



Dr. Julio Montaner (centre); with David Poole, Senior Vice-President of Scotiabank, BC & Yukon (left); and Dick Vollet, President and CEO, St. Paul's Hospital Foundation

Photo courtesy St. Paul's Hospital Foundation

The time is now to invest in Treatment as Prevention in the fight against HIV/AIDS

Dr. Julio Montaner shows B.C. business leaders and the community the urgency to implement Treatment as Prevention to achieve an AIDS-free generation

The bottom line is we must ramp up Treatment as Prevention in Canada now, Dr. Julio Montaner told more than a hundred business leaders and community members at Vancouver's Scotiabank Theatre this month.

Dr. Montaner, Director of the BC Centre for Excellence in HIV/AIDS (BC-CfE), was the featured speaker at this year's St. Paul's Health Forum, presented by the St. Paul's Hospital Foundation. His presentation, *Treatment as Prevention: The key to an AIDS-free generation*, highlighted the latest progress in the battle to stop HIV/AIDS and the steps necessary to end the disease.

The St. Paul's Health Forum was launched as a venue to allow the public to hear directly from the hospital's world-leading experts. This year's forum served as an opportunity for the call to implement Treatment as Prevention to reach an audience that included community members and business leaders — those who have the most personally invested in the research and those most able to financially invest and support its advancement.

David Poole, Senior Vice-President of Scotiabank, BC & Yukon, and chair of the St. Paul's Hospital



» The death sentence that defined my life was over. My irrational fears were put to bed. Dr. Montaner's made-in-B.C., triple-drug therapy gave me back my life."

— Barbara Lieske, who was diagnosed with HIV in 2000 and spoke at the St. Paul's Hospital Foundation Health Forum

Foundation Board of Directors, said Dr. Montaner made a solid business case.

"We organized this HIV Forum to give the public an opportunity to hear Dr. Montaner discuss the incredible work he and the BC-CfE are conducting at St. Paul's," said Poole. "The evidence is clear: We can eliminate HIV and reduce undue burden on our strained health care system by supporting Treatment as Prevention. We can prevent new diagnoses while at the same time improve the lives of those diagnosed."

Dr. Montaner underlined the urgency for action.

"To curb HIV and reach the promise of an AIDS-free generation, we must ramp up and fully roll out Treatment as Prevention in Canada and around the world," Dr. Montaner said. "You can deliver on an AIDS-free generation. All you need to do is implement what we already know."

Treatment as Prevention combines the latest in testing, treatment, care and support. The groundbreaking strategy, pioneered by the BC-CfE, involves widespread HIV testing and access to highly active antiretroviral therapy to those medically eligible. It has led to a marked decrease in morbidity, mortality and HIV transmission. At the height of the epidemic in the early 1990s, one person in B.C. was dying every day of

AIDS. In 2012, the number of new HIV diagnoses had dropped to 248. As the only province to implement the Treatment as Prevention strategy, B.C. stands alone as the sole province to show a consistent decline in new HIV diagnoses.

Of those whose lives have been improved is Barbara Lieske, a patient of Dr. Montaner's since she was first diagnosed with HIV in 2000. Lieske also spoke at the Health Forum, delivering a deeply personal account of when she was diagnosed and how treatment saved her life.

"When I was released from the hospital in January of 2000 my CD4 count was seven and my viral load was in the millions," Lieske told the audience. "Thanks to Dr. Montaner, my CD4 count hovers around 950 and my viral load is undetectable. My life is not over. I have not stopped living."

B.C. continues to support Treatment as Prevention. Last November, the B.C. government announced the provincial rollout of the STOP HIV/AIDS pilot project, committing \$19.9-million in annual funding to the program that provides widespread HIV testing and treatment.

For more information about the St. Paul's Forum on HIV/AIDS, visit www.helpstpauls.com.



