



Centre universitaire de santé McGill  
McGill University Health Centre



## IN THEIR OWN WORDS

“

I know exactly what would make dialysis treatments more com-

fortable in the McGill University Health Centre (MUHC) Glen facility and I am hoping that at least three features will be factored into the design:

**Massage therapy area**—even for a fee—this add-on to regular treatments would be an important way to integrate the human touch into the healing process.

**Waiting rooms** that are truly user-friendly with nice, comfortably upholstered couches and good seating arrangements. We saw this attention to detail on our site visits [where Master Program committee members travelled to other state-of-the-art hospitals to view facilities].

**Parking**—the planners know how important this is; it must be geared towards easy access for the disabled and the elderly

”



James Seeley is a patient representative on the Master Program as well as a dialysis patient who has to submit to 5-6 hours of dialysis every second day.

# THE GLEN NEWS

A PUBLICATION OF THE MUHC FOUNDATION

## Validating the Master Program

Consultation for the Master Program (MP) finished in mid-February, following which recommendations outlined in the MP went to the Central Administrative Planning Committee (CAPC) for review and validation on February 20.

- ⌘ The validation process is one of the final steps in the completion of a Master Program.
- ⌘ Once reviewed, the MP will be delivered to two consulting corporations to generate revised cost and square footage estimates.
- ⌘ The Functional Program will begin as scheduled at the end of March, concurrently with the validation of the MP; planning is expected to progress without delay.

Universally applauded for its thoroughness and insight, the MP was also recognized for its handling of the complexity and huge volume of information that naturally arose during the consultation stage. MUHC Chief Planning Officer Jean Dufresne says that the goal of the fine-tuning process is to anchor and ground the Master Program in realistic, responsible guidelines by taking the recommendations and requests of the MP groups and prioritizing them. He explains, “At this stage, the MP is put through three steps of validation [clinical activity volume, architectural benchmarks, net-to-gross factor] to verify the MUHC’s anticipated needs.”



*Clinical Activity Volume.* Projected growth rates that were generated in the MP process are held up to statistics in current trends in health care as well as to the demographics of the MUHC’s catchment area to determine how much clinical activity the MUHC will realistically see. Dufresne says, “These statistics will be one driving force behind space and cost decisions.”

*Architectural Standards.* Although the Glen project will be the largest Canadian university teaching hospital in scope, it will still be based upon current architectural standards. One resource for such standards is the American Institute of Architects (AIA).

The AIA produces benchmarks for a generic hospital based on what has been done recently in new hospital construction. These benchmarks provide quantifiable data on how much space in most new hospitals is devoted to various service

(see *Master Program* on page 2)

# Negotiating a long road



ALEX PATERSON

None of us who embarked on the journey to create the McGill University Health Centre and build for it a new home ever imagined that the road would be free of twists and turns. We all knew that for a project of this scope to succeed we would have to keep our eyes on the objective and not allow ourselves to be distracted by the inconveniences of government bureaucracy.

We, and our counterparts at the Centre hospitalier de l'Université de Montréal (CHUM), had hoped to have the government funding for the functional planning approved by a decree from the Government of Quebec before the Bouchard government left office.

Unfortunately, this did not happen and now a new minister and cabinet will review our requests, and hopefully accept them in the not too distant future.

Mme Marois who has been a champion of both projects while the Minister of Health and Social Services, will, we believe, continue to support what she was instrumental in developing both at McGill University and the Université de Montréal.

In the meantime, our work is progressing on schedule and with renewed enthusiasm in many quarters. Now that the MUHC Planning Group has concluded the

Master Program, and with functional planning set to begin, we have a great deal of information and detail about the project at our fingertips. However, the fine-tuning to finalise such controversial items as the number of beds and operating rooms will only be completed, as forecast, in the Fall.

From a fund-raising point of view, we are welcoming effective and dedicated volunteers as members of our team. Among them are David Hannaford of Acumen Planning, as chair of our Planned Giving Committee, and James Grant of Stikeman Elliott and our former Dean of Medicine, Dr. Richard Cruess, as co-chairs of the Campaign Preparatory Task Force. A lot of work has also gone into developing the infrastructure for the campaign and identifying (and beginning the recruitment of) members of the campaign cabinet.

Looking past the distractions of political comings and goings is not always easy. Fortunately, many of the individuals who will help us succeed in our campaign are quite capable of focusing on the objective and willing to roll up their sleeves on the MUHC's behalf. We are fortunate to count on their support and to follow their example.

Alex K. Paterson

*Chairman, MUHC Foundation*

## Master Program

*(continued from page 1)*

lines. For example, the average operating theatre in the MUHC right now is under 350 square feet while the MP assumes 600 square feet for the average operating room at the Glen. This assumption will now be held up to the benchmark figures from the AIA and then balanced with specific MUHC needs. Final recommendations will optimize space and cost allocation, responsibly trimming the fat while ensuring the needed improvements to the current situation.

