POSITION**  
**AS AT MARCH 31, 2012**  
(in thousands of dollars)

	2012	2011
<b>FINANCIAL ASSETS</b>		
Cash and cash equivalents	\$17,807	\$13,587
Accounts receivable [note 5]	2,551	2,939
Inventories held for sale [note 6]	33,813	33,631
	<b>54,171</b>	<b>50,157</b>
<b>LIABILITIES</b>		
Accounts payable and accrued liabilities [note 7]	28,125	27,122
Deferred grants from the Government of Québec	7,709	8,429
Non-interest bearing advance from the Government of Québec	7,937	4,294
Debt [notes 8 and 9]	38,509	40,463
Accrued benefit liability [note 10]	7,839	7,920
	<b>90,119</b>	<b>88,228</b>
<b>NET DEBT</b>	<b>\$(35,948)</b>	<b>\$(38,071)</b>
<b>NON-FINANCIAL ASSETS</b>		
Tangible capital assets [note 11]	37,290	39,255
Prepaid expenses [note 12]	1,246	1,292
Deferred charges [note 13]	1,336	1,396
	<b>39,872</b>	<b>41,943</b>
<b>ACCUMULATED SURPLUS</b>	<b>\$3,924</b>	<b>\$3,872</b>
<b>Contractual commitments and contingencies [notes 15 and 16]</b>		

ON BEHALF OF THE BOARD OF DIRECTORS,

  
**Jean-Pierre Allaire**, FCPA, FCA  
Chair of the Board of Directors

  
**René Carignan**, CPA, CA  
Chair of the Audit Committee

## STATEMENT OF CHANGES IN NET DEBT FOR THE YEAR ENDED MARCH 31, 2012 (in thousands of dollars)

	2012	2011
<b>ANNUAL SURPLUS</b>	<b>\$52</b>	<b>\$54</b>
Acquisition of tangible capital assets	(3,592)	(7,651)
Amortization of tangible capital assets	5,165	4,838
Discontinuation of capital asset project in progress	367	–
Loss on disposal and sale of tangible capital assets	21	227
Proceeds on sale of tangible capital assets	4	2
	<b>1,965</b>	<b>(2,584 )</b>
Acquisition of prepaid expenses	(3,086)	(4,168)
Use of prepaid expenses	3,132	5,350
Amortization of deferred charges	60	59
	<b>106</b>	<b>1,241</b>
Decrease (increase) in net debt	2,123	(1,289)
<b>NET DEBT, BEGINNING OF YEAR</b>	<b>(38,071)</b>	<b>(36,782)</b>
<b>NET DEBT, END OF YEAR</b>	<b>\$(35,948)</b>	<b>\$(38,071)</b>

## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2012 (in thousands of dollars)

