



HOLIDAYS AT THE MUHC: a time to celebrate our team spirit and our achievements!



Another (intense!) year has passed us by and we must thank everyone who has worked tirelessly on the McGill University Health Centre (MUHC) redevelopment and transformation.

From a dream to a concept and now to reality, the MUHC 2015 is at our doorstep. To give you a sense of the magnitude of the challenges we have surmounted as a community and the extent of resources that were mobilized to make the New MUHC a reality in 2015, we chose to feature in this issue of *enBref* seven of the many teams who deserve our gratitude. They worked on different aspects of the transformation, in various missions and on various sites, without ever losing sight of our raison d'être... our patients and their families.

But we realize this represents only a fraction of the people who contributed a few pieces to this 14 000-piece puzzle that will take shape over the next year.

So to all the teams and those who individually contributed to this collective effort, THANK YOU!

And to our entire MUHC family, HAPPY HOLIDAYS!

SURGICAL AND PERI-OPERATIVE CARE



Pictured are some of the Glen site's Interventional Platform (IP) committee members responsible for developing a more unified physical and operational entity that will re-group procedures such as surgery, interventional radiology, cardiology, gastroenterology and endo-urology. They have been working hard to ensure that our facilities adapt more easily to future changes in healthcare delivery and medical technology. Among the many potential benefits of the new platform are reduced duplication of preop/recovery space/staff, reduced duplication of procedure room space and synergy of clinical expertise.

From left to right, bottom row: Lucia Ciofani, Dr. Giuseppe Martucci, Dr. Renzo Cecere, Donna Stanbridge, Liette Langlois, top row: Alyson Turner, Dr. Roupen Hatzakourzian, Dr. Sero Andonian, Dr. Kosar Khwaja, Ellen Seguin, Dr. Michael Tanzer, Dr. Alain Bitton, Robert Kuy, Patrice Senecal, Dr. Antoine Loutfi, Dr. Arvind Joshi.

(Continued on pages 4 and 5)

For all your hard work – the MUHC wants to thank you!

Staff Celebrations Day to kick off Glen site inauguration weekend in June 2015

Everyone at the McGill University Health Centre (MUHC) has gone

above and beyond in preparation for the big move to MUHC 2015. It's been and continues to be an extremely busy time, to say the least.

But come June 2015 those who are moving, whether it be to the new site, the Montreal General Hospital (MGH) or Lachine, will be settled in. It will then be time to celebrate this incredible achievement and recognize those who are at the heart of the MUHC – you!

(Continued on page 7)

You're invited!		
JUNE 2015		
19 FRIDAY	20 SATURDAY NEW HOSPITAL INAUGURATION	21 SUNDAY
Staff Celebrations	Walk for Montreal!	Community Festival

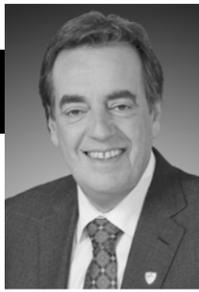
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Message from **NORMAND RINFRET**

Season's Greetings from the Director General and CEO of the MUHC

As always, the advent of a new year is the perfect time to reflect on past achievements and future endeavours. It also feels right to express gratitude for all that is good in our lives, both professionally and personally.

I am grateful for the fact that we have qualified healthcare professionals providing exceptional care to our patients. When I consider the qualities of our people, the words that spring most to mind are loyal, dedicated, compassionate, proud, talented, supportive and tenacious. After all, our focus never strays from our mission, despite financial constraints and a multitude of daily challenges. Thank you for helping the MUHC to make a difference in the lives of our patients and their families – you are each deeply appreciated.

I am also grateful that the Glen site is built and that our scheduled moves in 2015 are on track. Thanks to the Legacy Committee and more than 300 volunteers, celebratory events will pay tribute to our remarkable past and auspicious future. In addition, thanks to our foundations, donors and community, we continue to have their unwavering support. Finally, I am grateful for family, friendships and the little things in life that make one smile.

As you reflect on what you are grateful for, please accept my warmest wishes for health and happiness throughout the festive season and the New Year!

