



**Hôpitaux Shriners**  
pour enfants  
**Shriners Hospitals**  
for Children™

**Canada**  
Pediatric Specialty Care

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# THE **ORT** **OPEDIK**

*Helping Kids Defy the Odds*

■ Anna-Marie [page 3]



## **It's Official; Shriners Hospitals Will Build New Facility on Glen Campus!**

### **Joint Boards Give Go Ahead**

*On Thursday, April 17, 2008 we officially announced that the Joint Boards responsible for Shriners Hospitals for Children (SHC) throughout North America have approved the construction of a new hospital to replace the existing facility in Montreal, Canada. This facility will be built on the McGill University Health Centre's (MUHC) Glen Campus in Montreal.*

### **What to Expect in the Near Future**

*This is an extremely important moment and a monumental advance towards the future. We are committed to ensuring that the new hospital is defined by functional and physical specifications that correspond to our vision and to the needs of our current and future patients. To that end, since the announcement, internal discussions and planning meetings are taking place with Shrine leadership and Headquarters staff, along with joint discussions with the MUHC. The local management and Board are completing their analysis of current and future needs, so as to be able to define what services and flexibility will be required in the future. This vision should constitute a critical base for the planning process.*

*As well, we have been advised that over the next few months, a donor relations officer will be appointed for SHC-Canada.*

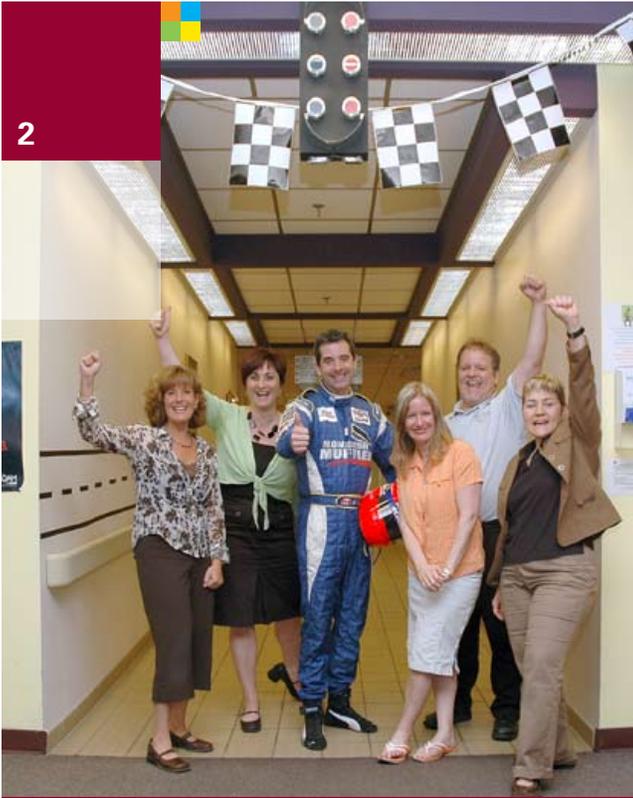
*On behalf of the Canadian Hospital Board of Governors, I wish to extend our thanks and appreciation to the many Shriners, hospital staff and community supporters who have remained committed to the future hospital. We invite them to remain focused and vigilant through the planning process to ensure that our future patients will continue to receive world class care in Montreal. We can be proud of what we have accomplished for more than 80 years at the existing hospital, but our priority and duty now is to plan for the generations of Shrine patients who will follow.*

**Gary Morrison**  
Chairman of the Board of Governors

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## Better Patient Care Thanks to a Behind the Scenes Team

In 2004, SHC began the gradual implementation of an electronic patient health record. The purpose of the Shriners Hospital for Children Information System (SHCIS) is to make medical records available securely via intranet to health professionals within the SHC system thus improving coordination of care, efficiency and timely access.

