

Centre universitaire de santé McGill McGill University Health Centre

Breaking New Ground for the Best Care for Life

For your today... for their future

2004-2005 ANNUAL REPORT





"It's been a year of many accomplishments. I firmly believe we have raised the bar of excellence and I look forward to continuing to provide the patient population with the right care at the right time at the right place."

THE McGILL UNIVERSITY HEALTH CENTRE (MUHC) is a comprehensive academic health institution with an international reputation for excellence in clinical programs, research and teaching. The MUHC is a merger of five teaching hospitals affiliated with the Faculty of Medicine at McGill University—The Montreal Children's, Montreal General, Royal Victoria, and Montreal Neurological hospitals, as well as the Montreal Chest Institute. Building on the tradition of medical leadership of the founding hospitals, the goal of the MUHC is to provide patient care based on the most advanced knowledge in the healthcare field, and to contribute to the development of new knowledge.

DR. ARTHUR T. PORTER MUHC DIRECTOR GENERAL AND CEO JANUARY 2005

[0]2=[0]5Some highlights of the year



The MUHC receives a state-ofthe-art CO₂ surgical laser coupled with a microscope that makes ear, nose and throat surgery safer and less invasive to patients.

Research conducted by MUHC scientists finds that Vioxx (an anti-inflammatory drug) increases risk of heart attack in elderly adults who have no previous history of heart attack.

Dr. Joseph Ragaz, MUHC director of Oncology (adults), takes part in a 20-year follow-up of a randomized trial that finds that the addition of radiation therapy on patients with highrisk breast cancer treated with radical mastectomy and adjuvant chemotherapy leads to better survival outcomes with few long-term toxic effects.

Dr. Erwin Schurr and Dr. Qutayba A study, co-authored by Dr. Eric Hamid of the MUHC Research Institute are listed in the prestigious Québec Science magazine's Top Ten Discoveries of 2004. Dr. Schurr is recognized for his identification of leprosy susceptibility genes and Dr. Hamid is recognized for his identification of a new target for control of asthma.

Fombonne, MUHC director of the Department of Psychiatry at The Montreal Children's Hospital, concludes there is no link between MMR vaccination and autism.



Researchers at the Research Institute of the MUHC and McMaster University identify a new gene in breast cancer. This gene, beta1-integrin, is shown to be critical in the initiation of tumour growth and development in a mouse model of cancer. When this gene is blocked. cancerous tumours cease to grow.

A first-of-its-kind study of safety issues surrounding the medical use of cannabis is launched at the MUHC. Known as the COMPASS study (Cannabis for the management of pain: assessment of safety study), the research initiative will follow 1.400 chronic pain patients. 350 of whom use cannabis as part of their pain management

strategy, for a one-year period.

MUHC researchers take part in a major ongoing Canadian Multicentre Osteoporosis Study (CAMOS) involving more than 9.000 people across Canada. The objective of CAMOS is to free older people in Canada from the threat of fractures.

MUHC physicians find a new way to preserve the fertility of women who must undergo chemotherapy. The technique involves removal of immature eggs from the woman's ovaries, and then maturing them by a technique called in-vitro maturation (IVM).

Clinicians from the MUHC and the Centre hospitalier de l'Université de Montréal (CHUM) participate in the first Canadian therapeutic HIV vaccine trial. The hone is that the vaccine will control the HIV infection and limit the use of drug cocktails, which have side effects.



Two important milestones provided the bookends to the 2004-2005 year for our project to build a modern health centre at the Mountain and Glen campuses.

In April 2004 former Quebec premier Daniel Johnson and former Canadian prime minister Brian Mulroney The redevelopment of the MUHC is a means to an end—outstanding patient care at a research-driven health centre

confirmed the importance of the MUHC project and that of its sister University of Montreal project in an exhaustive report commissioned by the Quebec Government. Commenting on this report, a La Presse editorial stated on April 17, "These projects are necessary for the health of Quebecers." On the same day, the lead editorial of the Montreal Gazette stated, "This city needs these hospitals." Both newspapers urged the government to "get on with the job." One year later, in March 2005, decontamination of the Glen campus site began, a task that is now being completed ahead of schedule and under budget. Whatever challenges lay ahead, the MUHC Redevelopment Project is now unstoppable. that stands among the very best in the world.

McGill and its teaching hospitals have earned a deserved reputation as international leaders in medical science. We train some of the best clinicians and scientists in the world at the MUHC and we attract the very best to work here. This international synergy enables us to provide leading-edge care to our patients and world leadership in advancing medical science. We cannot afford, however, to rest on our laurels. Medical knowledge does not stand still and neither will the MUHC

As we move forward, we will continue to make innovation the driving force behind our clinical and academic activities. This same spirit of innovation and willingness to think outside the box will also characterize how we manage our on-going operations, how we structure the MUHC Redevelopment Project and the links we establish with stakeholders in our immediate and international communities.

The people who work at the MUHC are a truly outstanding group of professionals. In this annual report, we are only able to feature a small fraction of the remarkable range of patient care, research and teaching endeavours of the MUHC provided by a group of dedicated professionals.

Their work is reinforced by the support we receive from the community. Important investments in activities and capital projects including new technology such as a state-of-the-art PET-CT scan at The Montreal General, a new angio-catheterization lab at The Montreal Children's, a new MUHC catheterization lab located at the Royal Victoria, and a new GE-MRI at the Montreal Neurological Hospital would not have been possible without the support of our donors. On behalf of everyone at the MUHC, we thank them for their generous commitment to the best care for life for our patients. We also thank our many community volunteers from the people who devote time to providing extra care to our patients to those who serve on our boards and committees. The strength of this community-hospital partnership is a unique hallmark of the MUHC and an inspiration for the future.

Two thousand and four - five was a year of achievement and challenges met. We are confident that next year and in the years ahead, we will confirm and enhance our role as a model academic health centre and an international leader in the provision of health care and the advancement of medical science. We will not compromise our capacity to excel, innovate, and grow to serve the many patients who depend on us.

