

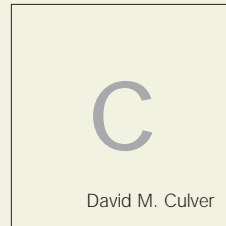
The MUHC

# where your health matters

At the McGill University Health Centre (MUHC) we strive for excellence in **PATIENT CARE**. We accomplish this through **TEACHING, RESEARCH** and **TECHNOLOGY ASSESSMENT**, which keeps us on the cutting-edge of developments in innovative technologies, treatments and therapies. As we continue to prepare for our move to the **NEW HEALTH CENTRE**, we will continue to sustain our high standard of patient care.

*The MUHC comprises the Montreal Children's (MCH), the Montreal General (MGH), the Royal Victoria (RVH), and Montreal Neurological (MNH) hospitals and the Montreal Chest Institute (MCI). The hospitals and the Research Institute (RI) of the MUHC are all affiliated with McGill University's Faculty of Medicine.*

Even after three and a half years as Chairman of the Board of Directors of the McGill University Health Centre, I am still constantly amazed at the breadth of activity that takes place in our hospitals. We are the most comprehensive health-care centre in the country offering services to children and adults ranging from primary and secondary care to ultra-specialized services across the full range of medical specialties. We are also home to the largest hospital-based research institute in Canada and, in partnership with McGill University, we are a world-renowned centre for education in medicine, nursing and the allied-health professions.



The ultimate goal of everything that is done at the MUHC is to provide the best possible health care to patients and to help advance medical knowledge and practice for the future. Just a few examples:

- The housekeeping staff in the Women's Pavilion who kept the room of a leukemia patient and new mother absolutely sterile so that she could leave the hospital a healthy person following an infusion of stem cells from her baby's umbilical cord. This child-parent transfer of stem cells was a world first.
- The radiation oncology technicians who pioneered new techniques for the effective treatment of patients with prostate cancer.
- The surgeons and literally hundreds of other health-care workers who supported two-and-a-half-year-old Émil Jutras through his long wait for a compatible heart transplant, first with extra-cardiac life support and then a mechanical heart.
- The researchers who identified a new drug for Lou-Gehrig's disease, who discovered a gene that links to juvenile diabetes, and who found a protein that promotes healing from burns and other wounds.

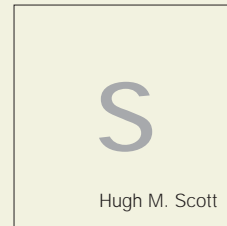
This annual report for 2002-03 documents some of the accomplishments and also the challenges that are part of the daily activities in every department and service. One of these challenges has been to demonstrate to the government that our health centre is providing value for the significant allocation of taxpayer dollars that we spend. It is not enough that we have high patient satisfaction rates. Efficiency and productivity are also essential measures of an effective health-care institution such as the MUHC. In 2002-03, much effort was devoted to efficiency initiatives across our hospitals and we are confident that for 2003-04 our performance will be in the top quartile of comparable hospitals across Canada. Achieving and documenting productivity results in the best way of ensuring the resources we need to maintain quality care.

Two thousand and three also saw changes to the Board of Directors of the MUHC under the Act respecting health services. I would like to take this opportunity to thank those members from the previous Board who have not returned for their years of service: Graham Bagnall, Tass Grivakes, Harvey Guyda, Maurice Jacques, Robert Laverdure, Ann Lynch, James Martin, Timothy Meagher, Jonathan Meakins, Gwen Nacos, Ron Riley and Nancy Wright.

Finally, I would like to welcome the new Board members and those members who are returning for another term. Together with the personnel of the MUHC we will work hard to meet the twofold challenge of implementing our vision for a new facility at the Glen site while continuing to meet the needs of our patients and maintaining our position as a leading academic health sciences centre.

## Letter from the MUHC Executive Director

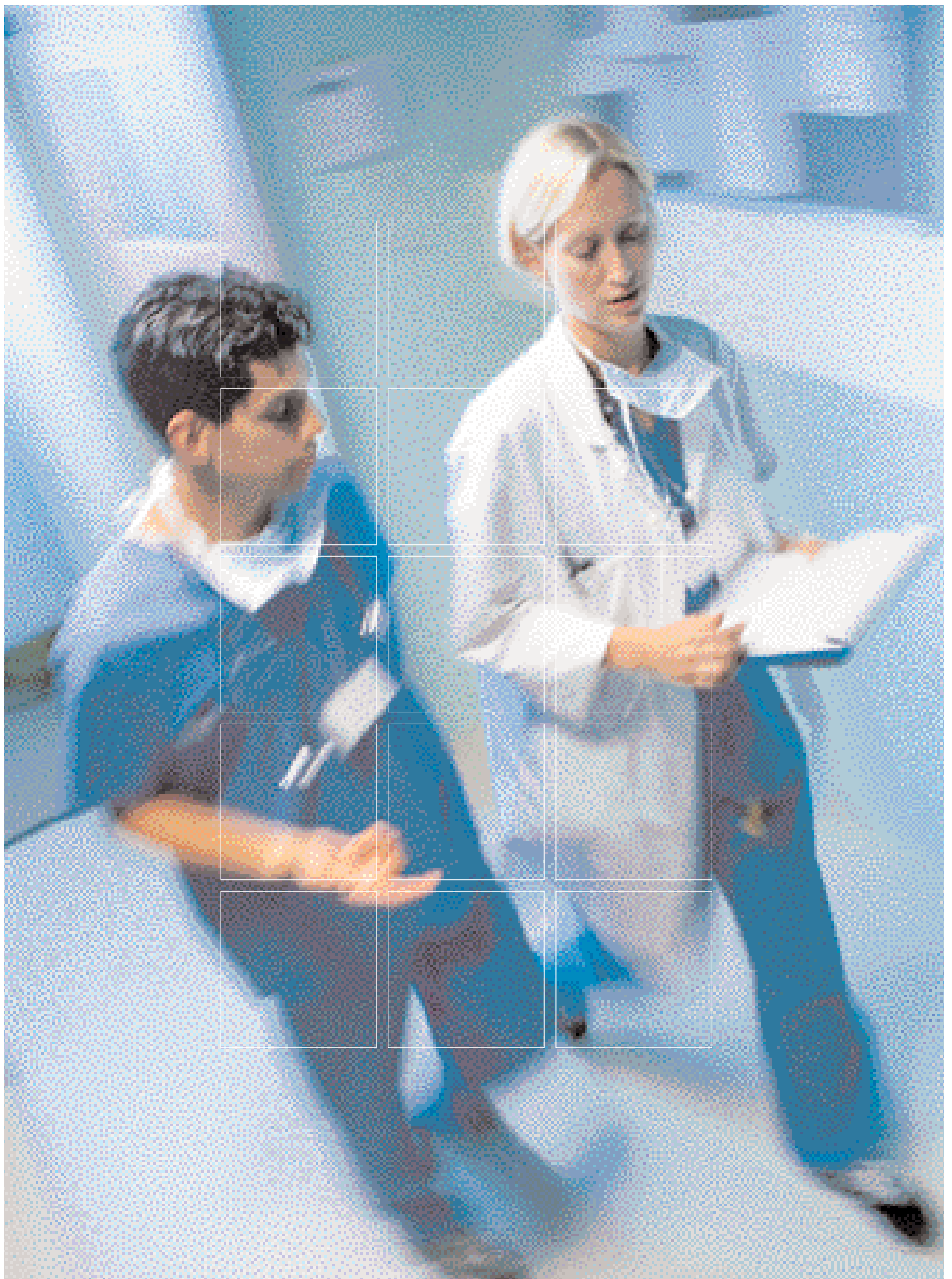
While conceived and created as a legal entity sometime previously, the McGill University Health Centre was "born" in the Ice Storm of 1998. Prior to that it had remained a grouping of five proud, renowned and venerable institutions with unique cultures and traditions dating from early in the 20th and 19th centuries. However, all was battered and weakened by the severe budget compressions and facilitated departures of the mid 1990's. Yet, to the challenge posed to our patients and to our community by the Ice Storm, the MUHC responded magnificently—and as one.