On June 16, 2008, SHC-Canada became the 21st Shriners Hospital to implement the system. The installation required almost two years of planning and adjustments in order for patient records to reflect the reality of the Canadian environment. This new program is a comprehensive tool that includes many functions such as patient demographics and appointment scheduling, patient registration, care plans, clinical documentation and medical orders.

A special launch event was organized with guest speaker and race car driver Bertrand Godin. The car racing theme was chosen to illustrate how race and SCHIS teams have to work fast and in synch and be prepared to meet the unpredictable. |

From left to right, the SHCIS team: Carole Lalande, Nancy Gionet, race car driver Bertrand Godin, Marie-Annie Lagacé, Luc Milot and Diane Poirier.

## A Word from the Administrator

Dear readers,

Shriners Hospitals are buzzing with activity, even in the summer!

In this issue of *Orthopedik*, we are delighted to share good news about the Joint Boards' decision regarding the construction of a new hospital at the Glen Yards. This decision was made possible by the support and cooperation of the Shriners, the Hospital staff, our colleagues at the Ministère de la santé and the City of Montreal, our patients'

parents and the Friends of the Shriners Hospital.

As you read through this issue, you're sure to notice the underlying theme that binds our work here at the Shriners: it's teamwork. Working as a team is a proven way of offering children and families the best possible care because it brings together people whose talents, perspectives, experience and diverse expertise make the whole more than the sum of its parts.

This team spirit is reflected in the cooperation that takes place between hospitals to ensure the well-being of patients or further the advancement of research—both terrific examples of health care professionals, parent and orthopedists all working together to treat a specific condition. The spirit of giving that inspires the Shriners also helps make our Hospital what it is. Every team member has an important role to play so that we can help children defy the odds.

Have a safe and healthy summer.

Céline Doray

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We want to hear from you! If you would like to ask us a question or suggest a topic for an article in an upcoming edition of the *Orthopedik*, please contact us at [gfouellet@shrinenet.org](mailto:gfouellet@shrinenet.org) or 514-282-6990.

**The Orthopedik** can also be downloaded from [www.shrinershospitals.org/Hospitals/Canada](http://www.shrinershospitals.org/Hospitals/Canada).

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# Anna-Marie's Triumph Over Pain

[Emmanuelle Rondeau] Anna-Marie took a year off school in Barbados to come to SHC- Canada for treatment. She was born with severe Blount's disease meaning that the inner part of the tibia below the knee fails to develop normally causing progressive bowing. For Anna-Marie, it affected both legs with acute bowing of her left leg.

Anna-Marie first underwent surgery to halt the progression of disease at the age of 7 in Barbados. Her condition continued to deteriorate and her doctors felt that there was nothing else they could do. Walking had become so painful that the 15 year-old had to use crutches and sometimes even a walker, to move around.

"I accepted the deformity and I didn't care what my leg looked like, but I hoped to find a way to stop the pain", recalls Anna-Marie.

That's when she took control of the situation. Having heard of the Shriners through the parent of a former patient, she searched on the internet and got in



Anna-Marie with registered nurse assistant Yvonne Rock

touch with SHC-Canada. With the help of her sponsoring family, she went through the rigorous application process.

Anna-Marie flew to SHC-Canada for her first consultation on April 16, 2007 and found renewed hope. She was followed by Dr. Reggie Hamdy at the Shriners and was referred to orthopedists Dr. Mark Burman and Dr. Rudy Reindl from the Montreal General Hospital for her particular treatment.

They formulated a plan in two stages. In October 2007, Dr. Burman completed arthroscopic surgery to fix the meniscus in her knee and Dr. Reindl performed an intra-articular osteotomy (cutting of the bone) to correct the bone at the knee level. This helped align the knee, and once this healed, she would need a second surgery to correct the deformity. While in Montreal, she stayed with a sponsoring family and between surgeries she went home.

Anna-Marie returned to the Shriners for the second surgery, on January 27, 2008.