2 MUHC

For your today... for their future

DR. ARTHUR T. PORTER MUHC DIRECTOR GENERAL AND CEO DAVID CULVER CHAIRMAN OF THE MUHC BOARD OF DIRECTORS

29,847 SURGERIES PER YEAR

37,177 AD MISSIONS PER YEAR 3,819,570 KILOGRAMS **OF LAUNDRY WASHED 102 PER DAY**

1,992,203 MEALS SERVED PER YEAR

8,884,102 **DIAGNOSTIC TESTS PER YEAR**

PER YEAR

667,910 AMBULATORY **VISITS PER YEAR**

134,580 EMERGENCY DEPARTMENT VISITS PER YEAR



3,700 BIRTHS PER YEAR

6,000 SWITCHBOARD CALLS PER DAY

1,300 PHYSICIANS AND DENTISTS

1,925 CLERICAL **SUPPORT STAFF**

3,005 NURSES

973 HOSPITAL **TECHNICIANS/ TECHNOLOGISTS**



2,157 SERVICE STAFF

DIETETIC AIDES, KITCHEN HELPERS,

(SUCH AS HOUSEKEEPING,

80 PHARMACISTS

446 ALLIED-HEALTH AND OTHER PROFESSIONALS

348 MANAGERS 1,074 RESEARCHERS

Left to right, Kevin Chan, volunteer, Imma Franco, acting associate director of Programs and Services Planning, Dr. Kenneth Shaw, pediatric surgeon and director of the MCH Emergency Department and medical director of MCH Trauma, Alain Pagé, Budget manager, Barbara Towers, president of the MUHC Council of Nurses and nurse clinician at the Montreal Neurological Day Hospital, and Hermenia Cabantugan Billones, housekeeper.



THE MUHC Our mission: patient care, research and teaching

PATIENT CARE—Our multidisciplinary teams of healthcare professionals provide tertiary and quaternary care to patients from across Quebec and elsewhere. We also provide primary and secondary care and trauma emergency services to adults and children in Montreal and surrounding regions. The six clinical missions of the MUHC are: Pediatric Medicine (The Montreal Children's Hospital), Medicine, Surgery, Neurosciences, Women's Health and Mental Health.

RESEARCH—The Research Institute of the MUHC is an internationally recognized biomedical and healthcare hospital research centre. The Institute supports over 500 researchers as well as 1,000 graduate and post-doctoral students. It operates more than 300 laboratories devoted to a broad spectrum of fundamental and clinical research. The close tie between research and clinical care is a hallmark of the MUHC and its Research Institute.

TEACHING—The MUHC prides itself on the quality and rigour of its clinical and scientific training. Each year, close to 3,000 people train at the MUHC, including 825 medical and surgical residents, 1,075 nurses, 450 medical students and 525 alliedhealth students. Continuing education programs are also an integral part of providing best patient care. All physicians at the MUHC are crossappointed to the McGill University Faculty of Medicine.

We sow the seeds of hope

Whether it is for the motorcycle accident victim being rushed into our Tertiary Trauma Program, a regional referral centre for all major trauma in downtown Montreal and surrounding communities; for the mother donating a kidney to her son in the Living Related Kidney Transplant Program, a leader in harvesting kidneys with a minimally invasive approach; for the woman seeking care at our Cedar's Breast Cancer Centre, a place that provides women of all ages fully-integrated, "one stop" health care, including patient education, diagnostic testing, treatment and follow-up; or for the young child with retinitis pigmentosa, who is seen at The Montreal Children's Ocular Genetics Clinic, a participant in clinical research trials to provide the best treatment possible to its patients. But we not only sow the seeds, we nurture them through a continuum of care throughout our specialized departments, where top-notch healthcare professionals provide patients with the best care available. Our research keeps us on the cutting edge of treatments allowing us to turn what is learned at the benchside into practice at the bedside. Technology permits us to practice medicine in a way that the human hand on its own is incapable of-taking us into the depths of the human body and propelling us to a new dimension of care. And teaching the next generation of healthcare professionals keeps us at the forefront of medical knowledge and makes us proud to contribute to the world's caregivers. Here are some of our stories...

Within the six missions of the MUHC—Pediatric Medicine (The Montreal Children's Hospital), Medicine, Surgery, Neurosciences, Women's Health and Mental Health—



THE MUHC—PATIENT CARE, RESEARCH AND TEACHING

Sowing the seeds of hope for our PATIENTS WITH CANCER.

GROUNDBREAKING ONCOLOGY PROGRAM HELPS YOUNG ADULTS WITH healthcare needs are addressed. This is essential, because CANCER The MUHC's Young Adult Oncology Program, one of the first of its kind in Canada, offers a wide range of medical and psychosocial interventions for young adults with cancer. Patients in the program have a wide variety of tumours and testicular cancer.

coping with the impact of cancer on their education, social life and career ambitions. Through the program, patients have access to social services and mental health experts, as well as a dedicated pivot nurse, to coordinate their care.

Patients in the program are candidates for clinical trials. They are often enrolled in social and psychological studies and the long-term effects of treatment.

PIVOT NURSES PROVIDE SEAMLESS CARE FOR ONCOLOGY PATIENTS To help ensure cancer patients at the MUHC and throughout the McGill Health Network (*Réseau universitaire intégré de santé* McGill) receive seamless, coordinated care, selected oncology nurses are now designated as pivot nurses resulted in high cure rates for the Centre's patients. (infirmière pivot en oncologie).

providing support to cancer patients and their families. complex system of cancer care and to make sure their causes and treatments for these cancers.

MUHC patients must often visit a number of different professionals in different settings to obtain the full spectrum of cancer therapy.

Pivot nurses also coordinate patient care through cancers; most frequent solid tumours are sarcomas, brain various services (hospitals, CLSCs and community organizations) and work with other healthcare professionals to In addition to medical treatment, they may need help ensure continuity of care. They follow patients from diagnosis, through treatment and even palliative care, when necessary.

BONE CANCER CENTRE OF EXCELLENCE OFFERS SPECIALIZED DIAGNOSIS AND TREATMENT Since 2004, a team of more than 20 specialists at the MUHC Bone Cancer Centre of Excellence has as well, to help them cope with the possibility of recurrences been diagnosing and treating adult and pediatric patients with bone and soft tissue cancers.