Since those dark days, together we have built upon those links and that renewed self-confidence to bring into being a new institution with its own culture and traditions, which is mindful and respectful of its past, but is more than the sum of its parts.





Thus, this report is one that reflects an MUHC that has come of age, that has turned the corner. It is also both an annual report and a five-year review. It describes an organization that has met and overcome challenges of organization and integration. Falling volumes of patient-service in certain areas have been reversed, and growth and innovation has continued in others. It is an institution that is committed to mutual respect, openness, and to unceasing quality improvement. Its physical plants and specialized equipment have benefited from investments of over \$100 million. It remains in the forefront of Canadian Health Research and Clinical Education. Recruitment in all areas is flourishing.

I will end on a personal note. This will be the last report issued during my time as steward of this remarkable place. Much is reported in these pages of what is exceptional and unusual, and that is good. But I want to pay special tribute to the over 10,000 individuals who make up the MUHC and its affiliated institutes and Foundations. Many go without public recognition, and may even feel unnoticed. But they—you—are noticed, by patients and by colleagues. To all I say thank you, and *au revoir*.



# at a glance

- The six clinical missions of the MUHC: **The Montreal Children's Hospital, Medicine (including Emergency Medicine), Surgery, Neurosciences, Mental Health and Women's Health**
- Each year, the MUHC receives over 800,000 ambulatory visits, including emergency department visits, and over 35,000 inpatient stays
- There are over 1,300 physicians and dentists in the MUHC hospitals, and 10,000 health care and other personnel
- During 2002-2003, close to 2,000 people trained at the MUHC, including some 815 medical and surgical residents, 150 medical students, 800 nurses and hundreds of allied-health students
- The Research Institute of the MUHC is the largest medical and life sciences research facility of its kind in Canada. It brings in \$70 million in government and industry funding a year.
- The MUHC operating budget is over \$535 million

1		36,773 Admissions
	2	
810,319 Ambulatory visits		3

1 Rudy Diaz of MUHC Enviro-Housekeeping at the MGH site. Enviro-Housekeeping Service received a 77 percent level of satisfaction from MUHC clients and patients over 2002-2003. 2 Sabrina Keller, right, and Siriat Na-Nakorn, MUHC Emergency Department nurses at the RVH site. Emergency Department nursing activity increased significantly, particularly in ambulance volumes, with the MGH at 19 percent and the RVH at 11 percent. 3 Patients at the MCI, Sylvio Papineau, left, and Nancy Blanchette, making muffins in the recreation department.

# Patient Care

**The Montreal Children's Hospital** In the course of the year, more than 225,700 patients were treated in the pediatric ambulatory environment, including almost 65,000 visits to the Emergency Department. In addition to this, approximately 6,800 patients were admitted to hospital and more than 6,500 patients underwent surgery and/or received procedures requiring anaesthesia outside the OR. As we continue the trend towards increasing the number and types of patients we treat in an ambulatory setting, those patients who are admitted to the hospital require more intense, complex care.

To keep abreast of the rapidly changing health-care environment, a strategic planning process was launched in April 2002, which resulted in the establishment of five important task forces, each mandated to pursue specific objectives, namely to: redesign Critical Care processes, develop an Operating Plan, conduct a Core Program review, identify Information Technology priorities, and identify priority investments in Human Resources.

The outcomes from these task forces are helping The Children's focus on and implement important changes to the delivery of care. These changes will be instituted as The Montreal Children's Hospital embarks on Phase III in 2003-2004.

Important reorganizations were carried out at The Children's over the last year, the most significant of these being in Allied Health Services, Developmental and Behavioral Pediatric Services (DBPS), Child Life and School Services, Pastoral Services, Clinical Nutrition, and Social Services. Efforts to also increase access to the clinics (a key strategic objective) led to the creation of an appointment centre (or Call Centre). This will streamline activities and offer better coordination of these services to our patients and their families.

The Montreal Children's would like to acknowledge the valuable contribution of Suzanne Tremblay as Associate Executive Director up until her departure at the end of 2002.

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## Highlights

- The first successful pediatric mechanical heart procedure was performed on a two-and-a-half-year-old (Berlin Heart) as a bridge to heart transplantation.
- A greater number of increasingly complex bone marrow transplants with immunodeficient patients were achieved in 2002/03 compared to previous years: 1999-2000 (8), 2000/01 (9), 2001/02 (6), and 2002-2003 (12).
- A pilot Autism Program was established at The Children's. This program will benefit all families across Québec.
- An MUHC Genetics Program, to be based at The Montreal Children's Hospital, was further developed.
- Additional staff support in Medical Imaging was required, with various creative, short-term solutions ranging from local support to assistance Canada-wide and from the United States.
- A one-week camp for children with arthritis was created and will officially open in the summer of 2004. This was a joint project between The Children's and the Arthritis Society.



Dr. David McGillivray, left, MUHC Emergency Department doctor at The Children's, examining 18-month-old Mohammed, with mom Hamid Aicha, and nurse Margorie Jourdain. During 2002-03 The Children's Emergency Department had 64,912 visits, compared to 68,255 visits from the year before.

**Medicine** Medical Services includes all inpatient and ambulatory medical activities at the MGH, RVH and MCI. This includes invasive and non-invasive cardiology, gastrointestinal endoscopy, the Oncology Day Centres, and many day hospital activities.

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Highlights

■ **Respiratory Program:** Transition beds were added to the long-term-care units to assist the RVH and MGH with their quotas of transitional care patients.

Ambulatory visits increased by 11 percent. These increases occurred primarily in the Emergency and the Day Hospital. A Pulmonary Rehabilitation program was initiated.

■ **Cardiology:** New cardiac catheterization laboratory equipment was installed at the RVH site. The renovations to the unit are expected to be complete by February 2004. The Heart Failure Clinic at the RVH saw patients in its new premises.