This time, Dr. Reindl straightened the 13 degree curvature of her femur and performed an osteotomy as well as the installation an Illizarov fixator to correct the 60 degree curvature of her tibia. Anna-Marie lived with the Illizarov apparatus on her leg for three months, and increased the tension on the apparatus to straighten her leg four times a day herself.

According to Dr. Reindl, physiotherapy plays a vital role in her recovery. Her severe Blounts caused damage requiring that the strength and flexibility of her leg has to be rebuilt.

*"I had to learn to walk without the deformity and the pain, and at first it was a strange feeling. Every once in a while, I still expect to get up and feel the familiar pain, but thanks to the Shriners it is no longer there!"*

"Anna-Marie is still at risk of developing arthritis in her damaged joint, but our hope is that this treatment should give her at least 20 pain-free years", concluded Dr. Reindl. "Once she has recovered from this surgery, we will

evaluate if she needs a correction of her right leg as well."

Anna-Marie has now returned to Barbados. A few days before her departure, she spoke of swimming in the ocean and of starting university in tourism management and languages in the fall. |



Pre-operative picture of left knee and the same knee after installation of the Illizarov fixator.

[Reggie Hamdy M.D.] World-wide, it is estimated that each year more than 100 000 babies are born with congenital clubfoot.

At Shriners Hospitals for Children alone, 3,272 children were treated in 2003 for a clubfoot or clubfoot related disorder. The goal of clubfoot treatment is to obtain

a functional, pain free foot with good mobility. The treatment of clubfoot can be surgical, non-surgical or a combination of the two.

## The Ponseti Technique

Drs. Reggie Hamdy and Thierry Benaroch introduced the Ponseti technique to SHC-Canada in 2001. The technique involves three years of treatment, which is extremely intensive and demanding for families. However, with a success rate close to 90%, parents and health care professionals feel that it is well worth it.

When infants 4 to 6 days old are referred to SHC-Canada for treatment, they are first evaluated by an orthopedic surgeon. Such was the case for Shawn Pierre Bussi eres who first saw Dr. Hamdy on August 24, 2007. "After we saw the surgeon, the nurse explained every step of the technique, and what would be expected from us. Absolutely everything she told us happened as she said it would. We had no surprises", recalls Pierre-Paul Bussi eres, Shawn's father.

The first part of the technique involves the surgeon skillfully manipulating the feet which are then immobilized with the precise, gentle molding of a cast. For a period of five to six weeks, families return to the Hospital on a weekly basis.

At each visit, the cast is removed; the feet are further corrected with more manipulation and a new cast is applied.

*While the infants are in a cast, parents are not able to enjoy some of the usual bonding activities with their babies such as bath time. "On each visit to the Hospital for a new cast, once the old one was removed, the nursing staff gave us bath time with Jacob. For the first six weeks of his life it was the only time we could touch his legs and kiss his toes. We treasured those moments," shares Adrienne Saba, whose son Jacob is treated by Dr. Benaroch.*

Once the pediatric orthopedic surgeon is satisfied that he has obtained the desired realignment of the foot, he performs tendon surgery to correct the position of the heel. Following the surgery, the baby spends three more consecutive weeks in a cast.

After the cast is removed, parents play a crucial role in the treatment, as the

*"For me, the most difficult thing about this time was the way strangers reacted to Jacob, whose legs were in full casts. They would assume the worst, and ask me if I had dropped him or if they had broken his legs at birth. But I was always able to explain why he needed this treatment," remembers Mrs. Saba.*

success of the next two phases depends entirely on them. First, the child is fitted with shoes attached to a bar. To maintain the proper alignment of the corrected foot, it is vital that the baby wear the shoes and t bar for 23 hours a day for three months; then, only during nap time and at night until the age of 3 years old.

"While Shawn was in a cast, it was relatively easy for us. But now, we have to work harder. We wait until he is asleep to put the shoes on with the bar. He is a handful and he wakes up during the night and actually manages to take them off, but he continues to respond well to treatment", explains M. Bussi eres. Children are monitored closely and parents must persevere through this time, otherwise the treatment may need to be repeated.