Normand Rinfret, CRIA
Director General and Chief Executive Officer

LAUNCHING THE “THANK YOU” TO OUR STAFF PROJECT

Our teams have been working hard to provide the best care for patients across the McGill University Health Centre (MUHC) as we plan the move to the new hospital site. The MUHC Legacy Committee is planning a very special day of celebrations on June 19, 2015 as a way of saying thank you to our staff and to recognize all that they do for our patients.

As part of this initiative, the Staff Celebrations Subcommittee has launched a campaign called Say “Thank You” to Our Staff. Over the coming weeks committee members will be strategically placing display cases containing blank thank-you cards throughout patient care areas and at hospital entrances. Patients, visitors and family members will be encouraged to write thank-you notes, which will be displayed on a “Gratitude Wall” at the Staff Celebrations Day in June.

We hope you will take a moment to familiarize yourself with these boxes and encourage patients, visitors and family members to express their appreciation to our staff.

We are pleased to have secured the sponsorship of Kamik, which has graciously agreed to fund this project.

The display cases will be moving around every few weeks in order to target as many key areas as possible.

If you work in a high-volume patient care area and would like to have a display case placed in your department, please contact Renee Gillman at ext. 36436 or by email at renee.gillman@muhc.mcgill.ca.



1. Teams have eight minutes to complete each task. Infection Control Practitioner France Hamel shows us her fancy timer. “The competition is exciting for the organizers, too,” she says.



2. Yellow team members work fast to complete the Donning and Doffing challenge. They must correctly number the steps in putting on and removing Personal Protective Equipment (PPE).



3. As she adjusts mask N95, nurse Sharon Johnson, from the orange team, listens to instructions from a fellow contestant. “The race is quite motivating,” she says. “We learn in a different way.”



4. With two minutes to go, nurses from the blue team think carefully before completing an Occupational Health and Safety questionnaire on vaccination and needle injury.

Nursing workshop gets makeover and becomes The Infection Control Amazing Race!

Nurses from Unit 15 (Internal Medicine) at the McGill University Health Centre (MUHC) Montreal General Hospital were pleasantly surprised when they took part in a nursing workshop in September. With creativity and hard work, Nursing Professional Development Educator Shella Moyses, in collaboration with Infection Control Practitioner France Hamel, transformed the learning experience into an exciting competition.

The Infection Prevention and Control Amazing Race comprised five stations in which teams of nurses performed a few physical and many mental challenges which tested their knowledge about infection control policies and procedures.

After heated interactions and lots of laughs, Moyses announced the Race's winning team, while Hamel talked about the unit's impressive success rate and mentioned a few areas where improvements are needed to reach the Hand Hygiene Goal.

In the end, both organizers, alongside Assistant Nurse Manager Elisa Ford, Clinical Nurse Specialist Maria-Helena Dias and Nurse Manager Joan Legair, won kudos from participants for their hard work at making the MGH Infection and Prevention Control Amazing Race a big success!



5. The Jeopardy! theme song plays in the background, as “host” Shella Moyses asks questions from categories such as “Don't eat poop,” “Those nasty critters” and “Clean me up, Scotty.”



6. It's all about team work! Nurses from the red team rack their brains to answer the Infection Control Crossword Puzzle. “The workshop is like being back at school, it makes things easier to remember,” says nurse Marta Walat (not pictured).



7. After teams complete the “Wipe Those Bugs Away!” task, Nurse Manager Joan Legair uses Glo Germ's revealing ultra-violet light to evaluate their performance. “I conduct weekly cleaning audits,” she says. “This is a great opportunity for nurses to see how they're doing.”



8. And the winner is... the green team! Participants are ecstatic and will soon enjoy their prize: delicious chocolates.



9. France Hamel, Elisa Ford, Shella Moyses, Maria-Helena Dias and Joan Legair embrace after the race. Asked if they would do it again, many nurses answered, “Definitely!”

So much work! Thank You!