■ **Oncology:** Recruitment efforts continued and the Radiation Oncology Department had their first full year of operation on their consolidated site at the MGH, where there was an increase in the number of visits and treatments.

■ **Palliative Care:** The closure of the Palliative Care Unit at the RVH was planned. The unit will be consolidated on the MGH site. Medical and nursing leadership have worked collaboratively during this transition period, and despite the challenges both units received the Award of Excellence for Nursing Practice as a unit at the MGH and RVH.

■ **Acute Geriatrics, Geriatric Day Hospital, and Transitional Care:** Both the MGH and RVH units maintained their active Falls Prevention Program and were able to see a decrease in adverse events. Psychiatry continued to develop guidelines and resources to enhance patient care. Due to an increased number of transitional care patients, more beds were added in the community and the RVH to reduce ER congestion and to provide more beds for acute medicine.

■ **Nephrology/Dialysis:** The Satellite Dialysis Unit at the Queen Elizabeth Health Complex has received preliminary approval. A tele-nephrology project is underway which will assist with the supervision of dialysis care to northern satellite patients in Chibougamou and Chisassibi.

■ **Endoscopy:** Due to an increase in volume, a review of patient flow activities was completed at the MGH site to assess staffing requirements. A model of care will be explored in the coming year to maximize the resources available and to develop clinical practice guidelines.

■ **Metabolic Day Centres:** A significant increase in the number of visits was witnessed at the RVH site. As a result, the activities of the centre will be reviewed over the next year to ensure that patient needs continue to be met.

■ **RVH Immunodeficiency Service and MGH Immunodeficiency Treatment Centre:** Activity increased by six percent over the past year.



Dr. Anita Brown-Johnson, left, MUHC director of the Transitional Unit at the MGH site, and Mrs. Walburg Heck, a patient of the unit, pose in front of a Monet painting in the newly renovated room called the Solarium. The room, lavished with artwork, and surrounded by windows, allows the patients some quiet time in a beautiful setting. The room is also used for music therapy and other group activities.

## Patient Care

**Emergency Medicine** The MUHC Department of Emergency Medicine was created four years ago through integration of the departments at the MGH and RVH. The goal was to facilitate the exchange of ideas and allow better access to services for patients.

**Surgery** Surgery comprises areas such as dentistry, gynecology, neurosurgery, urology, ophthalmology, plastic surgery, and orthopedics.

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### Highlights

- Triage guidelines were systematically reviewed, and tools were standardized in both Emergency Departments.
- The RVH Short Stay Unit (SSU) opened September 1, 2002. The SSU has been a success and on-going work in terms of accessibility and patient satisfaction is planned.
- Emergency Department (ED) nursing activity increased significantly, particularly in ambulance volumes, with the MGH at 19 percent and the RVH at 11 percent.
- A review of trends in the development of Emergency Nursing was conducted in order to select areas where improvement is needed.
- The department of Emergency Medicine in collaboration with Nursing Resource Management Service is in the process of establishing criteria for using supplemental resources when the ED capacity exceeds 100 percent.
- Emergency Codes have been revised to best suit the new reality of the MUHC, and it was proposed that ambulances be redistributed between the sites.
- The computerized environment was improved and some outdated equipment was replaced.
- Significant renovations are planned for the MGH ED.

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- In the Operating Room a new and complex vascular procedure for repairing aneurysms was performed. It is the first to be performed in Canada and only the fifth worldwide.
- Significant additional OR times were provided to handle the cancer surgery waiting list.
- Individual Intensive Care Unit (ICU) admissions increased by two percent and average length of stay was 3.53 days. In addition, several different specialties admitted patients to the ICU from outside Quebec. The MGH ICU won a number of design awards for the merged unit on floor nine.
- Cardiology-Cardiac Surgery at the MGH included visits to the unit by discharged cardiac and thoracic surgery patients for wound assessment to decrease people returning to the Emergency Department. The Cardiac Surgery Follow-Up Calls project was also implemented to provide better quality of care, promote education and continue to decrease emergency visits, as well as decrease readmission to the cardiac surgery unit.
- Education and training staff were at the core of many activities.
- Patient volumes have increased in General Surgery, Oncology, and also in laparoscopic procedures and transplants.

**Neurosciences** Neurosciences comprises all activity at the MNH, as well as neurological inpatient and ambulatory activities at the MGH. In addition, consultation services are offered to patients at the MGH and RVH.

The Neurosciences Mission currently has eight defined teams that offer care in a multi-disciplinary and coordinated fashion. They have developed close-knit relations with the various rehabilitation hospitals, which have reduced time between MNH admissions and patient transfers. The teams: Epilepsy, Brain Tumour, Movement Disorder, Stroke, Spinal, General Neurology, ALS and Multiple Sclerosis.

**Mental Health** Mental Health comprises all activity at the Allan Memorial Institute, as well as mental health inpatient and ambulatory activities at the MGH. Consultation services are also offered to all other patients at the MGH and RVH.

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Highlights

**Ambulatory Services:**

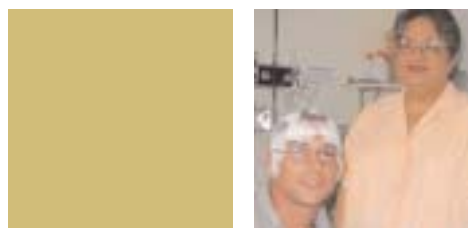
- The Ambulatory Centre was completed at the end of March 2003, with a number of patient waiting rooms also upgraded.
- Total ambulatory visits remained stable and Neurosurgery ambulatory activities increased by 21.4 percent.
- Due to an enhanced partnership with the CLSC network, the Neurological Day Centre saw a decline in visits.

**Inpatient Services:**

- The Epilepsy Clinic was relocated from the RVH to a newly renovated space at the MNH, minimizing the number of places that patients must visit during the course of their stay.
- A six-bed stroke unit opened at the MNH.
- Surgical activity remained constant during the past two years.
- Admission increased by 2.4 percent compared to 2001-2002.

- The psychiatric services in the Emergency Department are being improved and will remain an objective for the following year.
- A research-based innovation in nursing, which focuses on bridging the gaps between hospital and community residential treatment for persons with mental health disorders, was introduced.

- Development of plans to create an integrated inpatient unit at the MGH and to consolidate ambulatory activities at the Allan Memorial Institute was started.
- Safety and security of patients and staff is being addressed.



André Lévesque, left, an MUHC patient of the Epilepsy Monitoring Unit at the MNH, and Rose Roxas, a nurse of the unit. During 2002-03 the Epilepsy Clinic was relocated from the RVH to a newly renovated space at the MNH, minimizing the number of places that a patient must visit during the course of a visit.

## Patient Care

**Women's Health** Women's Health comprises the Obstetrical, Perinatal and Antenatal Unit, Post Partum, The McGill Reproductive Centre, the Neonatal Intensive Care Unit, and Gynecology-Oncology.