> Treatment for these rare cancers is highly specialized and may include a combination of surgery, chemotherapy and radiotherapy. Specialists also oversee the sophisticated reconstruction of bone and soft tissue often needed after treatment. Specialized, leading-edge therapies have

As the only designated *Centre Hospitalier Universitaire* Pivot nurses act as case managers, coordinating care and (CHU) in this area of medicine, the Centre is also heavily committed to research. Centre specialists are working with Their primary roles are to guide patients through the a nation-wide network of scientists to better understand



PATIENT CARE AND TECHNOLOGY

PET/CT SCANNER REVOLUTIONIZES CANCER DIAGNOSIS AT MUHC A state-of-the-art

PET/CT scanner at the MGH is revolutionizing cancer detection at the MUHC. This new equipment, among the most advanced in Quebec, allows doctors to diagnose more patients more accurately than ever before.

The PET (positron emission tomography scanner detects early-stage tumours by pinpointing areas of abnormal metabolic activity associated with cancer. CT (computerized tomography) technology is less accurate in highlighting cancer, but provides vastly superior images. Combining these two technologies into a single scanner has changed the face of cancer diagnosis.

The PET/CT scanner allows doctors to quickly detect tumours and pinpoint their exact location. As many as 12 patients per day can be diagnosed. High demand for this sophisticated tool means the new machine is in use seven days a week.

> Eighteen-year-old Jonathan Whyte Potter-Möl is one of 36 patients undergoing chemotherapy reatment with the Young Adult Oncology Program. Since the program started in March 2003, it has seen 75 patients, who range from 18 to 35 years old. Dr. Petr Kavan, founder of the Program. realized the gap between pediatric and adult care "It was visible that this population was not being approached properly. There are adults with pediatric types of cancer, who require a pediatric oncology approach to their treatment," says Dr. Kavan, "Before the development of this Program this group was also not involved in clinical trials to find better treatments so outcome was inferior." In addition, psychological support is an important factor with this age group. Jonathan is doing well and looks forward to a future in music.

Sowing the seeds of hope for our HEART PATIENTS...

CLINIC OFFERS FULL SPECTRUM OF CARE FOR ADULTS WITH CONGENITAL

HEART DISEASE The multidisciplinary team at The McGill Adult Unit for Congenital Heart Disease provides a full spectrum of care and surveillance to about 500 adult patients with congenital heart disease. The centre (also known as the MAUDE Unit, after Dr. Maude Abbott, a Quebec pioneer in medical research), is one of the very few clinics in North America serving this patient The Lipid Prevention Clinic offers high-risk patients a population.

Thanks to modern medicine, most children with congenital heart disease-a common birth defect-can now live healthy lives. However, as adults, they are at higher-than-normal risk of heart, lung and kidney problems. Some eventually need heart surgery, or even a heart transplant.

With the opening of the MAUDE Unit, the MUHC now offers people with congenital heart disease a continuum of care, from early infancy to adulthood.

THE HEART TRANSPLANT PROGRAM AT THE MONTREAL CHILDREN'S HOSPITAL PROVIDES A VITAL RESOURCE FOR CHILDREN NEEDING HEART TRANSPLANTS Very few children need heart transplants-but when they do, it's a matter of life and death. The Pediatric Heart Transplant Program exists to help these children and their families. In the last four years, the Program's highly trained specialists have performed six transplants. Recipients ranged in age from neonates to teenagers. All six are still alive and doing well.

The major challenge facing the Program is the shortage of organs. Children needing a heart transplant may wait from several weeks to several months for a suitable organ to become available, as a result the MUHC has also pioneered the use of mechanical hearts for small children.

LIPID PREVENTION CLINIC HELPS PATIENTS CUT CARDIOVASCULAR RISK

multidisciplinary approach to preventing atherosclerosis, a major cause of cardiovascular problems such as heart disease and stroke. More than 2,000 patients-most with established coronary disease or genetic lipid disordersattend the clinic each year. There, they are screened for risk factors and genetic abnormalities.

Interventions range from lifestyle and dietary changes to medication. Because patients often have other risk factors in addition to high cholesterol, clinic staff tries to target the whole individual.

Clinic staff is also heavily involved in research, especially into the genetic causes of early-onset heart disease.



PATIENT CARE

UPGRADED CARDIAC CATHETER LABS NOW SERVE ENTIRE McGILL RUIS After major renovations, the MUHC cardiac catheter labs have been designated as The Percutaneous Coronary Intervention Centre for the entire McGill Health Network. The Centre's multidisciplinary team of cardiologists, nurses and specialized radiology technologists treat emergency cases around the clock, and elective patients during regular hours. As many as 4,500 patients per year can be treated.

Patients with coronary and valvular disease come to the Centre for diagnostic procedures or for therapeutic interventions such as angioplasties, a non-invasive procedure to widen clogged coronary arteries.

PATIENT SAFETY COORDINATOR HELPS MUHC MEET

SAFETY GOALS The MUHC is the first healthcare facility in Canada to employ a full-time Patient Safety Coordinator. The coordinator develops the MUHC patient safety plan, including the implementation of the Canadian Council on Health Services Accreditation's patient safety goals and develops training programs in this area.

In addition, the coordinator investigates sentinel incidents-any unexpected occurrence involving risk of death or serious injury to a patient-and recommends realistic ways to prevent similar events in the future. The position of Patient Safety Coordinator was created to help ensure patient safety goals are met at all MUHC hospitals.

> Thirty-six-year-old Darren Prentice has had four open-heart surgeries. His first was at the age of eight at the Montreal Children's Hospital. A growth was found in one of his valves that was obstructing his heart's ability to function properly. At the age of 12 he underwent his second surgery-the growth had returned so surgeons at the MCH replaced the defective valve with a prosthetic one. At 17, he was given a larger prosthetic valve for his growing body and at the age of 35 after a bout of endocarditis his heart raced to 220 beats per minute and then stopped. Thankfully it started again on its own, but this episode brought him to his fourth open-heart surgery, this time at the adult sites of the MUHC where surgeons implanted an ICD (Medtronic Implantable Cardioverter Defibrillator)-a pacemaker and defibrillator in one-under Darren's skin just above his heart. The box-shaped device will shock his heart into functioning if and when it beats out of control again. Darren is just one example of our continuum of care through the entire age spectrum.