CANCER CARE



In 2015, the Cedar Cancer Centre and the Hematology-Medical Oncology-Transplant Inpatient Unit will consolidate all CANCER CARE and services on the Glen site. Pictured is one of multiple teams and workgroups made up of clinicians, professionals, patient representatives and partners who have shared ideas and worked in different areas, such as the Urgent Care Centre, the Hematology-Oncology Inpatient Unit, the Ambulatory Clinics, the Treatment Centre and the Supportive and Palliative Care Services, on patient and work flows, integration of electronic tools, development of the integrated clinic master schedule and the harmonization of practices.

1. Dr. Scott Owen, 2. Dr. Michael Sebag, 3. Dr. Christine Legler, 4. Elizabeth Mokrusa, 5. Dr. Simon Tanguay, 6. Anne-Marie Charbonneau Allard, 7. Pardeep Trehan, 8. Dr. Carolyn Freeman, 9. Claude Lemieux, 10. Lucie Tardif, 11. Dr. Tarek Hijal, 12. Barbara Himsl

Harmonized, front-line operations at the point of care, centralized appointment booking and optimized exam room utilization were included in the goals in planning for the out-patient clinic clusters at the Glen. Pictured here is the AMBULATORY CARE leadership team responsible for implementing the new service model, with support from the Transition Support Office resources who coordinated multiple workgroups comprised of physicians, nurses, operations management, process engineering consultants and front-line staff across all missions, in this formidable operations re-design project.

AMBULATORY CARE



1. Dr. Antoine Loutfi, 2. Danielle Beaucage, 3. Nathalie Frechette, 4. Lynn Lebel, 5. Anne-Marie Lancot, 6. Dr. Carolyn Freeman, 7. Stéphane Timothée, 8. Richard Fahey, 9. Marie-Josée Stonely, 10. Dr. Thomas Maniatis, 11. Mario DiCarlo, 12. Bridget Callaghan, 13. Monique Forest, 14. Ellen Seguin, 15. Brian Bradley

CHANGES AT THE NEURO



Preparation for the physical separation of THE NEURO from the Royal Victoria Hospital (RVH) in 2015 has involved tremendous dedication from physicians, staff, volunteers and patient representatives from The Neuro and across the entire MUHC. The Transition Support Office, Technical Services and Planning have specifically supported the implementation of new ways of working as well as renovations to maintain safe and high quality patient care and they have ensured support services that were previously delivered by the RVH.

1. Sylvie Lussier, 2. Siva Moonsamy, 3. Lucia Fabijan, 4. Eid Haddad, 5. Diane Rizi, 6. Rosie Senerchia, 7. Marie Courchesne, 8. Viola Grasso, 9. Sandra McPherson, 10. Maria Mastracchio-Lafontaine, 11. Fred Pennell, 12. Teresa Mack, 13. Emery Leblanc, 14. Katherine Kowal, 15. Justin Ciampini, 16. Sarah Zagury, 17. Nevine Fateen, 18. Julia Gibbs, 19. Rafal Smigiel, 20. Adam Dudeck



MEDICAL IMAGING

New technologies and a technical platform that is 40 per cent bigger await the MEDICAL IMAGING team at the Glen site. With the help of the Transition Support Office, the team is working on many challenges, including: processes and work organization review, deployment of new systems, coordination of activities transfer and specialized training of technical personnel.

1. Jeannette Piedade, 2. Maria Ianhantuono, 3. Sandra Hamelin, 4. Michel Picard, 5. Julie Dumaine, 6. Isabelle Dubé, 7. Alexandra Rivard Fradette, 8. Lyne Brisebois, 9. Lise Proulx, 10. Heather Dewar, 11. Johanne L'Écuyer, 12. Alain Gauvin, 13. Sylvie Landry

In 2012, Barbara Izzard, the previous Associate Director of Nursing at the Montreal Children's Hospital (MCH), and Sharon Taylor-Ducharme from the Transition Support Office, created a Transition Steering Committee to help structure PEDIATRIC CARE and mobilize the MCH staff in preparation for its new environment at the Glen. Since then, more than 20 clinical teams across the MCH have participated in transition efforts, to consolidate teams, harmonize practices and redesign workflows within the peri-operative services.