### Highlights

- **Obstetrical, Perinatal and Antenatal Unit** saw a total of 4,042 babies born over the 2002-03 year. Multiple births were up to 95 compared to 57 during 2001-02. One main objective for 2003-04 is to initiate a step-down unit on the ante-partum floor to improve nursing care and maintain an adequate number of open beds.
- In **Post Partum**, admissions remained stable. New services for Post Partum over 2003-04 include changes in bed allocations to certain rooms to make families more comfortable and to provide easier nursing access.
- In the **McGill Reproductive Centre** orderly responsibilities expanded to include assisting physicians with embryo transfers so nurses have more free time to dedicate to direct patient care. One central nursing office was established to encourage sharing of nursing activities.
- In the **Ambulatory Clinics** the Twin Clinic was created for parents who are expecting twins to have the opportunity to meet other couples with twins so they can share hospital experiences and life changes. Over the next year, a nurse role for the gynecology and menopause clinics will be added to help with the patient flow and increased volume.
- **Neonatal Intensive Care Unit** cared for 31 sets of twins, compared to 34 in 2001-02, and four sets of triplets, compared to two in 2001-02.
- **Nursing Professional Development Educators** (NPDEs), who mostly work with the nursing group to help advance the evidence-based practice in the care of newborns, helped to improve overall patient care.

## Ambulatory Care

The MUHC is very much an active part of a regional health-care network that includes hospitals, private clinics, CLSCs, long-term-care facilities, rehabilitation centres and other institutions.

With the shift to ambulatory (outpatient) and community-based services, partner institutions are providing more primary care. The MUHC will continue to play a key role in transferring expertise and resources to the ambulatory care setting but it is expected that within the MUHC, the use of Day Hospitals and Day Centres (alternatives to hospitalization) will become more prominent in the future.

In collaboration with our partners in the network, we will establish teaching and research programs that are better adapted to the changing realities of the health-care system.

MISSION	REFERENCE YEAR				
	1998-1999	99-2000	2000-2001	2001-2002	2002-2003
Medical	312,578	317,227	322,137	313,456	312,130
Mental health	81,358	79,677	76,457	68,000	69,929
Neurosciences	31,936	31,428	35,947	37,365	37,61
The Children's	136,588	137,850	112,557	116,355	144,511
Surgical	181,983	179,292	182,213	173,940	181,208
Women's health	51,071	56,682	42,521	43,205	43,624
<b>Total visits</b>	<b>795,514</b>	<b>802,156</b>	<b>771,832</b>	<b>752,321</b>	<b>789,018</b>

Source: Internal ambulatory care statistics reports.

The following considerations apply when these numbers are compared with the statistics found in the Financial and Operational Report:

STATISTICS	AS 478	AMBULATORY CARE REPORTS
Mental health	Indicator is # of pts	Indicator is # of visits
ER	Counted separately	Counted under Medical Mission
Family planning	Counted separately	Admissible stats counted under Women's Health Non-Admissible stats counted separately
Oncology/Hematology	Counted separately	Counted under Medical Mission
Geriatric Day Hospital	Counted separately	Counted under Medical Mission

Source: Internal ambulatory care statistics reports.

**Nursing** The MUHC nursing vision is to maximize the health potential of individuals, families and communities. MUHC nurses achieve this in a number of ways, including anticipating and responding to evolving health care needs; initiating and leading changes to constantly improve care, empowering people towards health and wellness; contributing to the development of a leading-edge nursing community; fostering and supporting creative practices, continuous learning and professional growth; expanding collaborative practice with other professionals and community partners; and creating and validating knowledge through nursing research and supporting its utilization in practice.

**Hospital Services** Hospital Services comprises Biomedical Services, Admitting, Medical Records, Radiation Oncology, Medical Physics, Nuclear Medicine and Radiology. During 2002-03 the division coordinated \$18.5 million worth of equipment acquisition for all sites.

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Highlights

- Nursing expertise increased for care of patients with mechanical hearts.
- Protocols were standardized across the MUHC for the care of patients with stroke and transient ischemic attacks.
- A comprehensive care document was developed for patients with Brain Tumors.
- Nursing expertise expanded for patients with movement disorders and for those with chronic neurological pain.
- Suicide prevention guidelines were reviewed.
- A specialized clinic for expectant parents of twins and a parent support group in neonatal intensive care were created.
- A nursing team was formed at The Children's to insert and monitor peripherally inserted central catheters.
- Surgical nursing teaching sessions occurred on a monthly basis.
- Three hundred and sixty three nurses were hired across all missions.
- Valerie Shannon, founding director of the MUHC Nursing Directorate, stepped down in February 2003. The MUHC thanks Mrs. Shannon for her valuable contribution.

- Dialysis equipment upgrade was completed and the MGH Cardiac Care Unit, RVH Intensive Care Unit (ICU), and the MNH ICU physiological monitoring systems were upgraded on most sites.
- In Medical Records practices were standardized within the MUHC adult sites and a work tool was implemented for cross-site transfers of health records.
- A patient photo-identification system was implemented in Radiation Oncology to ensure patients are properly identified before receiving treatment.
- All studies from Nuclear Medicine at the MUHC are now available from a single Nuclear Medicine Server.
- In Medical Imaging at the MGH, the turnaround time for radiology reports was greatly reduced from 20 to six days. New angiography equipment was installed at the MGH and a Digital Chest Imaging suite was purchased and installed at the RVH.



Melanie Hogue, left, an MCH Neonatal Intensive Care Unit nurse, with mom Hélène Dubé holding three-month-old Olivier. During 2002-03, The Children's hired 92 nurses, up from 80 nurses the year before.

**Professional Services** Professional Services is responsible for attending and resident staff, including managing issues of forecasting, recruiting, and credentialing. It must ensure that medical acts performed by all medical staff are of the highest quality. Professional Services also works in close collaboration with the Nursing Directorate to assure the provision of good quality care to patients.

**Diagnostic and Therapeutic Services** The Diagnostic and Therapeutic Services, which includes areas such as physiotherapy, clinical nutrition, social work, medical laboratories, and food services, achieved a balanced budget in 2003-04 as a result of improvements and innovations, without compromising quality of services. This is also attributable to increases in productivity and efficiency.

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Highlights

- Streamlined the process of recruiting physicians.
- Increased the number of medical and surgical residents in the Faculty of Medicine from 798 to 815.
- Dental resident numbers remained stable at ten for both adult sites, and three for the MCH. There were five Pharmacy residents.
- Communications to residents will be improved so they are kept aware of any changes and decisions that directly affect their front-line role and decision-making on the wards and clinics.
- Professional Services continues to develop in areas

- such as impact analysis and development, and prioritization of new programs.
- Very active recruiting took place within almost all adult-site disciplines of Professional Services, particularly in the Oncology Program. At the MCH, recruitment in Diagnostic Imaging, Pediatric Anesthesia, and Pediatric Emergency Medicine continued.
- The MUHC handled the SARS crisis in an efficient and professional manner and infection control staff continued regular surveillance of nosocomial infection rates.