	2012	2011
<b>OPERATING ACTIVITIES</b>		
Annual surplus	\$52	\$54
Items not affecting cash and cash equivalents		
Amortization of tangible capital assets	5,165	4,838
Discontinuation of capital asset project in progress	367	–
Amortization of deferred charges	60	59
Loss on disposal and sale of tangible capital assets	21	227
Unrealized exchange loss (gain)	91	(710)
(Decrease) increase in accrued benefit liability	(81)	459
	<b>5,675</b>	<b>4,927</b>
Change in assets and liabilities related to operations		
Decrease (increase) in accounts receivable	388	(440)
(Increase) decrease in inventories held for sale	(182)	2,709
Decrease in prepaid expenses	46	1,182
Increase (decrease) in accounts payable and accrued liabilities	1,239	(5,566)
(Decrease) increase in deferred grants from the Government of Québec	(720)	10,951
Increase (decrease) in advance from the Government of Québec	3,643	(819)
<b>Cash flows from (used in) operating activities</b>	<b>10,089</b>	<b>12,944</b>
<b>INVESTING ACTIVITIES RELATED TO TANGIBLE CAPITAL ASSETS</b>		
Acquisition of tangible capital assets	(3,828)	(7,613)
Proceeds on disposal of tangible capital assets	4	2
<b>Cash flows (from) used in investing activities related to tangible capital assets</b>	<b>(3,824)</b>	<b>(7,611)</b>
<b>FINANCING ACTIVITIES</b>		
Increase in debt	2,725	10,200
Repayment of short-term borrowing	–	(3,000)
Debt repayment	(4,679)	(4,110)
<b>Cash flows from (used in) financing activities</b>	<b>(1,954)</b>	<b>3,090</b>
<b>Unrealized exchange (loss) gain on cash and non-cash working capital items denominated in foreign currency</b>	<b>(91)</b>	<b>710</b>
<b>INCREASE IN CASH AND CASH EQUIVALENTS</b>	<b>4,220</b>	<b>9,133</b>
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR</b>	<b>13,587</b>	<b>4,454</b>
<b>CASH AND CASH EQUIVALENTS, END OF YEAR</b>	<b>\$17,807</b>	<b>\$13,587</b>
<b>ADDITIONAL INFORMATION</b>		
Interest paid	\$1,384	\$1,409
Acquisitions of tangible capital assets funded by accounts payable and accrued liabilities	\$341	\$577

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

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**Notes to financial statements**  
**For the year ended March 31, 2012**  
**(in thousands of dollars)**

## **1. INCORPORATION AND NATURE OF OPERATIONS**

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. Under its incorporating statute, Héma-Québec is not subject to income taxes.

## **2. SIGNIFICANT ACCOUNTING POLICIES**

In preparing its financial statements, Héma-Québec primarily uses the Public Sector Accounting section of the Canadian Institute of Chartered Accounts (CICA) *Handbook* and has applied the basis of presentation recommended by the *CICA Handbook* for the first time. The use of any other primary source of generally accepted accounting principles must be consistent with the *CICA 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. The main estimates consist of the useful life of tangible capital assets, allowance for pay equity and accrued benefit liability. Actual results could differ from management's best estimates.

### **REVENUES**

Revenues are accounted for on an accrual basis. Revenues resulting from products are recognized once all the risks and rewards of ownership have been transferred to clients, while revenues from services are recognized as the services are rendered.

Revenues derived from Government of Québec grants relating to human tissue, stem cells, cord blood, the reference laboratory and the eye bank as well as the Synagis product are recognized in the same year as the transactions giving rise to those grants.

### **FINANCIAL ASSETS**

#### **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.



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**Notes to financial statements**  
**For the year ended March 31, 2012**  
**(in thousands of dollars)**

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

### **Inventories held for sale**

Inventories held for sale, consisting of inventories of blood, labile and stable products, and human tissue, are measured at the lower of cost and net realizable value, with cost determined using the average cost method. Net realizable value is the estimated selling price less the related variable selling expenses.

## **LIABILITIES**

### **Debt**

Debt is recognized on issuance at the principal amount outstanding at maturity. Issuance costs related to borrowings are recognized on issuance of those borrowings in 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 provides its employees with certain post-employment benefits accounted for under "other plans," while providing certain retirees with health and life insurance benefits.

The cost of retirement benefits is measured using net current period benefit cost, net prior period service cost arising from an amendment, amortization of actuarial gains and losses, and accrued benefit obligation interest expense, 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 value of plan assets, net of unamortized actuarial gains and losses.

Accrued benefit obligations and current period benefit cost are actuarially determined using the projected benefit method prorated on services and management's best estimates as to the expected rate of return on plan investments, inflation rate, discount rate, rate of compensation increase, employee retirement ages and assumed health care cost trends.

The market-related value approach is used to calculate the value of assets and expected return on assets smoothed over a five-year period.

Plan amendments give rise to a past service cost, which is recognized as an expense in the year of the amendments.