PERI-OPÉRATIVE PEDIATRIC CARE

1. Sylvie Dessureault, 2. Dr. Annie Marleau, 3. Karina Olivo, 4. Dr. Vincent Collard, 5. Sophie Brisebois, 6. Manon Leclair, 7. Maria Santos, 8. Sharon Taylor-Ducharme, 9. Nadia Eldaoud, 10. Dr. Mohamed El-Shirbiny

LACHINE TRANSITION



This interdisciplinary team has been working hard since December 2010 to prepare for the transfer of the long-term respiratory care program at the Montreal Chest Institute (MCI) to the Lachine Hospital's Camille Lefebvre Pavilion. Their many objectives include: to ensure the upgrading of facilities, to develop a care team to meet the needs of the new unit of 44 beds and to minimize the impact of the transition on the residents and their families.

1. Gabriel Leonard, 2. Lorine Jean-Marie, 3. Emery Leblanc, 4. Ellen Leibovich, 5. Chantale Bourdeau, 6. Lyne Noel, 7. Dr. Ron Olivenstein, 8. Dr. Sylvie Douyon, 9. Rebecca Burns, 10. Josée Gendron, 11. Pina Ventulieri, 12. Claude Briault, 13. Michèle Czerednikow, 14. Jocelyne Faille, 15. Élodie Viau. Not pictured: Dr. Luc Daudelin, Rocco Montesano



Hubert Jacob

Tackling Crohn's disease

A LIFE-ALTERING OPERATION GIVES A LAVAL TEEN A NEW LEASE ON LIFE

Hubert Jacob was only 13 years old when his parents took him to the Montreal Children's Hospital (MCH) Emergency Department at the McGill University Health Centre (MUHC), where he was admitted for dehydration caused by an extreme loss of fluids as a result of acute diarrhea. The diagnosis soon followed: Hubert had Crohn's disease, a condition that causes inflammation of the gastrointestinal (GI) tract.

What followed seemed like a whirlwind of hospitalizations, treatments and struggles. "From age 13 to 14, we were in and out of the hospital. We spent birthdays, holidays and several weeks on end in the hospital. Hubert was immunosuppressed, and extremely sick. He just wasn't gaining weight and he wasn't growing," says his mother Madeleine.

In a period of 20 months, Hubert was hospitalized five times and missed almost two years of high school. At age 14, he was only four feet and 7 inches tall and weighed just 77 lbs. Hoping to find a solution that would get his growth back on track, Hubert and his family, along with his gastroenterologist, Dr. Terry Sigman, decided to try another option: surgery.

On July 2, 2011, Dr. Sherif Emil, director of General and Thoracic Surgery at the MCH, removed Hubert's entire colon by laparoscopy (also called minimally invasive surgery) using a camera and several very small incisions. He was left with an ostomy bag to collect his stool until his intestines are reconnected at a later date through a second surgery.

The change, says Madeleine, was night and day. "It was amazing to see him slowly get better from that moment forward and to resume his regular activities."

Today, Hubert is almost 18-years-old and back to being his active, happy-go-lucky self. Now a student at Cégep de Saint-Laurent, Hubert hopes to eventually study Health Sciences, so that he can put his personal experience as a patient to use as a future doctor.

Hubert recently came to the hospital to cheer on another patient who had undergone the exact same operation. "It made all the difference to that patient's recovery," says Dr. Emil. "Night and day, as the nurses have said!"

WHAT IS CROHN'S DISEASE?

When a patient has Crohn's disease, all of the body parts that deal with processing food can become inflamed. The walls of the inflamed area thicken and develop a cobblestone-like surface. This can cause stomach pain, vomiting and loss of appetite, among others. What's more, there is no cure for Crohn's disease – the management of the disease is done through controlling the symptoms.

Board of Directors highlights

In order to keep the community apprised of its decisions, our Board of Directors of the McGill University Health Centre (MUHC) has decided to report regularly on resolutions that it has passed. The items below relate to decisions taken at the November 4th meeting.

The Board of Directors approved:

- The Entente de gestion et d'imputabilité 2014-2015 to intervene between the MUHC and the Agence de la santé et des services sociaux de Montréal.