*The Net-to-Gross Factor.* This refers to all the extra space that must be considered in a building's construction, such as the thickness of a wall or the width of a corridor. The net-to-gross factor asks how much extra square footage must be planned for the best operations possible while keeping costs down. Reducing the size of the average bathroom or atrium by a few square feet can noticeably reduce the net-to-gross factor, and this space could conceivably be allotted to other vital operations.

The validation of the Master Program is expected to be completed

this month, following which the MUHC Planning Group's two teams of consultants will generate revised cost and square footage estimates based on the validated MP. The MP will then be delivered to the Glen Project Steering Committee and subsequently be presented to the MUHC Board by the end of April. Functional Programming, involving close to 60 groups of five to seven members, is scheduled to begin meeting at this time, when volume estimates have been completed.

# Renovations: not a cost-effective solution

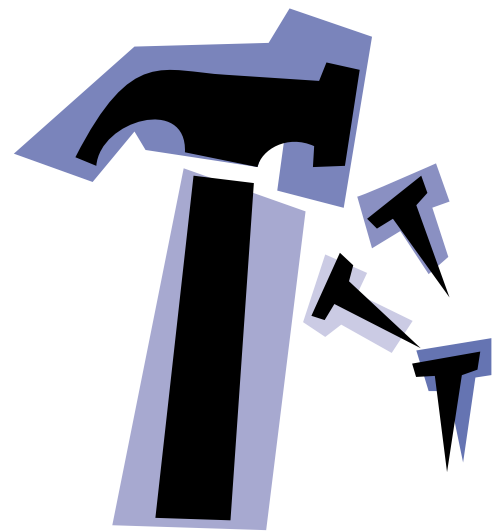
**A**ldona Tusas, Associate Director of Organizational and Physical Programming for the MUHC is often asked to weigh in on the 'renovate' vs 'construct anew' debate. "I have noticed," she comments, "that those who question the move often focus on the external architectural beauty of the existing sites and not on their internal functionality or ability to meet the continually evolving needs for patient care delivery. Our constraints are so great.

For example, we are presently spending \$7 million merging three out of four ICU units at the Montreal General Hospital (MGH) site and the finished product is still a compromise. The preferred configuration for the new ICU would have placed support spaces such as the nursing station and consultation, utility and storage areas in the middle and patient rooms along the periphery, but the narrow building width prohibited that. Similarly, a dedicated patient elevator has to be constructed to compensate for the fact that the ICUs will be located on a floor above the operating theatres. These types of compromises are a constant in many of the urgent improvements we are undertaking."

Teresa DiBartolo, Acting Manager, Architectural Services, the Montreal Children's Hospital (MCH) site of the MUHC concurs. "I definitely support the construction of the Glen site 100%," she declares. "But meanwhile, we cannot postpone some basic improvements; we renovate out of necessity, not for the fun of it. Certain problems cannot even be corrected with renovations due to the lack of space, structural constraints and physical layout limitations of our existing buildings. Necessary functional adjacencies are extremely compromised. For instance, currently, the MCH emergency is on the main floor and our operating rooms are on the 10th floor—three buildings over. However, the costs and disruptions associated with fixing this situation would be totally inconceivable. Therefore, we must wait for the move."

A 1994 study commissioned by the McGill University Health Centre (MUHC) recommended building a new facility as a more cost-effective and viable alternative than renovating the existing structures. As well, it suggested that the physical operating and maintenance costs of a better designed, more functional facility would be significantly lower.

"The physical envelope of the buildings creates other challenges," explained Tusas. "We have repaired the roof at the Royal Victoria Hospital (RVH) site at a cost of close to a million dollars. Not for



**"We renovate out of necessity,  
not for the fun of it."**

aesthetics, but because there were gaping holes and falling plaster. But there are still problems with water infiltration through masonry. And that doesn't begin to address the problem of draughty windows—yet another cost. Furthermore, whenever we touch the exterior of a heritage site like the RVH, additional monies are required to retain its visual integrity. The cost of maintaining the heritage aspect of our buildings is one we can ill afford."

The renovations to the RVH Medical Oncology Day Hospital several years ago cost approximately \$2.5 million. Renovation costs rose, according to Tusas, because of special precautions to

remove old asbestos in ceilings in the old building and because of the need to add on infrastructure to provide the required electromechanical needs. In other cases, the purchase of large pieces of modern equipment necessitates the entire reworking of a room, including demolition, to accommodate its size. "Situations such as these drive up the renovation costs, not to mention the difficulties in doing renovations while maintaining patient care operations," she explained.