- Social Work saw an eight-percent increase in client services.
- There was a 21 percent and 9.6 percent increase in new Clinical Nutrition inpatient and outpatient cases, respectively.
- Physiotherapy services increased: five percent for referrals, three percent for patient care hours. Physiotherapy Services are the most productive when compared to benchmark hospitals across Canada.
- The MUHC laboratories remained number one for efficiency compared to other university hospitals in Quebec.
- Infant Screening Program at the RVH Neonatal Intensive Care Unit (NICU) was created and it includes monitoring

- Northern Module and Cree babies.
- Consolidation and integration of services and cross-site standardization of activities contributed to increases in efficiency. This includes the integration of cytology activities at the RVH, integration of autopsy activities at the MGH, and reorganization of immunohistochemistry processing, which has improved turn-around-time from five days to one.
- Intensive Nutrition Therapy in the Heart Failure Clinic was introduced: preliminary results of nutritional intervention and health outcomes look promising.
- Patient satisfaction with food services went up 21 percent.



Debra Gelbre, right, an MUHC physiotherapist in the Mark Rennie Centre at the MNH, helps Simon Papineau, a patient of the centre, regain his ability to walk. Over the past year there was an increase in physiotherapy services—five percent for referrals and three percent for patient care hours. MUHC physiotherapy services are the most productive compared to benchmark hospitals across Canada.

**Quality Management** The mission of Quality Management is to support MUHC teams, departments, programs, professional councils, management, staff, and volunteers with the goal of achieving the best possible outcome of care, treatment, and services to patients and their families in an effective and efficient manner.

**Communications** MUHC Communications promotes clinical, research and teaching activities to local, national and international audiences. This past year 50 press releases were issued and 15 press conferences were organized. In addition, ten issues of the MUHC newspaper *Ensemble* were distributed throughout the health centre and to subscribers in the community. Three separate research brochures were also published. As a result of these and other Communications initiatives, well over 100 media outlets, including international scientific web sites, aired or printed stories about the MUHC.

Highlights



- Developed communication strategies to ensure that quality improvement processes and their results were effectively communicated to the MUHC community.
- Evaluated clinical programs, and developed strategies for medical quality evaluation.
- Supported implementation of the Policy on Disclosure of incidents/errors to a patient and/or family.
- Developed the Balanced Score Card, which presents overall MUHC indicators such as employee attendance and retention rates, financial and economic performance, patient satisfaction and innovative academic highlights.
- Provided leadership, guidance and support to those implementing systems and processes designed to evaluate, report, and improve the quality of MUHC services.
- Provided education and training across the MUHC sites in Quality Initiatives.
- Assured hospital conformance with accreditation standards.

**Information Services** Information Services has the responsibility to define, implement and support the technology and systems required for patient care. As of this past year, the CHUM and MUHC senior management now share strategic leadership resources, which will help build synergies and collaboration with Health IS-IT on the island of Montreal.



- The MUHC installed a new pharmacy system that is the first clinico-administrative system to be implemented across all MUHC hospital sites. The system will allow departmental operations to provide a high level of crucial patient data availability.
- The Voice Mail system has been replaced on most sites and the implementation of a Voice Recognition system has started and will be fully operational next year. Call Centre technologies were also started, allowing improved access to services for clients.
- In collaboration with CHUM leadership, the MUHC IS decided to pursue negotiations with a Canadian company in order to acquire software and services to implement a Clinical Information System. Contract negotiations were still in progress at the end of March 2003.
- Twenty servers were added to the existing 85 servers—a 24 percent increase.

## Patient Care Support Services

**Technical Services** The MUHC Division of Technical Services currently encompasses nine departments, which include Enviro-Housekeeping Services, Security and Emergency Measures, Transportation and Postal Services, Materials Installations and Infrastructure, and Project Management.

**Human Resources** Workforce shortages continue to plague Canadian health-care institutions. At the MUHC, shortages exist with pharmacy, nursing, medical secretaries, inhalation therapy, physiotherapy, dietary technicians and patient attendants. Over the year, Human Resources continued to find creative ways of attract personnel to the MUHC.

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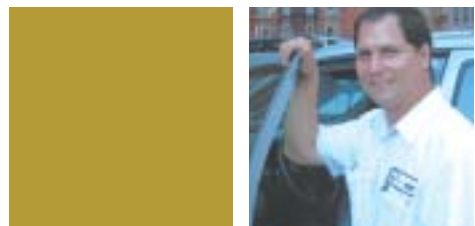
### Highlights

- Major renovations were made to the MGH laundry facilities, including a high-tech uniform distribution system—there are only five such systems in the world.
- Level of satisfaction from clients and patients for all five sites was 77 percent for Enviro-Housekeeping Services.
- Training was given to approximately 2,700 people in Emergency Measures.
- The development of a grounds maintenance program and the number of parking spaces continue to be addressed.
- The finalization of the Lifeline program and the acquisition and implementation of new computerized call centre equipment to monitor average time to respond to calls and the number of calls per minute continued.
- Programs are being put in place for monitoring air quality and cleaning ventilation ducts. Work on the electrical and heating systems continues.
- Programs, physical space, and internal projects continued to be effectively organized and many construction projects to modernize and improve MUHC facilities and the environment were also designed, implemented, and completed.

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- Recruitment activities for health-care professionals included job fairs and visits to high schools, CEGEPs and universities.
- The adult site Occupational Health and Safety sector recorded 3,795 visits during the year, for pre-employment screenings, vaccinations, tests and various other follow-ups.
- The 2002-2003 influenza campaign provided vaccines to 21.5 percent of the staff, physicians and volunteers.
- The first annual MUHC work climate survey was carried out in the spring of 2003. The results were good. This will allow the MUHC to undertake a research program on the impact of work climate on factors such as productivity and patient satisfaction.



Luis Sanchez is an MUHC parking attendant. The number of parking spaces at the MUHC continues to be addressed.

# Volunteers

In 2002-03, volunteers have once again provided an invaluable service and support to the MUHC.

The **Children's** had 396 volunteers last year and 249 of these were new additions. Though this net gain of volunteers represents a decrease of eight percent over last year the number of volunteer hours in 2002-03 represented an increase of 8.5 percent (22,697 hours versus 20,886). Many clinical services benefited from the generosity and warmth of the volunteers. Assistance and caring were given to patients and their families in areas such as the Emergency Department, Hematology, and Physiotherapy. MCH volunteers also read bedtime stories and entertained with storytelling in the clinics or on the terrace.

At the **MGH** approximately 690 volunteers provided almost 61,400 hours of work. Although the number of student volunteers remained at about 350, there was a 20 percent increase in adult volunteers. However, the numbers of hours worked by both groups increased significantly with the adults contributing 5,420 hours and the students 1,710 more than last year. Over the 2002-03 year, the Volunteers for Oncology Patients (VOP) program was merged with CANSUPPORT; The Nightingale Project, which uses mainly student volunteers to assist patients during mealtime, continued to be very popular and successful; and MGH volunteers started to greet families and friends visiting patients in the Intensive Care Unit (ICU). The staff reports that the volunteers' presence has a positive impact on the day to day functioning of the ICU. Volunteers also continued to work in areas such as Orthopedics, Transitional Care, Oncology, Palliative Care, and many more.