Each step of the treatment is carefully documented. These show Shawn's progress through the treatment from August 2007 to April



Nurses H el ene Gauthier, Pierre Ouellet and Mario Rinaldi are responsible for casting as well as teaching parents about the technique. They help them cope with the social and emotional impact of the treatment. As well, the nurses work in collaboration with the doctors and refer the family to physiotherapy or occupational therapy services if required for appropriate development.

At three years of age, if the parents have been diligent, the treatment is usually finished. As recognition for their effort and for being such an integral part of the health care team, parents are awarded a special certificate.

**The Ponseti Team: Mario Rinaldi, Dr. Thierry Benaroch, H el ene Gauthier, Dr. Reggie Hamdy and Pierre Ouellet (seated).**



*"It is not easy, but it is harder to see your child suffer. Jacob's toes faced completely inwards and today he is walking normally. That's amazing to me. I look at it as a gift that will last him a lifetime," concludes Mrs. Saba.*



Jacob playing peek-a-boo

## Evaluating the Results

There is currently a clinical outcomes research project underway among 7 Shriners Hospitals including SHC-Canada to assess the impact and outcomes of the Ponseti technique in the correction of clubfoot deformity. For research purposes, children treated at Shriners are closely evaluated from birth to 3 years of age. At 6 specific time points the change in the level of deformity is measured in a standardized fashion using photos, a classification scale and a parent questionnaire. This project will confirm if these outcomes measures are valid and appropriate. The data, once analyzed, should also objective evidence of the results of the Ponseti technique. |



2008.

# Healing the Body and Soul

**[Stephanie Gould, physiotherapist]** Shortly after New Year's Day 2006, Valérie Villeneuve took her son to the Emergency Room of the Children's Hospital of Eastern Ontario (CHEO). He was feverish, disoriented and had a purplish rash. Tommy was diagnosed with meningococemia, a severe and very dangerous blood infection. He spent almost 4 months in the Intensive Care Unit at CHEO. He required intubation, below-knee amputations, finger amputations, skin grafts and dialysis just to survive.

At the end of April 2006, Tommy was transferred to The Montreal Children's Hospital (MCH) in his home province of Quebec where the health care team managed his end-stage kidney disease, secondary malnourishment and orthopedic complications. In July 2006, Dr. Francois Fassier operated on Tommy's residual legs to apply two Ilizarov fixators in order to straighten out his knees.

Once the fixators were removed, in September 2006, Tommy was referred to SHC - Canada to initiate rehabilitation and prosthetic training. He faced many challenges and had developed a tough shell.



The first objective was to establish trust between Tommy and his health care providers. In physiotherapy, early sessions were spent building a trusting relationship. For the first few weeks, his appointments were quiet as he would hide to avoid contact. Slowly, we initiated play and then a dialogue about goals. It was very important that Tommy be involved in goal setting and in determining his rewards. Even seemingly simple things, like putting on the silicone liner socks for his prostheses, were made difficult by his scarred skin and the hypersensitivity of his residual legs. But with a clear plan and by breaking down the goals into smaller daily activities, the process was successful.

Once Tommy tolerated the liners, the next goal was to stand. He needed to strengthen, stretch and get used to bearing weight on his sensitive legs. He started with simply wearing the prostheses, then gradually standing on a tilt table. On a fairly regular basis, the thin, fragile skin on his legs would break down from the pressure and we would have to take several days off from the standing activities until it healed.

But Tommy persevered. He developed pride in his achievements, and by the end of spring 2007 Tommy was walking, first with a walker and within weeks he switched to two canes. Today, he goes to school, participates in physical education classes and does physiotherapy in his own community. He still faces several revision surgeries as well as a kidney transplant. When he returns to the Shriners for appointments, he speaks with all of us, smiles, and even laughs. The sight of him being a happy, ordinary kid is the most satisfying reward for everyone who has known Tommy through these tough years.