Actuarial gains or losses arise from, in particular, the difference between the actual return on plan assets and the expected 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 of participating employees.

## Notes to financial statements

### For the year ended March 31, 2012

(in thousands of dollars)

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

### NON-FINANCIAL ASSETS

#### Tangible capital assets

Tangible capital assets are recorded at cost and amortized on a straight-line basis over their useful lives, except for uncovered land, using the following rates:

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

Assets under construction or development are not amortized until put into service.

Works of art are not accounted for as tangible capital assets: their cost is expensed in the year of acquisition.

When conditions indicate that a tangible capital asset no longer contributes to Héma-Québec's ability to provide goods and services, or that the value of future economic benefits associated with the tangible capital asset is less than its net book value, the cost of the tangible capital asset is to be reduced to reflect the decline in the asset's value. Write-downs are accounted for as expenses for the year in the statement of operations and are not subsequently reversed.

#### 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 historical average monthly exchange rate. Exchange gains and losses on translation of monetary assets and liabilities are included in the calculation of the surplus for the year.

## Notes to financial statements For the year ended March 31, 2012 (in thousands of dollars)

### 3. EXPENSES BY ACTIVITY CENTRE

				2012	2011
	LABILE PRODUCTS	STABLE PRODUCTS	OTHER SERVICES	TOTAL	TOTAL
Stable products	\$–	\$173,406	\$–	\$173,406	\$167,428
Salaries and employee benefits	75,486	486	9,206	85,178	83,290
Medical and blood drive supplies	28,982	545	5,839	35,366	33,378
Building and premises	8,645	8	115	8,768	9,006
Purchased services	163	1,619	4,082	5,864	5,329
Amortization of tangible capital assets	4,861	8	296	5,165	4,838
Exchange loss	292	4,722	–	5,014	5,398
Freight and shipping	4,200	63	203	4,466	4,076
Advertising and public relations	4,061	19	168	4,248	3,904
Interest on long-term debt	1,383	–	–	1,383	1,436
Insurance	1,014	–	–	1,014	2,908
Other interest and bank charges	237	–	–	237	326
Loss on disposal and sale of tangible capital assets	10	–	11	21	227
Other expenses	8,318	29	1,119	9,466	8,788
<b>Subtotal</b>	<b>\$137,652</b>	<b>\$180,905</b>	<b>\$21,039</b>	<b>\$339,596</b>	<b>\$330,332</b>
Plasma for fractionation*	(10,460)	10,460			
Change in inventories**	(435)	(389)	177	(647)	2,964
<b>Total</b>	<b>\$126,757</b>	<b>\$190,976</b>	<b>\$21,216</b>	<b>\$338,949</b>	<b>\$333,296</b>

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

\*\* Change in inventories includes labile and stable products, human tissue, and plasma for fractionation.

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

The budgeted prices for all blood products are submitted every year to SigmaSanté, which is the body designated by the Minister of Health and Social Services to manage joint supplies under Section VI of the *Act respecting Héma-Québec and the Haemovigilance Committee*. Following consultations with the Procurement and Financing Management Committee (PFMC), the budgeted prices are approved by SigmaSanté. The PFMC is an advisory committee to the Québec government's Direction de la biovigilance, which falls under the purview of the Direction générale des services de santé et médecine universitaire. The PFMC's role is to make recommendations on financial and accounting issues relating to the supply of blood products.