Sowing the seeds of hope for our **PATIENTS WITH DIABETES...**

CANADA'S FIRST PEDIATRIC INSULIN PUMP CENTRE An increasing number of children with Type 1 diabetes use insulin pumps, which offer much better control of their disorder. To serve these young people, and to help other children make the switch from daily injection to insulin pumps, The Montreal Children's Hospital of the MUHC recently opened The Pediatric Insulin Pump Centre—the first of its kind in Canada.

The centre's multidisciplinary team includes endocrinologists, a nurse and a dietician. In addition to serving young patients, healthcare professionals at the centre also conduct research into treatment satisfaction, measures of metabolic control and the impact of insulin pumps on quality of life.

Other centres are already soliciting the expertise of the centre's staff, both as mentors for their healthcare professionals, and as consultants for patients.

SEXUAL DYSFUNCTION CLINIC HELPS MEN WITH DIABETES OVERCOME SEXUAL DIFFICULTIES Over the long run, diabetes can damage blood vessels and nerves. For males, one disturbing result may be erectile dysfunction (ED). According to some estimates, as many as 70 per cent of diabetic men may have ED. Helping these men is an important focus of the Sexual Dysfunction Clinic run by the MUHC's Department of Urology.

Clinic doctors first ensure patients' diabetes is well controlled. Then, each patient is thoroughly evaluated to clearly define the medical and psychological causes of sexual dysfunction. In most cases, medications can be used as a first-line therapy.



RESEARCH

THRIVING RESEARCH Research success is usually judged by the number of publications and the number of researchers able to obtain grants within any given institution. At the Research Institute (RI) of the MUHC, in the 2004-2005 period. 1.418 publications were produced by 533 researchers and clinicians, and close to \$100M in funding was obtained from external sources. This includes 24 RI scientists receiving salary awards from both the federal Canadian Institute of Health Research (CIHR) and the Fonds de la recherche en santé du Québec. Operating grants from the CIHR from two separate competitions (spring and fall) saw sixty-two investigators awarded grants. The RI's success rate for both competitions, was as usual, higher than the national average. The Canada Foundation for Innovation (CFI) also gave awards to seven RI investigators.

Internal awards have been handed out for more than ten years and are used to provide financial support to our brightest new recruits and young investigators. Generously supported by both MGH and RVH Foundations, 85 internal awards were presented to RI investigators at the annual awards dinner held in October 2004—over \$2,000,000 was awarded!

There is no doubt that we are a researchdriven healthcare institution.

> The Montreal Children's Hospital of the MUHC recently opened The Pediatric Insulin Pump Centre—the first of its kind in Canada. The MCH has been at the forefront of both the recommendations for use and utilization of pediatric insulin pump therapy in Quebec, since starting its first patients in 2000. Its patients now represent approximately 12 per cent of its clientele, and the number is increasing.

Sowing the seeds of hope for our **PATIENTS WITH** NEUROCOGNITIVE **DISORDERS**...

PREVENTING STROKE IS TOP PRIORITY AT MULTIDISCIPLINARY CLINIC At the MUHC Stroke Prevention Clinic, a specialized team of healthcare professionals evaluates and treats more than 2,500 patients each year, helping them avoid the devastating consequences of stroke. Clinic patients are at high risk 50 per cent to just nine per cent. because of their medical history, or because they have risk factors such as diabetes or high blood pressure.

Interventions often include counselling to promote healthy eating, smoking cessation and other lifestyle improvements. A specially trained clinic nurse helps people make these lifestyle changes. Many patients also require medication, while a few are referred for surgery to unblock clogged carotid arteries.

Clinic staff also conducts research, looking for new ways, new drugs or new interventions, to prevent strokes.

ADULT TRAUMA PROGRAMS DRAMATICALLY CUT DEATH RATES FOR MUHC PATIENTS Traumatic Brain Injuries (TBI) can be fatal or disabling if patients do not receive expert care immediately. Each year, about 500 adults are treated for this dangerous interactions. type of injury through the MUHC Adult TBI Program.

expertise and resources to treat complex multiple injuries often seen in trauma patients the team can respond within just 15 minutes.

Trauma-any kind of injury-is the most common cause of death for patients aged 45 or younger. Since it started in 1993, the MUHC Adult Trauma Program has reduced death rates for the most severely injuried trauma patients from

UNIQUE AUTISM STUDY A unique MUHC study at the Montreal Children's Hospital known as Pathways to Better Outcomes is breaking new ground in the study of children with autism. Autism affects about one in every 170 youngsters. Children with autism don't develop normal communication skills or engage in normal social interactions.

Researchers will track more than 400 children with autism from initial diagnosis (usually between ages two and four) to entry into school.

Until now, few studies have looked at the transition from preschool to early school-age years. In addition to collecting medical information, MUHC researchers will pay close attention to social factors, such as parental

One important study goal is to identify factors that Most trauma-related deaths occur within an hour of explain why some autistic children develop skills more injury. Because the MUHC trauma team possesses the quickly than others. This could help psychiatrists tailor autism programs to individual patients.



PATIENT CARE AND TECHNOLOGY

STATE-OF-THE-ART EQUIPMENT BENEFITS PATIENTS WITH NEUROLOGICAL DISORDERS New magnetic resonance imaging (MRI) and angiography equipment is helping MUHC healthcare providers diagnose and treat patients with neurological disorders more effectively. Patients with brain tumours, blood vessel abnormalities and aneurysms (weak spots in the artery wall, which can break open and bleed if not treated) are benefiting from this improved technology.

The MRI and angiography equipment. housed in separate suites, provide different types of imaging. However, sophisticated software allows technicians to "fuse" images from the two sources. The resulting three dimensional image shows the structures of the brain in relation to blood vessels-and provides an unsurpassed tool for planning neurological surgery.