On recommendation from the Council of Physicians, Dentists and Pharmacists, the Board approved :

- The appointment of Dr. Kevin Petrecca as MUHC Chief Department of Neurosurgery.

The Board of Directors approved the issuing of public tenders for the following:

- Project no.: 10-716 MRI Lachine
- Project no.: 10-227 Psychiatry ER /Psychiatry Short Stay Unit

Trauma patient Avery Palevsky thankful for his care at the Montreal General Hospital

It was a beautiful spring morning when Avery Palevsky headed out on his bike for a long Sunday cycle. "I had a smile on my face from ear to ear – nothing could have been nicer," he says.

But his happy face demeanor was short lived when Palevsky lost control of his handle bars. The Tour de l'Île de Montréal was underway so he moved off the bike path onto the streets. "Within the blink of an eye I lost control and down I went," he recalls.

"I was in excruciating pain, but I didn't believe I had done anything serious, however, an ambulance was called and I was rushed to the Montreal General Hospital," says Palevsky. "I naively thought I would be sent home quite quickly but after discovering I had a damaged artery and broken ribs I was told I would need to stay in the hospital for a bit and I required surgery."

Palevsky will tell you that the entire time he was at the Montreal General he was treated like a person. "I didn't feel like I was a number. Whenever anyone came to see me they were always kind and caring. From my trauma doc explaining my situation

to me, to the lovely lady who adjusted my bed so I was more comfortable, to my pain nurse who ensured I was comfortable from the moment I arrived to my discharge and at home, it was all appreciated."

"I was there for eight days and instead of eight days from hell it was honestly an

unbelievable experience. It's not like they knew me, or I was getting special service – these people have genuine kindness. It was a completely, unexpected, very welcome experience. I don't hope to do it again, but if I did I would do it at the Gen!"



MGH E12 East team, from left to right, top row: Channing Allen, Caroline Jimenes, Paula Teixeira, Andreane Corbeil; bottom row: Nancy Dezeeuw, Krista Brecht, Sonia Sandberg, Tin Wai Tjoe, Maria Luisa D'Anrono, Melyssa De Simone

Continued from page 1 - FOR ALL YOUR HARD WORK – THE MUHC WANTS TO THANK YOU!

Friday, June 19, 2015 – The Staff Celebrations Day

This special day runs from 7 a.m. to 7 p.m. and will be a chance for all employees to come together and enjoy a free meal courtesy of Sodexo (breakfast, lunch or dinner depending on what you register for). A special lunch is being organized at Lachine. And for those not moving to the Glen, shuttle buses will bring staff from the MGH and Neuro to the event. There will be live music, more than 150 door prizes, raffles and an overall fun ambiance. Don't miss it!

Space is limited so be sure to reserve early on muhclovesmtl.ca/events.

The party continues throughout the weekend with major events and activities as part of the inauguration celebrations of the new hospital:

Saturday, June 20th – Walk for Montreal! / Ribbon Cutting / Evenko Concert:

Thousands of Montrealers, including Mayor Denis Coderre, will come out to show their pride in our wonderful city by walking together from Dawson College to the new Glen site. The Walk will be followed by the official ribbon-cutting ceremony and free live concerts organized by Evenko.

You can register for the walk for \$5 and receive a Walk Kit that includes a commemorative t-shirt, a noisy clapper and a bracelet allowing you access to the Evenko concert. Register online at marchezpourmtl.ca

Sunday, June 21st – Free Community Festival:

Bring your friends and family to the Glen site for a full day of activities for all ages, including a Charity Ball Hockey Tournament, historical exhibits from our hospitals' pasts, media and sports celebrities and all-day live entertainment on the Evenko Stage. And of course, a few surprises await!

For more information about the MUHC's Legacy Year, full details of the inauguration events and great stories from the past, visit muhclovesmtl.ca. A huge thank you to the community for stepping forward to put on this celebration, as well as our volunteer committees for their hard work! To learn more about these committees, you can visit the "About" page at the above website, and for a full list of the sponsors who are making this all possible, visit our "Sponsors" page.