## Notes to financial statements

### For the year ended March 31, 2012

(in thousands of dollars)

#### 4. CREDITS ISSUED TO QUÉBEC HOSPITAL CENTRES PERTAINING TO THE PREVIOUS YEAR [CONT'D]

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

#### 5. ACCOUNTS RECEIVABLE

	2012	2011
Sales taxes	\$1,621	\$2,016
Trade accounts receivable	677	528
Other receivables	253	395
	<b>\$2,551</b>	<b>\$2,939</b>

#### 6. INVENTORIES HELD FOR SALE

	2012	2011
Stable products	\$23,527	\$21,903
Plasma for fractionation	4,042	5,291
Labile products	3,499	3,065
Blood drive equipment	1,758	2,039
Laboratory equipment	558	726
Human tissue	429	607
	<b>\$33,813</b>	<b>\$33,631</b>

#### 7. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	2012	2011
Trade accounts payable	\$19,229	\$18,500
Salaries and benefits	7,946	8,063
Deferred contributions	950	559
	<b>\$28,125</b>	<b>\$27,122</b>

## Notes to financial statements

### For the year ended March 31, 2012

(in thousands of dollars)

## 8. CREDIT FACILITIES

Héma-Québec was authorized by the Minister of Health and Social Services 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 credit facilities from financial institutions or the Québec Minister of Finance, as manager of the Financing Fund, and over the long term from the said Minister. The authorized amount for the three-year regime ended March 31, 2012 was \$77,000 (borrowed balance as at March 31, 2012, \$34,197), while a new regime with an authorized amount of \$33,000 was instituted for the fiscal year ending March 31, 2013. The borrowings provided for under these plans serve primarily to fund bank overdrafts, asset acquisition and renewal, loan renewals and the implementation of product safety improvement projects. Héma-Québec's borrowing terms comprise rates similar or equivalent to Government of Québec rates.

Héma-Québec also has a \$15,000 revolving line of credit with a financial institution under terms that may be changed at the bank's option. This line of credit is repayable at any time and was undrawn as at March 31, 2012 and 2011.

## 9. DEBT

	2012	2011
Loan, secured by the land and building, with a net carrying amount of \$3,703, repayable in monthly instalments of \$24 (principal only), at a fixed rate of 4.12%, matured in 2012.	\$–	\$3,593
Loans repayable in monthly instalments of \$172 (principal only), at fixed rates ranging from 1.55% to 4.57%, maturing from 2015 to 2017.	7,735	7,061
Loans repayable in monthly instalments of \$188 (principal only), at fixed rates ranging from 2.62% to 5.17%, renewable from 2013 to 2020 and maturing from 2020 to 2030.	30,774	29,809
	<b>\$38,509</b>	<b>\$40,463</b>

Assuming renewal under the same terms, principal repayments on debt over the upcoming years are as follows:

2013	\$4,324
2014	4,324
2015	4,324
2016	3,195
2017	2,608
2018 and thereafter	\$19,734

## Notes to financial statements

### For the year ended March 31, 2012

(in thousands of dollars)

## 10. DESCRIPTION OF EMPLOYEE BENEFIT PLANS

Héma-Québec has several funded and unfunded defined benefit plans to ensure that pension, other retirement and post-employment benefits are paid to most employees.

The actuarial valuations of the retirement plans were as at December 31, 2010. The accrued benefit obligations shown as at March 31, 2012 and retirement benefit expense for fiscal 2012 are based on an extrapolation of that latest actuarial valuation. The actuarial valuations resulted in certain changes to actuarial assumptions, as well as plan amendments to increase employee contribution rates. The defined benefit plans are based on years of service and final average salary. They also provide for partial indexation of pension benefits based on inflation.

The actuarial valuations of the other retirement benefit and post-employment plans were as at December 31, 2009, and the accrued benefit obligations and retirement benefit expense for fiscal 2012 are based on an extrapolation of that latest valuation.

Héma-Québec also has defined contribution plans under which the commitment is limited to the total value of the individual accounts of plan participants.

Actuarial gains and losses are amortized over the expected average remaining service life for active participating employees, which is 10 years for the unionized employee pension plan, 12 years for the non-unionized employee pension plan, 7 years for the supplemental pension plan, 14 years for extended health and life insurance plans, and 2 years for post employment benefits.