The angiography suite is also used to perform interventions such as coiling, a procedure used to block off aneurysms before they rupture

> Christina Jones is a 76-year-old patient with Multiple Sclerosis at the Montreal Neurological Hospital, which is a focal point in the fight against MS. The MNH MS clinic is the oldest in Canada. with over 4.000 patients registered and clocking close to 2,200 patients annually, which adds up to about 18 per cent of all Quebecers who are estimated to have MS. Specialists and researchers see patients and apply their state-of-the-art knowledge to the diagnosis and treatment of their disease at the Clinic. Christina, who is happy with her care at the MNH, was diagnosed later in her life and she says she only recently started to use a cane.

THE MUHC—PATIENT CARE, RESEARCH AND TEACHING

Sowing the seeds of hope for WOMEN'S HEALTH

REVOLUTIONARY EGG FREEZING TECHNIQUE ALLOWS WOMEN TO PRESERVE THEIR FERTILITY A revolutionary technique to freeze human the drawbacks and low survival rates associated with device called the McGill Cryoleaf, vitrification increases the close to home. survival rate of frozen eggs to over 90 per cent.

women with cancer—the process enables young women diagnosed with cancer to preserve their fertility before and fertilized at the McGill Reproductive Centre. The undergoing chemotherapy and radiotherapy-and of some women undergoing hormonal stimulation for for implantation. fertility treatment. Using these eggs, Centre specialists have achieved a 40 per cent pregnancy rate in patients nearly as high as when fresh eggs are used.

TRANSPORT IN-VITRO FERTILIZATION SERVICE GIVES CANADIANS IN RURAL AREAS ACCESS TO MUHC EXPERTISE Many Canadians live eggs was pioneered at the McGill Reproductive Centre of far from major urban areas—and thus have limited access the MUHC. Known as vitrification, the technique eliminates to fertility centres. For these people, the MUHC offers a unique Transport In-Vitro Fertilization (IVF) Service, which conventional methods. Used along with a proprietary allows them to access leading-edge infertility treatments

Hormonal stimulation and egg retrieval are performed Vitrification has been used to store the eggs of over 26 locally by the patient's own gynecologist. Collected eggs and sperm are flown to the MUHC in a special incubator resulting embryos are flown back to the patient's hometown

> Transport IVF was responsible for the very first airtransport pregnancy and live-birth ever achieved. As many as 20 children have been born to parents suffering from infertility through the service.

challenging problem of long-term pelvic pain in women. Pelvic pain is often caused by endometriosis or chronic pelvic inflammatory disease. However, it may have other causes, including disorders of the gastrointestinal tract, bladder or urinary tract.

In some women, no medical explanation for pelvic pain can be found. In such cases, the Clinic's multidisciplinary team investigates alternative possibilities to try to determine the cause of the pain.

While complete pain relief is not always achievable, clinic staff can help most patients manage pain so that it does not seriously disrupt their lives.

MUHC OFFERS WOMEN LEADING-EDGE ALTERNATIVE TO TRADITIONAL HYSTERECTOMY Women needing hysterectomies now have an alternative to traditional surgery. Called laparoscopic hysterectomy, the procedure is done using miniature cameras and specially designed surgical tools, which allow the surgeon to operate through small incisions in the abdomen.

A form of minimally invasive surgery (MIS), laparoscopic hysterectomy permits faster recovery and causes much less pain than a traditional hysterectomy.

With the acquisition of a new suite of operating rooms dedicated to minimally invasive surgery, the MUHC now has among the most advanced MIS capabilities in North America.

The new MIS facilities are equipped with the latest optical equipment as well as voice or touch-activated lighting, surgical tools, cameras and computers. Using this advanced technology, surgeons can dramatically increase the scope and volume of minimally invasive surgery performed at the MUHC.

CHRONIC PELVIC PAIN CLINIC HELPS WOMEN RELIEVE OR MANAGE PAIN The MUHC's Chronic Pelvic Pain Clinic addresses the

TEACHING AND PATIENT CARE

MUHC CENTRE OFFERS SURGEONS SPECIAL TRAINING IN MIS TECHNIQUES Special training is needed to perform minimally invasive surgery (MIS), the increasingly popular alternative to traditional surgery. The MUHC's Steinberg-Bernstein Minimally Invasive Surgery Centre is a worldrenowned training centre for surgeons who want to perfect their MIS techniques. The Centre's training function is becoming more and more significant, as MIS becomes more popular. Currently, the number of MUHC patients referred for MIS procedures doubles roughly every six months

MIS allows surgeons to see inside a patient and perform surgical manipulations with as little intrusion to the body as possible. Some operations that used to require a large incision, such as a radical prostatectomy (removal of the prostate gland), are now being performed with as few as four small incisions

During MIS procedures, a tiny telescope is inserted through a small surgical opening to view inside a patient's body and the image is shown on a video monitor. The surgeon uses long thin instruments passed through small incisions through the body wall. Bright illumination and optical magnification give the surgeon a very precise view of the area being operated on, resulting in greater accuracy than can be achieved with traditional open techniques

"At the MUHC, this technology is applied to a variety of areas," explains Dr. Gerald Fried, Steinberg-Bernstein Chair of Minimally Invasive Surgery at the MUHC. MIS is available for patients of all ages, but its benefits are particularly felt by the elderly or frail. "The impact of major open surgery on seniors can be devastating and the recovery long and painful. MIS minimizes trauma to the patient because it is so much less intrusive." he says

MUHC PAIN CENTRE FOCUSES ON TREATMENT,

RESEARCH AND EDUCATION The multidisciplinary team at the MUHC Pain Centre works with patients to relieve chronic pain. Upon referral to the Centre, patients are assessed and given a treatment plan, to be followed for three to six months. At the end of this period, they are discharged from the program. Their own doctors are given a summary of their treatments and recommendations for continued care.

Pain Centre staff also conduct research into pain, and offer educational programs for scientists and clinicians interested in exchanging ideas or learning more about pain treatment

MUHC researchers are also studying better ways to manage pain in infants and young children

> Gaëlle Dago is a patient of the McGill Reproductive Centre at the MUHC, where over 25,000 patients visit per year. Ms. Dago and her husband are happy to have the chance to experience this beautiful part of life and look forward to being parents.