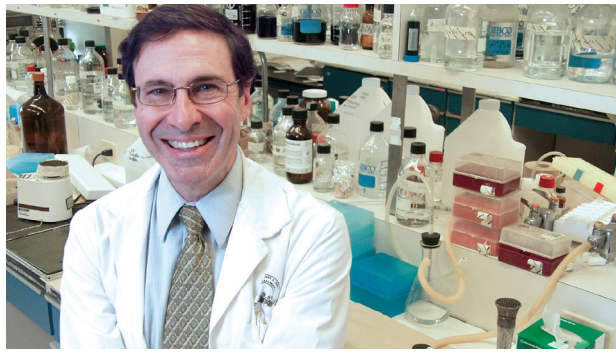
Lecture highlights promising development in HIV drug resistance

Sexually transmitted, drug resistant HIV is a growing concern in developing countries, according to Dr. Mark Wainberg, Killam Prize winner in Health Sciences and Director of the McGill University AIDS Centre in Montréal.

Dr. Wainberg, visiting the BC-CfE in February to meet with researchers, shared his latest findings on drug resistance in HIV, including how a new drug has the potential to prevent mutations associated with drug resistance.

In a Forefront lecture entitled *Is HIV drug resistance still relevant?*, Dr. Wainberg outlined the complexities of drug resistance, which develops due to the virus' ability to mutate rapidly under the selective pressure of antiretroviral therapy. Since the introduction of the first generation of antiretrovirals in the mid-1980s, drug resistance has presented a significant obstacle to the effectiveness of HIV treatment and is a frequent contributing factor to the failure of drug regimens.

While BC-CfE researchers witnessed a significant decrease in the number of new cases of drug resistance in B.C., the sexual transmission of drug resistant HIV is being increasingly reported in developing nations. According to Dr. Wainberg, approximately five to 10 per cent of all new HIV infections in developing countries include at least one drug-resistance-related mutation.



Dr. Mark Wainberg, Killam Prize winner in Health Sciences, and Director of the McGill University AIDS Centre.

However, a new drug may hold the key to prevent these drug resistant mutants. Dr. Wainberg presented findings from recent clinical trials of the drug dolutegravir, which proved effective in preventing HIV drug resistant mutations. While conceding the dolutegravir is entirely not immune to resistance, Dr. Wainberg showed that the virus mutations that developed on exposure to dolutegravir were not able to grow out, meaning the drug could hold promise in preventing the sexual transmission of drug resistant HIV.

"I want to be part of the HIV-cure initiative," Dr. Wainberg concluded. "It's possible that this drug and these mutations will be part of what everyone wants to achieve."

Founding director awarded Queen Diamond Jubilee Medal

Dr. Michael O'Shaughnessy, founding director of the BC Centre for Excellence in HIV/AIDS, has been awarded a Queen Elizabeth II Diamond Jubilee Medal.

The medal was given in recognition of O'Shaughnessy's work as a research pioneer in the field of HIV/AIDS, and as an advocate and agent for change. The medal was awarded by Hedy Fry, MP for Vancouver Centre, at an event on Jan. 17 at the Robert Lee YMCA in Vancouver.

As founding director, Dr. O'Shaughnessy helped develop the BC-CfE into a national and world leader in HIV/AIDS treatment and research. Under O'Shaughnessy's leadership, BC-CfE secured the support and funding to create a world-class drug treatment program to distribute life-saving medicine to HIV-infected residents of B.C.; was the country's first facility to use revolutionary triple-drug therapy in a publicly funded plan; and published the first HIV Treatment Guidelines in North America to detail how to administer HIV drugs effectively.

"I am extremely proud to have had a role in making the lives of people with HIV better, especially those in the Downtown Eastside," says O'Shaughnessy. "It's especially rewarding to see the number of new

infections declining with the Centre's new approach of Treatment as Prevention. Some day – and I hope sooner rather than later – the Centre will no longer be needed."

O'Shaughnessy's career-defining moment came in 1984 after reading the findings of Dr. Robert Gallo, Director of Washington, D.C.'s National Cancer Center. Gallo had determined that the HIV virus was the cause of AIDS. As head of the viral surveillance section for Ottawa's Laboratory Centre for Disease Control (LCDC), O'Shaughnessy immediately flew to Washington where Gallo provided him with enough HIV virus to run tests for two years. Back in Ottawa, O'Shaughnessy soon helped improve Gallo's diagnostic test for the disease. In just a few months, LCDC was up and running, doing Canada's first diagnostic work, and was further ahead than most U.S. laboratories. The groundbreaking work at LCDC produced the first of what would be more than 200 published papers co-authored by O'Shaughnessy during his career.