Tommy's successful recovery is a result of the impressive communication and coordination that occurred between all care givers involved. This was a wonderful example of multi- and inter-disciplinary care. We used rounds and team meet-

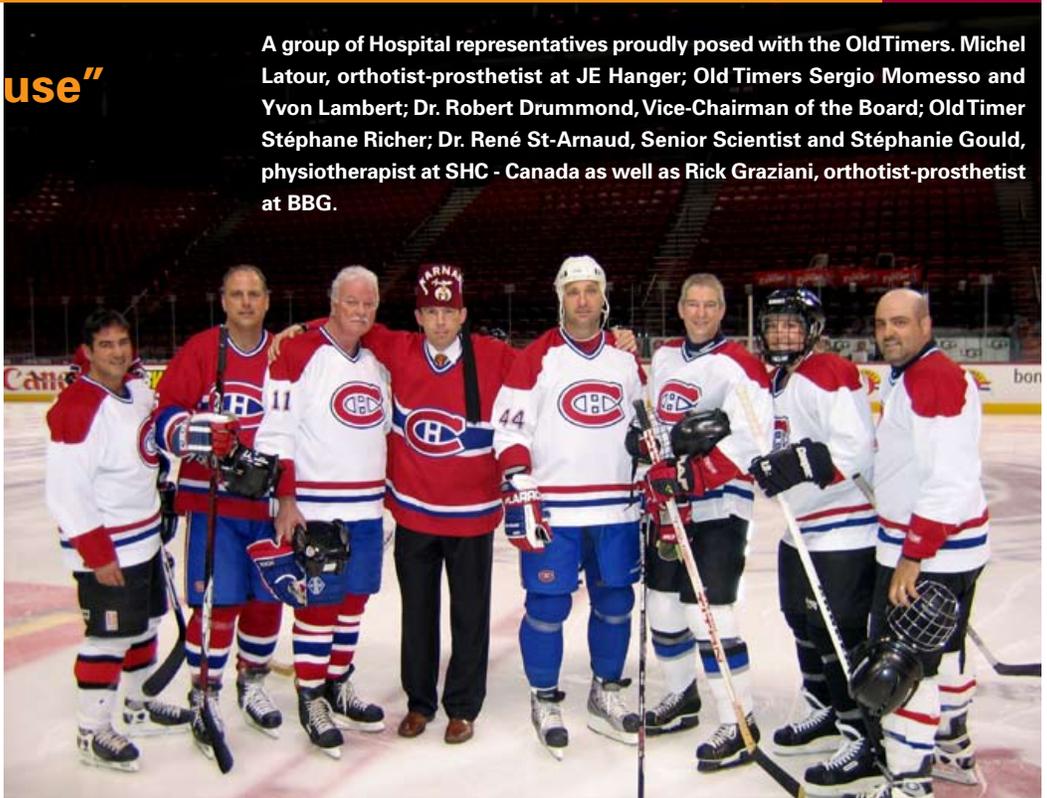


ings as a way of communicating among providers, as well as inter-establishment meetings that involved all Tommy's care givers: parents, community health care workers, members of the MCH transplant team, members of the orthopedic and rehabilitation teams from the Shriners Hospital and representatives from his school. This high level of communication allowed everyone to work as a unified team in order to help Tommy defy the odds. |



## “Hockey for a Cause”

More than 80 amateur hockey players gathered on May 4th for a few hours of fun for a good cause. For many of them, it was a dream come true; to play on the home ice of their favourite hockey team “The Montreal Canadiens” and with Canadiens “Old Timers” to boot! The group of friends and acquaintances of the organizer, George Warash, were able to raise \$21,000 for the Shriners Hospitals for Children - Canada. |



A group of Hospital representatives proudly posed with the Old Timers. Michel Latour, orthotist-prosthetist at JE Hanger; Old Timers Sergio Momesso and Yvon Lambert; Dr. Robert Drummond, Vice-Chairman of the Board; Old Timer Stéphane Richer; Dr. René St-Arnaud, Senior Scientist and Stéphanie Gould, physiotherapist at SHC - Canada as well as Rick Graziani, orthotist-prosthetist at BBG.