Last year, over 600 volunteers donated more than 52,000 hours to the patients and families of the **RVH**, the **MCI** and the **MNH**. They brought comfort and assistance to patients and families in many different areas, including Dialysis, Transplant, Main Recovery Room, Employee Daycare, Immunodeficiency Clinic, Emergency, Palliative Care, Neonatal Intensive Care, Geriatrics, Neurology and Oncology. Volunteers cuddled premature infants, sat and chatted with patients, lent films and/or books, helped with meal trays, helped people find their way, lent their time to fundraising and to support groups for patients, and more.



Margaret Wild, left, Oscar Steiner, a volunteer who greets people at the MGH Orthopedic Clinic and generally provides an upbeat atmosphere for patients in the waiting room, and Steve Wild, right, orthopedic patient. During 2002-2003, there was an approximately 20 percent increase in adult volunteers at the MGH.

# Auxiliaries

In 2002-2003, patients and their families, as well as the staff of the health centre, were once again the benefactors of the generosity in time and energy of the MUHC Auxiliaries. For the improvement of the quality of care and services delivered the auxiliaries raised over \$1.3 million. Over the last four years, the Auxiliaries have provided financial support to the institution amounting to over six million dollars. During 2002-2003, the auxiliaries provided funding for:

**THE MONTREAL CHILDREN'S HOSPITAL AUXILIARY**

- Transcultural psychiatry- educational material for refugee children
- An adjustable stretcher for the pediatric test centre
- Medical imaging- MRI music system
- Anesthesia- Nerve stimulators/bronchoscope/CO2 monitors
- Adolescent clinic- Gynecological examination table

- Renal- Doppler blood pressure detector

**THE MONTREAL GENERAL HOSPITAL AUXILIARY**

- Two research awards
- Service departments within the hospital
- Research Institute activities
- Ultrasound unit for the department of Radiology
- 20 wheel chairs for the renovated sixth-floor lobby

- IV Pumps for Post Op Nursing
- Electrosurgery Units

**THE ROYAL VICTORIA HOSPITAL AUXILIARY**

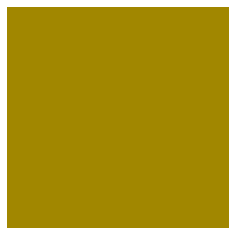
- Antepartum- Fetal heart monitors
- Emergency Department renovations
- Cardiology- Diagnostic equipment
- Obstetrics and Gynecology- Two ultrasound machines

- Nephrology and Hematology
- Annual decorating of units and family visiting areas
- E2 Clinic area renovations
- Intensive Care Unit- Total care beds

**THE MONTREAL CHEST INSTITUTE AUXILIARY**

- Patient activities, furniture and equipment

**The Friends of the Neuro** The Friends of the Neuro are volunteers who circulate a cart with a variety of personal items and reading material people might need during their stay. In addition, from time to time, McGill Student Volunteers will provide social and recreational activities. The Friends of the Neuro also organize numerous fundraising activities throughout the year. The money raised, together with the proceeds of the Café Neuro, is used to meet direct patient care needs.



Auxiliary ladies, Susan Benoit, left, and Gloria White, have been accumulatively volunteering in the Ross Café at the RVH site for over 25 years. Over the 2002-2003 year, the MUHC auxiliaries raised over \$1.3 million.

# Foundations

In 2002-2003, the Foundations continued to play a crucial role towards ensuring the provision of quality care and services to patients of the MUHC. This past year's activities have been a resounding success. Fundraising activities for 2002-2003 represent a seven percent increase at the RVH, a 29 percent increase at the MCH, more than a ten percent increase at the MGH, and a six percent increase at the MUHC Foundation, over 2001-2002. This final result is attributable to many different fundraising campaigns and special events. The money helped purchase numerous items and fund many projects that contributed to excellent patient care across the health centre. Some of these include:

## **MUHC FOUNDATION**

- Collaborated with staff and students at Lower Canada College to present a fashion show/cabaret to raise money for oncology at the McGill University Health Centre
- Hosted a press conference for Deborah Landry, who is raising awareness and support for ovarian cancer with her Dare to Dream tour on a motorbike across Canada. The Foundation continues to raise money for her cause.
- The Healing Gardens Project was initiated. In collaboration with the landscaping company Daccord Webster, five unique gardens, one on each of the MUHC sites, were planted. In addition, over \$130,000 was raised at a gala auction, where guests bid on each of the gardens. The proceeds went toward purchasing much-needed equipment to support MUHC nurses, including 42 digital patient monitors and pediatric stretchers and bedside tables.

## **MCH FOUNDATION**

- Thirty two parents' beds for the comfort of parents who need to stay with their sick child overnight
- Two heart-lung machines for cardiac surgery and specialized respirators
- Contributed to the development of the Autism Spectrum Disorders Program
- Established music therapy and art therapy programs
- Contributed to a comprehensive pain management service, which includes the purchase of ten new pain monitors

## **RVH FOUNDATION**

- Computers for Social Services
- Flexible endoscopic instruments for Gastroenterology and Urology
- Two phototherapy lamps to treat skin disease in newborns
- Specialized analgesia pumps that allow patients to control their pain levels following surgery
- Patient treatment chairs
- New stretchers for the cystoscopy suites
- Medication carts for Nursing
- Monitors for the Intensive Care Unit
- A transport incubator for Neonatology
- The construction of a short stay unit to relieve overcrowding in the Emergency Department and increase patient privacy

## **MGH FOUNDATION**

- The Mar-Kin Foundation Gamma Camera in Nuclear medicine
- First Pet/CT in Montreal, to be located at the MGH
- Construction of a state-of-the-art minimally invasive operating theatre
- The opening of the new Orthopaedic Surgery Centre and the Todd & Adam Sandler Eye Centre
- Funds improved patient services in breast, lung and prostate cancer, cardiology, gastroenterology, emergency medicine, geriatric medicine and palliative care.

	1	
<p>Medical residents make up almost 2.6% of the MUHC workforce</p>		
2		<p>Over 800 nurses receive training at the MUHC</p>

1 Dr. Marino J. Discepola, left, MUHC Ophthalmologist and Eye Surgeon, and fourth-year ophthalmology student Craig Moskowitz examine patient Suzanne Mainville. Dr. Discepola also teaches the art of cataract surgery. In his opinion, after one year the resident becomes a competent cataract surgeon. "I teach residents from all over the world. Our program is well renowned and well respected." 2 Brian Potter, right, a fourth-year MUHC medical student, examines six-month-old Kristin, a patient of the Children's medical unit, with dad Michael Delage nearby. Over 2002-03, approximately 150 medical students trained at the MUHC.