MUHC gets keys to the new hospital at the Glen site



sure that blocks A-B-C-D are fully up and running—from light switches to equipment, they will ensure that everything is ready to welcome patients. Over 8,500 MUHC staff members will receive training and orientation to prepare for the first patient move scheduled for April 26, 2015.

On November 7, 2014 the McGill University Health Centre (MUHC) gained full access to the new facilities at the Glen site. This gave us the green light to move ahead with the activation process and start preparing to receive patients, testing equipment and training healthcare professionals at the site.

Normand Rinfret and the Health and Social Services Minister, Mr. Gaétan Barrette, helped us mark this exciting achievement by taking a guided tour of the Glen site, which was also attended by local media.

Since October 1, Early Activators have been hard at work in the Research Institute of the MUHC (block E) making sure that all equipment, systems, furniture and other elements are there, have been tested and are ready to go. The Research Institute's move is scheduled for February 2015.

Over the next few months, hundreds of support and clinical Early Activators will make



Communicating to patients about the moves

When is my clinic moving? Where is it going? How will I get there? These are just some of the questions our patients are asking as we get closer to our big moves in 2015.

The Public Affairs and Strategic Planning department has prepared some easy-to-use tools that will help you communicate this important information to your patients and hopefully leave them feeling well-prepared for the changes to come.

One of these tools is a We're Moving poster. It can be personalized with your clinic or department name, moving date, new name and address. You can print it on your own printer and post around your clinic and department.

Another way to alleviate some of your patients' stress is to provide them with information about how to get to their clinic or department's new location. The bilingual Getting to the Glen and Getting to the MCH handouts explain how to get to their desired location, travelling by car, public transit, by bike or by foot. Copies of the handout can be ordered from Printing Services.

These tools are available on the Intranet, in the 2015 section under Activation and Transfers > Useful Tools.

For information about the MUHC's transformation and how the moves will be carried out, please visit our revamped website at www.muhc.ca/2015.

We're moving in 2015!
Every detail of the design of the new Glen site of the MUHC has been carefully thought out with one goal in mind: to provide our patients and families with the same exceptional medical care, just enhanced by custom facilities, state-of-the-art equipment and healing environments.

How do I get there?
McGill University Health Centre
Glen site
1001 Décarie Blvd.
Montreal, QC H4A 3J1

ARRIVING BY CAR
Cars: The hospital's public entrance on Décarie Blvd. is easily accessed from highways 15, 20 and 720. The public parking lot is located underneath the main plaza and comes complete with a navigational system that indicates the specific level, zone and lane of free spaces.

ON déménagement! WE'RE moving!
(NOM DE LA CLINIQUE/ NAME OF CLINIC)
(date de déménagement/moving date)

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Centre universitaire de santé McGill / McGill University Health Centre

YOU ASKED FOR IT AND THE MUHC DELIVERED!

New online Learning Management System has been launched

The McGill University Health Centre (MUHC) is now home to an online Learning Management System (LMS). Created to better meet the diverse training needs of the MUHC community, the platform is now available, just in time to help train the 8,000 to 10,000 employees, physicians and residents who will start working at the Glen site next spring.

A joint initiative of the Human Resources Directorate, the Transition Support Office, the Department of Nursing and the Telehealth Office of the McGill RUIS, the LMS serves five main goals:

- share knowledge throughout the MUHC
- promote efficiency in the way we approach and develop our training material
- provide access to training and educational material from home and from work
- monitor compliance
- make it easy for all to report back to affiliated institutions or associations

"We are looking forward to using this tool to facilitate registration for activities and diffusion of information that pertains to the Glen training and orientation plan," says Elizabeth Leiriao, manager in the Training and Organizational department. "When it comes to training, employees want more flexibility. The LMS makes resources accessible from anywhere."

Another great feature of the LMS is it allows for tracking. "Before the LMS, we were able to publish content on the intranet, but we could not know who was doing what and we could not measure the learning and the success of our programs," explains Niki Soilis, who has been advising on the development of the LMS.

"For example, with the LMS, we can now track whether people have taken e-learning and verify if they have learned, through quizzes or surveys," says Olivia Yu, pedagogical advisor. "And we can also track how many hours of accredited training have been done."