### ACCRUED BENEFIT OBLIGATION

	2012		2011	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Accrued benefit obligation, beginning of year	\$115,837	\$5,695	\$104,116	\$5,564
Current period benefit cost	8,880	2,504	8,363	2,291
Interest expense on obligation	7,100	175	6,372	176
Benefits paid	(3,243)	(2,249)	(3,069)	(2,367)
Cost of plan amendments incurred during the year	419	–	–	–
Actuarial loss	10,684	646	55	31
<b>Accrued benefit obligation, end of year</b>	<b>\$139,677</b>	<b>\$6,771</b>	<b>\$115,837</b>	<b>\$5,695</b>



**Notes to financial statements**  
**For the year ended March 31, 2012**  
**(in thousands of dollars)**

**10. DESCRIPTION OF EMPLOYEE BENEFIT PLANS [CONT'D]**

**ACCRUED BENEFIT ASSETS**

	<b>2012</b>		<b>2011</b>	
	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>
Market-related value of assets, beginning of year	\$108,366		\$96,864	
Employer contributions	7,029		5,234	
Employee contributions	3,672		3,637	
Expected return on plan assets	6,725		5,986	
Benefits paid	(3,243)		(3,069)	
Loss on assets	(1,574)		(286)	
<b>Market-related value of assets, end of year</b>	<b>\$120,975</b>		<b>\$108,366</b>	

**RECONCILIATION OF FINANCIAL POSITION**

	<b>2012</b>		<b>2011</b>	
	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>
Market-related value of assets	\$120,975	\$-	\$108,366	\$-
Accrued benefit obligation	139,677	6,771	115,837	5,695
<b>Financial position – deficit</b>	<b>(18,702)</b>	<b>(6,771)</b>	<b>(7,471)</b>	<b>(5,695)</b>
Net unamortized actuarial losses	16,760	874	5,018	228
<b>Accrued benefit liability, end of year</b>	<b>\$(1,942)</b>	<b>\$(5,897)</b>	<b>\$(2,453)</b>	<b>\$(5,467)</b>

**CLASSIFICATION OF LIABILITIES RECORDED IN HÉMA-QUÉBEC'S FINANCIAL STATEMENTS**

	<b>2012</b>	<b>2011</b>
Pension plans	\$1,942	\$2,453
Other plans	5,897	5,467
<b>Total accrued benefit liability</b>	<b>\$7,839</b>	<b>\$7,920</b>

Accrued benefit obligations exceed plan assets for all Héma-Québec plans.

**MARKET VALUE OF ASSETS AS AT MARCH 31 (DEFINED BENEFIT PLANS)**

	<b>2012</b>		<b>2011</b>	
Shares	\$71,105	61%	\$65,844	60%
Bonds	39,715	34%	39,229	36%
Other	6,535	5%	4,710	4%
<b>Total</b>	<b>\$117,355</b>	<b>100%</b>	<b>\$109,783</b>	<b>100%</b>

**Notes to financial statements**  
**For the year ended March 31, 2012**  
**(in thousands of dollars)**

**10. DESCRIPTION OF EMPLOYEE BENEFIT PLANS [CONT'D]**

**ACTUAL RETURN ON PENSION PLAN ASSETS**

	<b>2012</b>	<b>2011</b>
Expected return on plan assets	\$6,725	\$5,986
Actual return on plan assets	5,151	5,700
<b>Loss on plan assets</b>	<b>\$(1,574)</b>	<b>\$(286)</b>
Rate of actual return	4.60%	5.71%

**RETIREMENT BENEFIT EXPENSE**

	<b>2012</b>		<b>2011</b>	
	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>
Current period net benefit cost	\$5,208	\$2,504	\$4,726	\$2,291
Amortization of actuarial losses	516	–	481	–
Cost of plan amendments incurred during the year	419	–	–	–
<b>Benefit expense</b>	<b>6,143</b>	<b>2,504</b>	<b>5,207</b>	<b>2,291</b>
Interest expense on obligation	7,100	175	6,372	176
Expected return on plan assets	(6,725)	–	(5,986)	–
<b>Retirement benefit interest expense</b>	<b>375</b>	<b>175</b>	<b>386</b>	<b>176</b>
<b>Benefit expense</b>	<b>\$6,518</b>	<b>\$2,679</b>	<b>\$5,593</b>	<b>\$2,467</b>