Teaching

## Teaching

Besides its excellence as a health centre, the MUHC is dedicated to teaching and education. It has earned an international reputation for the quality of its extensive education and training programs.

Last year, close to 2,000 people trained at the MUHC, including some 815 medical and surgical residents, 150 medical students, 800 nurses, and numerous other trainees in areas such as pharmacy, pastoral service, medical laboratory technology, inhalation and respiratory therapy, dentistry, social work and medical imaging. Some of these are summarized here to represent a cross section of training activities available at the MUHC.

### **Training of Medical Laboratory Technologists**

Every year, a number of third-year students from Dawson's Medical Laboratory Technology Program complete their internships at MUHC hospitals. The MUHC rounds out their education by providing them with practical, hands-on experience. They spend several weeks in different labs working as medical technologists.

The students analyze clinical samples that help physicians make diagnoses and treat patients. Technologists play a vital role in the health-care system because lab tests comprise 70 percent of the information that physicians use to reach a diagnosis.

**Training of Residents** Currently, 379 medical residents make up approximately 2.6 percent of the MUHC workforce. Every summer, new residents begin their training at the MUHC and their training period can last up to eight years.

The initial transition from medical school to residency is a significant challenge and there are many lectures to attend, but the main way of learning is through seeing patients. This encourages residents to think independently and develop key skills. Teaching is done in the classroom and at the bedside of patients, and during teaching rounds, residents learn from the whole medical team.

As residents gain seniority, decision-making and leadership skills are emphasized, as are teaching and supervisory skills.

**Medical Physics Training Program** This one of a kind program, based at the MGH site, has an excellent reputation and boasts state-of-the-art equipment.

There are three areas that students can specialize in resulting in a Masters degree in medical physics: radiation therapy, radiology, and nuclear medicine. Most, however, choose radiation therapy. In radiation therapy, the medical physicist measures the radiation to be delivered to the cancer patient after a radiation oncologist determines the area of treatment and the dosage of radiation required. The medical physicist then sets the equipment to deliver that exact dosage.

The residency program at the MUHC offers two years of practical experience after completion of a Masters or Ph.D. After two years in the masters program students are employable anywhere in the world. There are four accredited residency programs in North America and this is the only one in Canada.

Petro Majja, MUHC social worker of the Brain Tumour Program at the MNH, consults with Leanne Bowler, temporary librarian at the Neuro Patient Resource Centre. The centre offers books that may be borrowed, pamphlets, Internet searches and referrals to other resource organizations. The centre continues to provide an excellent educational service to patients and staff.



**Chaplaincy Training** As a teaching hospital, the MUHC trains many categories of medical staff, but a little known fact is that the health centre also trains chaplains through the MUHC Clinical Pastoral Education (CPE) program. The CPE program is one of four in Quebec and has been operating at the Royal Victoria Hospital for 15 years.

In the CPE program, students learn how to assess and respond to the spiritual needs of patients and family members. On their own, students learn to listen with compassion, empathy and discernment. They also master staying calm and centered in situations where others are anxious.

About fifty percent of the training involves direct work with patients and family. They are assigned to a clinical area where they function as chaplain, and like medical students, they take part in on-call rotations.

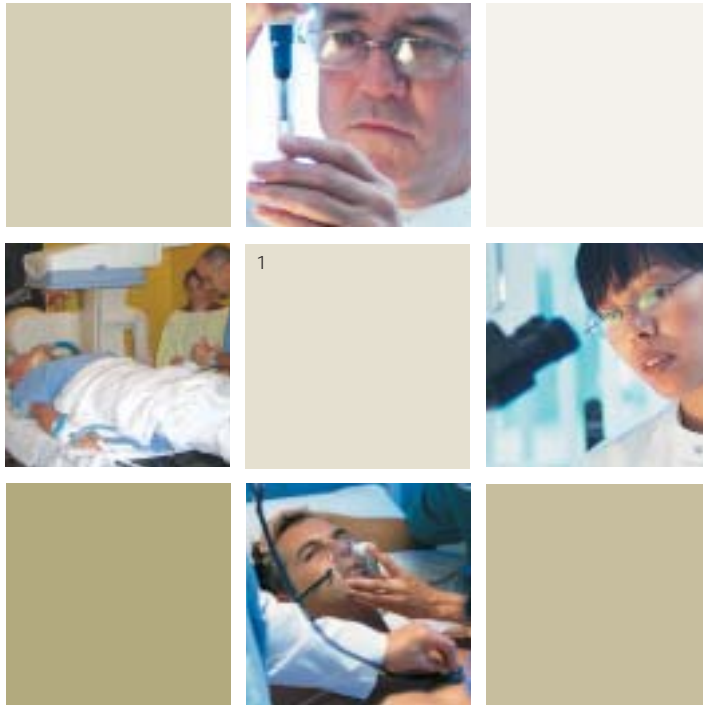
**Medical Imaging Training** Since 1968, the RVH, MGH, and MCH sites have been involved in the training of medical imaging students from Montreal's Dawson College. MUHC instructors apply the students' theoretical knowledge to practical work during a 33-week internship that takes place the final year of the three-year program.

Internship students move through rotations within the hospitals, such as mobile radiography, OR, ER, ultrasound, fluoroscopy, obstetrics ultrasound, gastrointestinal, and urology. They also study pathology, anatomy and physics.

**Patient Resource Centres** As part of its commitment to excellence in patient care, the MUHC hospital sites all have Patient Resource Centres that provide patients and their families with the latest medical information, as well as support and community resources. Some Centres have computer workstations that can link users to reliable and current consumer health information on a wide range of topics. Librarians are also available to help users find the type of information that they are looking for.



Mr. D'Andrea, left, and Maria Farinaccio, a third-year nursing extern from the University of Montreal, in general surgery. Last year over 40 nursing externs worked at the MUHC. The Nursing Extern program, which was developed to recruit and potentially retain nurses at the health centre, involves hiring CEGEP and second-year university nursing students every year to work full- and part-time over the summer. The experience has proven to be very beneficial to the nursing students and an enormous support to the MUHC.



1 Marie-Louise Tammaro, left, an MUHC nurse, and Richard Lapointe, right, a radiology technologist, utilizing new angiography equipment at the MGH. Along with a variety of medical/surgical accessories, the new equipment is enabling MUHC radiologists to visualize patients' internal structures in detail. Besides providing them the ability to perform specialized investigations and interventions with a greater degree of confidence, it is also opening the door to newer radiological techniques that can benefit the patient. The fact that this new equipment is 'network enabled' means that any MUHC physician can access his or her patients' images from virtually any desktop computer.

# Technology Assessment



## Technology Assessment

As an academic health-care institution, one important component of the MUHC's mission is to remain at the forefront of developments in innovative technologies, treatments and therapies. As a result, the Technology Assessment Unit (TAU) was created. It is a unique entity in the province, with a staff of 17, including 12 committee members. It is called upon by various internal stakeholder groups to advise the MUHC on the economic impact and effectiveness of specific technologies and to contribute to the training of personnel in the field of health technology assessment. It also makes policy recommendations, which have an impact on the decision-making processes concerning the use of new technologies that are consistent with the values and orientations of the MUHC.