LOOKING AHEAD The Future MUHC

The MUHC is stewarding a future model of academic medicine built on two campuses—new facilities at the Glen Campus, which borders the City of Westmount and the Côte-des-Neiges-Notre-Dame-De-Grâce borough at the top of the St-Jacques Street escarpment, and fully modernized and expanded facilities at the Montreal General Hospital site or the Mountain Campus, located in the heart of Montreal on Pine and Cedar Avenues. The redeveloped MUHC will provide the best possible environment for patient care and academic medicine. Our vision is a MUHC for the next century where patients receive the most advanced and complex care and where medical research and teaching are integrated into all of our activities. The goal is to attract and retain the very best healthcare experts and have state-of-the-art technology at our disposal, as well as be capable of adapting as the field of medicine evolves. Remaining true to our values and our academic mission will allow us to provide leading-edge tertiary and quaternary health care within the McGill Health Network (*Réseau universitaire intégré de santé McGill*), while also continuing to be a reference of excellence around the world.

The future campuses will have...

- Single rooms that provide patients with a restful haven to promote recovery, respect privacy and improve safety. Family members will also be able to stay overnight comfortably.
- Facilities that will reflect the needs of different age groups, and those cognitively or physically impaired. They'll also contain elements of positive distraction, such as nature, art and music.



 Dedicated family areas for social interaction and support, as well as space for educating family members and extended caregivers on follow-up care.

 Inpatient-care units that are pod shaped with cul-de-sac and multidisciplinary workstations, which are more efficient for caregivers and quieter for patients.

- Easier to understand and clear signage so people quickly reach their destination and with increased adjacent services.
- A design that will support the constantly evolving delivery of patient care and breakthroughs in research and technology. This will help us attract and retain experts in fields where we excel.

FOUNDATIONS

Over 2004-05 the MUHC Foundations continued to play a crucial role in ensuring the delivery of quality care and services for our patients. We are proud and grateful for the ongoing tradition of private philanthropy that supports outstanding patient care, medical research and teaching for the best care for life at the MUHC.



MUHC FOUNDATION

The MUHC Foundation continued to advance the \$300 million Best Care for Life campaign, successfully moving forward with the campaign's quiet phase and preparing for the public launch, which took place in September 2005. In addition, the Foundation worked with the Cedars Cancer Institute to raise \$2 million in support of oncology services at the MUHC through its annual golf tournament, and organized the Bid For Life auction, which raised \$184,000 for essential nursing equipment.

In other contributions, the MUHC Foundation donated \$2.6 million to support critical projects across the sites, including donations to cardiac care, mental health and palliative care. The Foundation also provided \$100,000 to purchase equipment for the liver transplant program; \$100,000 to purchase a CO_2 laser for otolaryngology; and \$48,200 for research in radiation oncology.

MCH FOUNDATION

Community support for The Children's was unequalled during 2004-05 as the Hospital celebrated "100 years of medical breakthroughs, hope and hugs." The Foundation was able to meet most of the Hospital's current needs, including 244 new pieces of medical and surgical equipment. Some of the donations include: a "Giraffe" Incubator for the NICU (\$55,000), a state-of-art incubator combined with a radiant warmer, which provides superior care to premature newborns who have a very low birth weight; four Pediatric Larvngoscopes (\$12,000 each), an instrument that provides illumination to the glottis to facilitate passing an endotracheal tube through the patient's vocal cords and can also be used to examine many pathologies (edema, bleeding, polyps, fibrosis); a multi-detector Gamma Camera (\$700,000), which operates in conjunction with other imaging units such as ultrasound, CT-Scan and magnetic resonance imaging (MRI). allowing for superior sensitivity in the imaging of patients. In the coming year, The Montreal Children's Hospital Foundation and its donors will also embark on a new venture: that of building the new Montreal Children's Hospital on the Glen site. Within the Best Care for Life campaign, the Montreal Children's Hospital Foundation will lead the Best Care for Children campaign.

MCI FOUNDATION

The MCI Foundation, the smallest of the MUHC Foundations, had a successful year, and was able to fund clinical research, \$156,168, the Clinical Respiratory Epidemiology Unit, \$661,068, and improve MCI patient areas, including patient bathrooms and new beds and tables with \$310,172. It continues to help support The Best Care for Life campaign.

MGH FOUNDATION

The Montreal General Hospital Foundation is pleased to report another record year of fundraising under the Chairmanship of Bob Swidler. The MGH Foundation continues its important role, in concert with John Rae, in soliciting major gifts for the Best Care for Life campaign, highlighted by a leadership commitment of \$12 million by the Molson Foundation. Among many of the projects made possible by the MGH Foundation, a few include the expansion and reconstruction of the Emergency Department, a \$4 million project, the first PET/CT in Montreal, a \$7.5 million project made possible through the collaboration of the Saku Koivu and MGH Foundations, which became fully operational in Spring 2004, three Minimally Invasive Operating Theatres-included in this project are new facilities for the Post Anesthesia Care Unit, and the Pain Centre-and the complete reorganization and enlargement of the Division of Gastroenterology begun in 2004-05, with a preliminary commitment of \$770,000 made by the MGH Foundation.

RVH FOUNDATION

During the 2004-05 fiscal year, the RVH Foundation raised all the funds necessary for the installation of the very first MRI (\$800,000) and a new CT Scan (\$1.6 million) at the RVH. It also provided generously for the construction of the Catheterization Laboratory on Surgical 4 as well as the integration of outpatient services for Mental Health at the Allan Memorial Institute. The Foundation also donated \$300,000 to support the MRI and Angiography projects at the Montreal Neurological Hospital. These are all priorities of the \$300 million Best Care for Life campaign, and the RVH Foundation will continue to work closely with its partners to ensure its success.

The RVH Foundation provided \$890,000 for the relocation of the Bone Metabolism Clinic to E1 and \$750,000 for the renovation of the E2 Clinics, a project that was also supported by the RVH Auxiliary and the Medical Clinics Fund. And as usual, the Foundation supported fellowships and studentships for the MUHC Research Institute as well as CNA Certification Bursaries, a program for which the MUHC earned the Canadian Nurses Association 2003 Employer Recognition Award.