**SIGNIFICANT ASSUMPTIONS**

	<b>2012</b>		<b>2011</b>	
	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>	<b>PENSION PLANS</b>	<b>OTHER PLANS</b>
<b>Accrued benefit obligation as at March 31</b>				
Discount rate	5.50%	3.10%	6.00%	4.20%
Rate of compensation increase	3.75%	3.75%	3.50%	3.50%
Inflation rate	2.50%	–	2.50%	–
<b>Benefit expense for the years ended March 31</b>				
Discount rate	6.00%	4.20%	6.00%	4.40%
Expected rate of return on plan assets	6.00%	–	6.00%	–
Rate of compensation increase	3.50%	3.50%	3.50%	3.50%

The assumptions regarding demographic mortality factors are based on the sex-distinct UP-94 generational table projected with Scale AA for the fiscal year ended March 31, 2012 (sex-distinct UP-94 Table projected with Scale AA to 2015 for the fiscal year ended March 31, 2011).

**Notes to financial statements**  
**For the year ended March 31, 2012**  
**(in thousands of dollars)**

**11. TANGIBLE CAPITAL ASSETS**

2012							
	LAND	BUILDING, BETTERMENT AND LEASEHOLD IMPROVEMENTS	MACHINERY, AUTOMOTIVE AND OTHER EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER EQUIPMENT	SOFTWARE TOOLS AND PACKAGES	TOTAL
<b>Cost of tangible capital assets</b>							
Opening balance	\$2,140	\$38,021	\$19,336	\$4,261	\$6,725	\$9,165	\$79,648
Acquisitions	–	476	1,365	89	711	951	3,592
Disposals	–	–	(367)	(68)	(1,232)	–	(1,667)
Abandonments	–	–	–	–	–	(367)	(367)
<b>Closing balance</b>	<b>\$2,140</b>	<b>38,497</b>	<b>\$20,334</b>	<b>\$4,282</b>	<b>\$6,204</b>	<b>\$9,749</b>	<b>\$81,206</b>
<b>Accumulated amortization</b>							
Opening balance	\$–	\$13,260	\$10,898	\$3,494	\$5,532	\$7,209	\$40,393
Amortization expense	–	2,052	1,675	255	718	465	5,165
Impact of disposals	–	–	(342)	(68)	(1,232)	–	(1,642)
<b>Closing balance</b>	<b>\$–</b>	<b>\$15,312</b>	<b>\$12,231</b>	<b>\$3,681</b>	<b>\$5,018</b>	<b>\$7,674</b>	<b>\$43,916</b>
<b>Net book value</b>	<b>\$2,140</b>	<b>\$23,185</b>	<b>\$8,103</b>	<b>\$601</b>	<b>\$1,186</b>	<b>\$2,075</b>	<b>\$37,290</b>