Illustrious Ronald Snow from Montreal is presenting a donation of \$42,000 to Hospital Administrator, Céline Doray, on behalf of the members of the Mystic Fund. It was created among the Nobles of Al Azhar Temple in Calgary for the betterment and comfort of the patients at the Shrine Hospital in Montreal. The funds will be used for the purchase of a manifold for Oxygen, Nitrogen and Nitrous Oxide.

## “151,000 Thanks”

Earlier this year, the Rameses Shriners donated \$151,000 to help defray the cost of humanitarian work. Of this, \$100,000 was donated directly to SHC-Canada and the balance was donated through SHC-Canada to our Botox Outreach Clinic in Sudbury. This means that many children in the Sudbury area can receive their Botox treatment from Dr. Reggie Hamdy locally instead of having to travel to Montreal. |





## History repeats itself thanks to the Belleville Shriners



They both have sparkling blue eyes, a dazzling smile and received life changing treatment which allowed them to walk at SHC-Canada. One was a patient this past winter, the other's story began in the 1920s. Four year-old Keirra Macleod and 86 year-old Lillian Waters have a special place in their hearts for the Shriners Hospital, and especially the members of Belleville Shrine Club which is a part of the Rameses Shrine (Ontario).

### Keirra's Story

On February 14, 2008 Keirra underwent a 10 hour neurosurgery. "Doctors fixed my nerves on my back so I can walk better," explained Keirra. Born with cerebral palsy, she couldn't sit in certain positions and even had trouble walking with a cane. Following the surgery, the change was apparent: Keirra could sit with no problem, cross her legs, stand without support and her walking abilities improved dramatically. According to her mother "She can do so many things now... including wiggling her toes! Shriners have given her the chance to

dance at her prom and to walk down the aisle at her own wedding."

### Lillian's Story

The relationship between the Belleville resident Lillian Waters and the Shriners began in the early 1920s. Living in Montreal, she was only a few months old when she was diagnosed with a form of tuberculosis - a bacterial infection that could impede her ability to walk, if she ever did. She was referred to the Shriners Hospital for treatment. "I was one of the first patients through the door," she said with a smile. Mrs. Waters spent the next four years of her life at the hospital, at no expense to the family. "I came out with braces and went into school - they still weren't promising I would ever walk." Over the next several years, she made several return visits to the hospital for follow-up treatments and at the age of 10, she took her first unassisted steps while at the facility. "I was scared to trust that I could walk on my own. Shriners were so good to me over the years and I've never forgotten them." |

## Celebrating the Shrine!

[Guylaine Ouellet] Friday, June 6 was the inaugural International Shrine Awareness Day. It was a day of recognition for Shriners of North America - chosen because the Imperial Council was formed on June 6, 1876.

### Who are the Shriners?

Shriners of North America is a fraternity. It started in Manhattan in 1870, members of what's widely considered the world's oldest fraternity, Masonry - wanted a fraternity that stressed fun and

fellowship instead. Actor Billy Florence conceptualized the idea for a Near East-themed organization after attending a party thrown by an Arabian diplomat. Walter M. Fleming, M.D. added the structure to Florence's proposed pomp-and-circumstance, drafting the fraternity's name, initiation rites, rituals and rules. Together, they designed the new fraternity's emblem, devised a salutation and determined the red fez with a black tassel would be the group's official headgear. And local Shriners chapters, it was decided, would be called Temples. The first such chapter, Mecca Shriners, met in New York City in 1872. |



On Friday, May 9, 2008, 50 Shriners from across Canada and the northern United States attended SHC-Canada's annual Hospital Seminar. Special guest Illustrious Sir Ralph Semb participated in the event and gave an inspiring talk.

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