The platform is available on the Intranet (under Apps) and on the Internet at elearning.muhc.mcgill.ca. MUHC personnel can connect using a unique identification number (instructions on how to obtain this number are featured on the main page) and support is available by calling 24294. All departments can use the LMS to share documents, presentations, videos and e-learning for training purposes.

"The LMS was built to be a sustainable training tool in the organization," says Leiriao. "We think it will serve the MUHC well into the future."



World AIDS Day 2014: a fight on several fronts

World AIDS Day is observed on December 1 every year, reminding us that the fight against the AIDS pandemic is far from over. More than 36 million people have died since it emerged in the early 1980s. Today, 35.3 million people around the world are living with the virus, including 71,000 in Canada. Every day, 6,800 people are infected. Two researchers from the Research Institute of the McGill University Health Centre (RI-MUHC) tell us about significant progress made over the past 25 years and what remains to be done to stem the pandemic.

The theme for World AIDS Day 2014 was “Getting to Zero”: zero new HIV infections, zero discrimination and zero HIV-related deaths. Dr. Jean-Pierre Routy, associate professor of Medicine, Division of Experimental Medicine at McGill University and expert in HIV pathogenesis at the Royal Victoria Hospital of the MUHC, believes it’s an appropriate theme. “We have the tools to almost totally block infection because triple therapy, the combination of three antiretroviral drugs, is very effective. It’s administered in one pill each day, and has very few side effects. Even uninfected people can increase their protection by 50 per cent by taking a combination therapy 12 hours before sexual relations.”

Effective treatments are available and the epidemic has stabilized in Canada, but Dr. Routy says there are still gaps in HIV care that facilitate transmission of the virus. “A quarter of those infected don’t know they are HIV positive, 10 per cent are followed but don’t receive treatment, or their treatment is suboptimal. That means 35 per cent of infected Canadians remain a source for transmitting the virus.”

Over the past 30 years, researchers around the world have contributed in various ways to the development of a safe and effective preventive vaccine. Among them is Dr. Nicole Bernard, a researcher



Dr. Nicole Bernard (sitting) and her team from the HIV and Innate Immunity Research Laboratory



Dr. Jean-Pierre Routy, associate professor of Medicine, Division of Experimental Medicine at McGill University and expert in HIV pathogenesis at the Royal Victoria Hospital of the MUHC

in infection and immunity at the RI-MUHC and associate professor of Medicine at McGill University. Her work on cellular immunity has been an important step in the development of therapies or vaccines.

“I’m interested in how people with two specific genes that influence the activity of natural killer cells, also known as NK cells, are protected against HIV infection,” she says. “These people appear to be able to destroy infected cells right after exposure to the virus. I want to determine the potential and limitations of this discovery for vaccines that protect against HIV infection.”

In a fight of this magnitude collaboration between scientific researchers and clinicians is essential. Dr. Bernard, for example, studies immune cells taken from the blood of HIV-positive patients being followed by Dr. Routy. The results of her research will then inform the hematologist’s work with his patients.

Two significant advances in recent years noted by Dr. Nicole Bernard:

- Follow-up of a clinical trial conducted among 16,000 adults in Thailand in 2009. At the time, a preventive vaccine reduced the risk of infection by 32.1 per cent.
- A prototype DNA vaccine tested in macaques in the United States. It has been very effective at preventing infection, stimulating strong immune responses in mucosal tissues, the primary HIV entry door.

Also essential is the funding for research. In 2013, Dr. Routy was one of the nine co-leaders of the Canadian HIV Cure Enterprise (CanCURE), a research program awarded \$8.7 million over five years by the Canadian Institutes of Health Research (CIHR) to find new treatments for HIV/AIDS. “We are working on two strategies: a therapeutic vaccine and a vaccine combined with immunotherapy,” he says.

In addition to a vaccine and increasingly effective treatments, screening, prevention and the fight against stigma and discrimination continue to be essential weapons in eradicating HIV. “People should not feel shame or fear with regard to their families or employers,” says Dr. Routy. “If they are treated early, these people will not be sick. This will benefit all of society in the long term.”

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les réseaux sociaux!**

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