At least some of the investments on the various sites are portable. According to Di Bartolo, most of the MCH equipment  
*(see Renovations on page 4)*

## Renovations

(continued from page 3)

recently purchased will be moveable. "I will be happy, though, to leave some things—such as our maintenance headaches—behind us. Recently, one of our pipes burst in our ambulatory services area causing substantial damage and necessitating the cancellation of several clinics. We don't expect this will happen in the new site given the modern systems which will be properly insulated in a quality building shell."

Handicapped access is another problem at all the sites that will be corrected with an up-to-date building. One of the projects about to begin is a \$1 million reorganization of the ambulatory care unit at the Montreal Chest Institute site, which will at least greatly

improve access to its ambulatory population of patients with respiratory ailments.

Jim Gates, Associate Executive Director of the Montreal Neurological Hospital (MNH) site prefers to look at the larger perspective when discussing the Glen project and what it means to the MUHC and its patients. "I believe that the new facility will be wonderful, but this is not simply a dollars and cents issue; after all, the new building will have its own financial demands of ventilation, heating, maintenance and air-conditioning. If we don't move, we are in big trouble. Ultimately, though, this move isn't just about bricks and mortar. I believe it is about patient care, and providing that care in an environment conducive to healing."

## Asked & Answered

At a recent presentation of the MUHC Foundation's Virtual Tour of the Glen, one audience member posed the following question: **Why is it better to build a hospital complex that is horizontally rather than vertically oriented?**

Planners and architects design hospitals with the goal of optimizing the use of available land. The Glen site is a long, 43 acre tract of land, making it preferable to build out rather than up. Here are five reasons why:

**Access.** Ambulatory patients can enter the complex through a door next to the department they need to visit rather than spend time waiting for, and traveling in, an elevator also used by staff and visitors.

**Adjacencies.** A horizontal layout is more flexible in creating service line adjacencies. A vertical structure has a smaller floor plate, so there is less space for finding solutions to adjacency requirements.

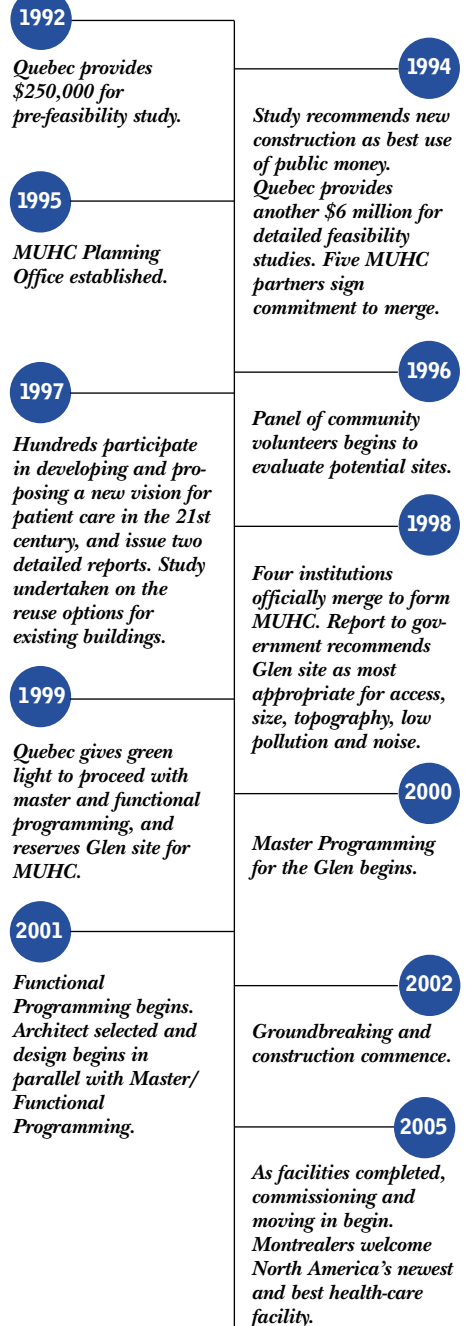
**Evacuation.** In the case of an emergency, a structure that is low to the ground is easier to evacuate.

**Traffic flow.** A horizontal design allows for the separation of different traffic flows. For instance, the new health centre will have separate elevators for patient transport, visitors, and supplies and disposal services, minimizing patient exposure to infection as well as ensuring greater patient privacy.

**Future expansion.** When it comes to renovations and expansions, it is much easier and there is much less interruption of service, to close down one pavilion in a campus of buildings for renovations than to shut down two or three floors of a high-rise facility.

*We appreciate and encourage reader feedback on the Glen News and aim to find answers to all of your questions and concerns.*

## GLEN PROJECT TIMELINE



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