VOLUNTEERS

From the Cuddlers Program in the Neonatal Intensive Care Unit at the RVH, to the Arts and Crafts Program for patients at the Montreal Neurological Hospital, to sitting quietly with a patient in palliative care at the Montreal General, to making a child laugh at The Montreal Children's, over 2,000 volunteers give their time to the MUHC. They bring energy and many talents to lend support, comfort and practical assistance to patients and families. In 2004-05, volunteers donated over 123,000 hours.

At the MUHC, training for volunteers is a primary concern. Trained, well-informed people are better equipped to understand and help our patients and families. Confident volunteers also stay longer and ensure continuity in the services we offer.

"Our volunteers continue to serve from their hearts, their minds, and at times with sheer raw energy," says Nevine Fateen, manager of adult Volunteers, which was united under one administration in December 2004. "Working on a human level our volunteers bring a special touch to the MUHC."



AUXILIARIES

Patients and families, as well as MUHC staff, were once again the benefactors of the generosity in time and energy of the MUHC Auxiliaries. Over the 2004-05 the Auxiliaries provided funding for:

THE MCH AUXILIARY

Probes for HP U in Cardiology, Research Institute, Ventilator Tester, five Pulse Oximeters, Bronchoscope, Publicity and Promotion for the Salon de la Maternité, Infusion Pump, Reverse Osmosis

THE MGH AUXILIARY

Physiological Monitoring System, Cardiac Catheterization Laboratory, EKG Machine, Biphasic Difibrilator, Difibrilator, IV Poles, Renovations and Painting of 19th Floor

RVH AUXILIARY

Obstetrics and Gynecology High-resolution Ultrasound Machine, Neonatology Resusitaire Warmers, Emergency Department Stretchers, Warmer Blankets and Computers, Endoscopy Electrosurgical Generator, Speech Pathology Otoacoustic Emission, Neonatal ICU Resuscitators, Decorating of Wards and Family Visiting Areas

MCI AUXILIARY

Patient activities, furniture and equipment

THE FRIENDS OF THE NEURO

The Friends are volunteers who circulate a cart with a variety of personal items and reading material for patients and families. Occasionally, McGill University student volunteers also provide social and recreational activities through this group. The Friends of the Neuro also organize numerous fundraising activities throughout the year and money raised, together with the proceeds of the Café Neuro, is used to meet direct patient care needs.



The MUHC financial year ended March 31, 2005 and resulted in an operating deficit of \$20,186,000 on a total revenue of \$689,646,000. This deficit represents less than 3 per cent of revenue. The MUHC deficit was under the targeted deficit of \$20,200,000, approved by the "Agence de développement de réseaux locaux de services de santé et de services sociaux de Montréal." On the following pages is the MUHC financial and operational data summary for the past three financial years.

THE MUHC **Financial Report**

RENÉ CARIGNAN CHIEF FINANCIAL, ADMINISTRATIVE AND CLINICAL SUPPORT OFFICER

INPATIENTS	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001
Bed Set-up					
Acute Care – Adults and Children	1,041	1,079	1,094	1,056	1,061
Newborns – General Care	26	26	26	26	26
Newborns – Intensive Care	55	55	55	55	55
Chronic Care – Adults	117	115	115	115	115
Total	1,239	1,275	1,290	1,252	1,257
Admissions					
Acute Care – Adults and Children	32,593	33,509	32,331	31,356	33,933
Newborns – General Care	3,484	3,497	3,378	3,340	3,344
Newborns – Intensive Care	699	740	664	702	650
Chronic Care – Adults	401	422	400	336	399
Total	37,177	38,168	36,773	35,734	38,326
Patient Days					
Acute Care – Adults and Children	284,006	296,719	299,192	299,610	307,794
Newborns – General Care	8,483	8,485	8,295	8,350	8,025
Newborns – Intensive Care	14,070	15,327	13,627	12,889	13,811
Chronic Care – Adults	45,747	42,930	48,152	42,475	44,725
Total	352,306	363,461	369,266	363,324	374,355
Average Length of Stay					
Acute Care – Adults and Children	8.71	8.85	9.25	9.56	9.07
Newborns – General Care	2.43	2.43	2.46	2.50	2.40
Newborns – Intensive Care	20.13	20.71	20.52	18.36	21.25
Chronic Care – Adults	114.08	101.73	120.38	126.41	112.09
Weighted Total	9.48	9.52	10.04	10.17	9.77
Average Occupancy					
Acute Care – Adults and Children	74.75%	75.34%	74.93%	77.73%	79.48%
Newborns – General Care	89.39%	89.41%	87.41%	87.99%	84.56%
Newborns – Intensive Care	70.09%	76.35%	67.88%	64.20%	68.80%
Chronic Care – Adults	107.12%	102.28%	114.72%	101.19%	106.55%
Total	77.90%	78.10%	78.43%	79.51%	81.59%

Note 1: Due to the fact that the bed utilization exceeds the number of chronic beds declared in the official AS-478 report, the occupancy rate of the chronic care adults exceeds 100%.

2004-2005	2003-2004	2002-2003
162,884	163,205	166,149
228,810	221,811	211,346
117,917	116,035	116,076
37,071	35,254	33,294
163,150	156,948	139,591
709,832	693,253	666,456
	162,884 228,810 117,917 37,071 163,150	162,884 163,205 228,810 221,811 117,917 116,035 37,071 35,254 163,150 156,948





- Nursing care
- Other
- Technical and support services
- Administration

ALTERNATIVE CARE TO HOSPITALIZATION	2004-2005	2003-2004	2002-2003	2001-2002	2000-2001
Ambulatory Services (visits)					
Emergency	134,580	132,083	131,619	133,821	133,171
Outpatient Clinics	644,131	668,482	657,943	645,557	658,662
Family Planning	19,365	22,625	20,757	21,333	18,362
Total	798,076	823,190	810,319	800,711	810,195
Day Care Medicine (treament day)					
Physical Disease	68,387	67,002	62,758	57,960	46,938
Parenteral Nutrition	6,257	6,293	7,045	6,693	4,932
Oncology and Hematology	21,821	20,162	16,976	18,982	20,107
Total	96,465	93,457	86,779	83,635	71,977
Day Hospital (attendance)					
Geriatrics	2,084	2,372	2,183	2,352	2,748
Psychiatry	11,794	13,458	12,949	13,582	16,161
Total	13,878	15,830	15,132	15,934	18,909
Nursing Day Care					
Day Surgery (patient)	17,212	18,857	18,453	17,539	18,266
Endoscopy and Cystoscopy (treatment)	21,452	20,917	19,861	19,987	20,844
Total	38,664	39,774	38,314	37,526	39,110
Others (treatment)					
Hemodialysis	45,543	44,800	43,652	41,946	40,970
Peritoneal Dialysis	19,022	20,107	24,543	23,137	22,392
Interventional Radiology	9,352	8,713	7,255	7,023	6,730
Cardiac Angiography	4,002	4,193	4,176	4,787	4,974
Lithotripsy	758	711	807	2,239	2,347
Total	78,677	78,524	80,433	79,132	77,413