2011							
	LAND	BUILDING, BETTERMENT AND LEASEHOLD IMPROVEMENTS	MACHINERY, AUTOMOTIVE AND OTHER EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER EQUIPMENT	SOFTWARE TOOLS AND PACKAGES	TOTAL
<b>Cost of tangible capital assets</b>							
Opening balance	\$2,140	\$36,001	\$17,778	\$3,813	\$7,192	\$8,207	\$75,131
Acquisitions	–	3,232	2,188	465	795	971	7,651
Disposals	–	(1,212)	(630)	(17)	(1,262)	(13)	(3,134)
<b>Closing balance</b>	<b>\$2,140</b>	<b>\$38,021</b>	<b>\$19,336</b>	<b>\$4,261</b>	<b>\$6,725</b>	<b>\$9,165</b>	<b>\$79,648</b>
<b>Accumulated amortization</b>							
Opening balance	\$–	\$12,470	\$10,012	\$3,270	\$6,148	\$6,560	\$38,460
Amortization expense	–	1,082	1,492	240	646	658	4,838
Impact of disposals	–	(1,012)	(606)	(16)	(1,262)	(9)	(2,905)
<b>Closing balance</b>	<b>\$–</b>	<b>\$13,260</b>	<b>\$10,898</b>	<b>\$3,494</b>	<b>\$5,532</b>	<b>\$7,209</b>	<b>\$40,393</b>
<b>Net book 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>

\* The accumulated costs of work in progress as at March 31, 2012 totalled \$713 excluding taxes in the computer software tools and packages category (\$1,288 as at March 31, 2011 of which \$1,150 was included in the software tools and packages category and \$138 in the automotive equipment category).

## Notes to financial statements

### For the year ended March 31, 2012

(in thousands of dollars)

#### 12. PREPAID EXPENSES

	2012	2011
Municipal and school taxes	558	528
Insurance	108	319
Other	580	445
	<b>\$1,246</b>	<b>\$1,292</b>

#### 13. 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. Amortization for the period was \$60 (\$59 in 2011) and was recognized in the statement of operations under "Other expenses." Accumulated amortization, determined on a straight-line basis, was \$539 (\$479 in 2011).

#### 14. CURRENCY RISK MANAGEMENT

In the normal course of operations, Héma-Québec purchases its stable products primarily in U.S. dollars and is therefore exposed to currency fluctuations. Héma-Québec has established a currency risk management policy and enters into derivative financial instruments to manage currency risk exposures particularly through foreign exchange contracts. Héma-Québec has entered into 26 foreign exchange contracts to purchase U.S. dollars in the amount of \$142,000 at a rate of 1.02575 for the period from April 2, 2012 to March 21, 2013 to manage the currency risk related to the purchase of stable products, and medical and blood drive supplies (in 2011, 26 foreign exchange contracts in the amount of \$134,000 at a rate of 1.0267 for the period from April 1, 2011 to March 22, 2012). These contracts cover 90% of expected foreign currency commitments. As at March 31, 2012, the closing exchange rate was 0.9975 and unrealized losses on foreign exchange contracts were measured at \$4,011 (\$7,651 as at March 31, 2011).

The statement of financial position includes the following amounts in Canadian dollars with respect to financial assets and liabilities denominated in foreign currencies:

	2012	2011
<b>U.S. DOLLARS</b>		
Cash	\$2,721	\$733
Accounts payable and accrued liabilities	\$4,090	\$5,794
<b>EUROS</b>		
Accounts payable and accrued liabilities	\$5	\$-

## Notes to financial statements

### For the year ended March 31, 2012

(in thousands of dollars)

#### 15. CONTRACTUAL OBLIGATIONS

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.

The lease expense for the premises for the year ended March 31, 2012 amounted to \$2,275 (\$2,342 in 2011). Future minimum payments under long-term leases are as follows:

2013	\$2,274
2014	2,045
2015	1,728
2016	1,724
2017	1,543
2018 and thereafter	\$26,465

#### 16. CONTINGENCIES

Héma-Québec is exposed to various claims and legal actions in the normal course of operations. Management believes the potential outlays arising from those disputes to be adequately provisioned and foresees no adverse material effect on the financial position or results of operating activities of Héma-Québec.

#### 17. 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, special funds, agencies and enterprises controlled directly or indirectly by the Government of Québec or subject to joint control or common significant influence by the Government of Québec. Héma-Québec has not entered into any commercial transactions with these related parties that were not 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.

#### 18. COMPARATIVE FIGURES

Certain prior-year figures have been reclassified to conform to current-year presentation.

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