In 2002-2003, the Unit completed seven evaluations and as a result issued seven recommendations to MUHC management. Recommendations were made on whether to implement new therapeutic programs for patients with Chronic Hepatitis C, multiple sclerosis, small bowel obstruction and deep vein thrombosis. Recommendations were also made regarding the use of new innovative devices, such as colorectal stents and video capsule endoscopy systems.

According to Dr. James Brophy, director of the TAU, the most satisfying element of the work associated with the Unit in this past year has been the high level of collaboration between clinical and administrative partners.



Advanced medical technology has changed the face of medicine. Above, MUHC Eye Surgeon Dr. Marino J. Discepolo aspirates a cataract from an eye through a tiny hole in the cornea using a small pen-like instrument. The patient resumes normal activity within a day. About thirty years ago, cataract removal required surgical lifting of the cornea, and two-weeks in bed for the patient.



<sup>1</sup> Nine-year-old MCH Asthma Clinic patient Andrew Tash with Dr. Francine Ducharme, an MUHC physician and researcher at The Children's. Dr. Ducharme devotes about 80 percent of her time to asthma research and she is currently evaluating whether "we are giving the best treatments to our patients."

# Research



## Research

**The Research Institute (RI)** of the MUHC has a mission to facilitate investigator-initiated and discovery-driven research that creates new knowledge. The scientists of the RI of the MUHC constitute Canada's largest concentration of biomedical and health-care researchers, with over 500 researchers from around the world. Currently, five hundred and fifty graduate and post-doctoral students further their research at the RI.

MUHC medical research expertise can be categorized into five main areas:

- Basic biomedical research—an examination of the molecular, cellular, and organismal mechanisms of disease processes
- Clinical research—involving new clinical paradigms, new diagnostic procedures and new therapeutic agents and devices
- Evaluative research—evidence-based application of currently available methods of disease prevention, diagnosis and treatment
- Health services research—identifying the most effective systems of disease prevention, health maintenance and the delivery of care
- Technology transfer—making the link from laboratories to clinics and to health product industries

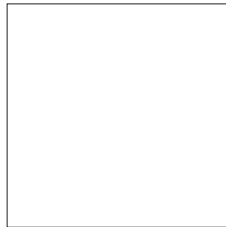
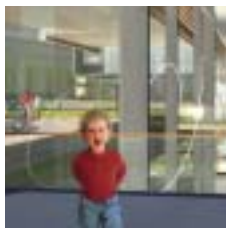
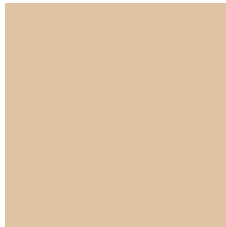
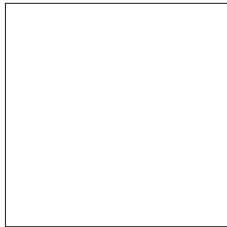
The 13 major axes of research at the Research Institute of the MUHC:

- 1) Cancer
- 2) Cardiovascular disease and critical care
- 3) Cell, tissue and organ engineering
- 4) Endocrinology and renal diseases
- 5) Health outcomes
- 6) Human reproduction and development
- 7) Infection and immunity
- 8) Medical genetics and genomics
- 9) Mental illness and addiction
- 10) Musculoskeletal disorders
- 11) Neuroscience
- 12) Public health and preventive medicine
- 13) Respiratory health



### Highlights

- Several new investigators were hired over the last year, many of who are also clinicians. As a result, the clinical care component of the health centre has expanded, a classic case of developing a strong teaching hospital that offers excellent patient health care.
- The RI continues to be a focal point for attracting brilliant young men and women who come with new ideas and skills that they bring to both the labs and the bedside.
- In 2002-03, our researchers obtained approximately \$70 million in funding from various sources.
- The MUHC's invention contribution—24 disclosures—was 31 percent of the total of the Faculty of Medicine and its affiliated hospitals.
- There are currently 1,488 research studies involving human subjects, 510 were started during 2002-03, and 978 are continuing from previous years.
- The RI has created more than 25 new biotechnology companies through Technology Transfer.



# The Future MUHC

## The Future MUHC

Planning for the new health centre at the Glen site continued during 2002-2003. The new centre will facilitate the MUHC's objectives of always providing the very best care to our patients and of being a leading centre for the advancement of medical knowledge through advanced clinical practise, research and teaching. The new facility will also support the role of the MUHC as a resource and a leader within the Quebec health-care system and beyond, and will support our role as a driving force behind the burgeoning biomedical sector of the Montreal and Quebec economy. The development of this state-of-the-art, comprehensive academic health centre has, and will, involve many non-government and government stakeholders.

**The Functional Program** A major milestone was reached on April 8, 2002. The Boards of the MUHC and of the MUHC Development Corporation gave their unanimous approval to the Functional Program (FP).

The FP represents thousands of hours of combined effort by medical professionals, staff, patient representatives and community representatives active with the MUHC.

The FP describes the spatial needs for each component of the health centre and specifies the relations of adjacency and proximity required for optimal operations and synergy. It was developed for presentation to the Government of Quebec to allow informed discussion on the Glen site project.

Inspired by the concept that a health-care centre's infrastructure can improve clinical results by being better adapted to patients' needs, the MUHC FP integrates high-tech and human touch for a patient-centred healing environment that will:

- Support the provision of best practice patient care;
- Contribute to patients' prompt and full recovery;

- Give patients a sense of personal control over their environment;
- Foster social support for patients of all ages and cultures;
- Integrate teaching and research with clinical care to enhance innovation and efficiency;
- Employ state-of-the-art building standards that are cost-effective;
- Reflect our history of health care, health research and health education excellence.

The FP also reflects important trends in health care provision. For example, ambulatory care is of growing importance at all modern hospitals as new health technologies allow increased use of day surgeries and out-patient clinics.

A full range of ambulatory services will be offered to adult and pediatric patients. Intelligent planning for ease of access from public and private transportation networks and for adjacencies among clinics, day hospitals, diagnostic centres, and family support services become critical and are addressed in the FP. Issues of convenience, comfort and privacy are particularly important for planners.

**Implementation Review** In October 2002 the Planning Office undertook to support a special committee of the Board called the Implementation Review Committee. The Committee was formed to work with the government on the follow-up analysis to the FP, particularly regarding a request for a phased or two-site proposal.

It was assumed by the Committee that such a plan would involve continuing to provide certain services from one of the MUHC existing sites that would function as an integral part of the MUHC. After careful review, the Committee recommended an interim approach that would reuse the space in the Montreal General. In this plan, the Montreal General building complex would house services that can fulfill their mission at a distance from the acute-care/research hub at the Glen site.

In anticipation of a provincial election, the Implementation Review Committee also prepared to brief a new Minister of Health, including exploring different forms of financing the Glen project.



Concept illustrations of the new health centre.