REVENUE March 31, 2005	2004-2005	2003-2004	2002-2003
Agency	497,524	479,504	457,114
Sales & Recoveries	18,901	22,895	22,900
Patients	19,555	19,409	16,713
Research	71,758	67,005	59,295
Other	81,908	78,874	70,914
Total	689,646	667,687	626,936







AWARDS

Just a few of the awards received over the 2004-2005 year as recognition of the outstanding contribution many of the people who work at the MUHC have made worldwide

DR. FREDERICK ANDERMANN, director of the MNH/MNI's Seizure Service and Epilepsy Clinic, and a professor in Neurology and Neurosurgery, and Pediatrics, received the 2004 Ross Award from the Canadian Pediatric Society (CPS). This award was established in 1976 and is the most prestigious honour given by the CPS. It recognizes excellence in the field of pediatric research, education and child health and advocacy.

DR. SAMUEL BENAROYA was among the recipients of the Canadian Society of Internal Medicine 2004 Osler Award. The award is presented annually to individuals demonstrating excellence in achievement in the field of General Internal Medicine, either in clinical practice, research, medical education or speciality development.

DR. CHAWKI BENKELFAT, MUHC research director in the Department of Psychiatry, and professor of psychiatry in the Faculty of Medicine at McGill University was presented with the Distinguished Investigator Award by The National Alliance for Research on Schizophrenia and Depression.

CAROL BURNETT, head nurse of the Oncology Day Centre and Medical Nursing Services, received the first CANO Award of Excellence in Hematology and Oncology Nursing for her years of dedication and work in advancing care and treatment of oncology patient.

JANE CHAMBERS-EVANS, MUHC nursing practice consultant and clinical ethicist, was honoured with the Order of Nurses' Prix Florence for Clinical Practice. The award recognizes nurses in such categories as clinical practice, leadership and research. The nominees are chosen by their peers as "exceptional" nurses, sources of inspiration and initiators of change.

RUTH GESSER, a MUHC speech-language pathologist at the MGH, was awarded the 2004 membership award from the Canadian Association of Speech-Language Pathologists and Audiologists. She received the award for her outstanding work in her many roles as clinician, teacher, mentor, and clinical supervisor, particularly in the area of voice disorders.

DR. DAVID GOLTZMAN, professor of the department of Medicine at McGill University and MUHC senior physician in the division of Endocrinology and the director of Calcium Research Laboratory, received the Canadian Society of Clinical Investigation (CSCI) Distinguished Service Award. This award recognizes extraordinary service to the CSCI in their efforts to promote clinical research across the nation.

DR. CÉLESTE JOHNSTON, MUHC nurse scientist (honourary) and a James McGill professor at McGill University, was awarded the Prix Florence by the Ordre des infirmières du Québec for her exceptional contributions in the advances of nursing knowledge in the field of pain management in newborns and young children.

PATRICIA LEFEBVRE, MUHC pharmacist-in-chief, received the status of Fellow of the Canadian Society of Hospital Pharmacists (CSHP). This honour recognizes her exemplary achievements and outstanding contributions to CSHP and to the profession.

DR. ANNE-MARIE MACLELLAN, MUHC assistant director, Medical Education Division, was the recipient of the Quebec Pediatric Association's Prix Letondal 2004, for her exceptional work and distinguished academic career in pediatrics.

DR. NICOLAS STEINMETZ, former interim executive director of the MCH, was granted the Pfizer Award for Leadership in recognition of his lifetime dedication to the care of children.

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ACCREDITATION REPORT, 2004

Every three years, the MUHC undergoes an Accreditation process to see if it is meeting standards set by the Canadian Council of Health Services Accreditation (CCHSA)—a federal organization that was formed to promote excellence in the provision of quality health care and the efficient use of resources in health organizations throughout Canada. Although this is a voluntary process for most hospitals, it is mandatory for all university teaching hospitals. Above are a few of the surveyors' comments from our 2004 Accreditation.

At the McGill University Health Centre

we know that good health is a precious part of life.

Building on the accomplishments of our founding partners-The Montreal Children's, Montreal General, Royal Victoria, and Montreal Neurological hospitals and the Montreal Chest Institute-we are planning to redevelop the MUHC to provide outstanding care to our patients for generations to come.



To make sure our patients receive the best possible care in the best possible environment, we have launched the \$300 million Best Care for Life Campaign-\$200 million for the redevelopment of the MUHC on the Glen and Mountain campuses and \$100 million for projects required immediately. This fund will build the MUHC of the future, while continuing to care for our patients on our existing sites.

Your support for the Best Care for Life campaign is vital.

Please make a gift today to help us provide our patients with the best care for life now and in the future.



MUHC HOSPITALS

MONTREAL CHILDREN'S HOSPITAL

2300 Tupper Street, Montreal, Quebec, H3H 1P3

MONTREAL GENERAL HOSPITAL 1650 Cedar Avenue, Montreal, Quebec, H3G 1A4

MONTREAL NEUROLOGICAL HOSPITAL 3801 University Street, Montreal, Quebec, H3A 2B4

ROYAL VICTORIA HOSPITAL 687 Pine Avenue West, Montreal, Quebec, H3A 1A1

MONTREAL CHEST INSTITUTE 3650 St-Urbain, Montreal, Quebec, H2X 2P4

Telephone: (514) 934-1934 www.muhc.ca