O'Shaughnessy was also Vice-President of Research and Tertiary Programs at Providence Health Care, and Assistant Dean of Research in the Faculty of Medicine at the University of British Columbia. O'Shaughnessy retired as director of the BC-CfE in October 2003.

STOP HIV/AIDS: Quality Improvement Network inspires collaboration

Collaboration, patient voice and a quality improvement approach are critical to raising the standard of HIV care across B.C. Those were the key messages reinforced during the most recent STOP HIV/AIDS Quality Improvement Network Learning Session.

The latest meeting was the fifth Learning Session, a full-day event that gathered health care providers, community representatives and persons living with HIV from across the province, and opened with a special guest: B.C. Minister of Health, the Honourable Margaret MacDiarmid.

Minister MacDiarmid was present to award Dr. Julio Montaner with the Queen Elizabeth II Diamond Jubilee Medal in recognition of his work and service in the field of HIV/AIDS in Canada. Both spoke about the need to work together to ensure the success of the STOP HIV/AIDS program. It was a fitting way to begin a session grounded in a collective approach to a shared aim.

The Quality Improvement Network, supported by the HIV Response Team, aims to foster the spread of best

practices with the common vision to improve patient engagement in care by networking, learning, sharing and aligning collective efforts towards improving the health and wellness of British Columbians living with HIV/AIDS.

The Learning Sessions are face-to-face meetings that give Network members an opportunity to strengthen relationships and share best practices. Attendees listen and reflect on the perspectives of patients, mentor each other on specific topics, and plan for implementing changes in their own practices.

The principle of all-teach, all-learn is important to the agenda of each session. The topics that individuals identified and discussed included integrating patient perspectives in program delivery, co-ordinating care for patients with hepatitis C and HIV co-infection, cultural competency, and establishing data collection systems. Attendees participated in a speed mentoring exercise to leverage the expertise collected in the room.

RESEARCH

Ugandan women in polygamous relationships at greater risk of infection

Ugandan women in polygamous relationships are at greater risk of HIV infection owing to male-dominated behaviour, according to new research findings.

Polygamy is a common form of multiple-partnered relationship in Eastern Uganda. Sexual risk patterns between men in polygamous and monogamous HIV sero-discordant relationships were compared in a study, called HAARP (Highly Active Antiretroviral therapy as Prevention).

The HAARP study found that men with more than two wives are not only more likely to be the HIV-positive partner, but more apt to determine when to use a condom.

Of the 241 men in the cohort, 56 reported being in polygamous relationships. In comparing polygamy to monogamy, men with two or more wives were more likely to be HIV positive (68% vs 54%). Of note, men with two or more wives were also more likely to make decisions about when to have sex (61% vs 36%) and when to use a condom (59% vs 28%).

This study underscores the continued risks for women in HIV sero-discordant relationships in sub-Saharan Africa.

Kate Shannon, Director of the Gender & Sexual Health Initiative at the BC-CfE, was the lead author of the research presented at the 17th International Symposium on HIV and Emerging Infectious Diseases in Marseille, France. The research was conducted at The AIDS Support Organization in Jinja, Uganda.

WHAT'S NEW

Special HIV/Antiretroviral Update on Treatment as Prevention

Date: Friday, April 26, 8:30 a.m.-5 p.m.

Location: Grand Ballroom - North Tower, Sheraton Wall Centre Hotel

What: This is an open educational event sponsored by the BC Centre for Excellence in HIV/AIDS and accredited by the College of Family Physicians of Canada. The HIV/Antiretroviral (ARV) Update aims to support primary care providers who wish to improve their skills in the management of HIV-positive individuals. A light breakfast, lunch and refreshments throughout the day will be provided on site. Past HIV/ARV Updates can be viewed in the Education/Training section of BC-CfE's website (www.cfenet.ubc.ca).

Details/registration: Registration will be on-line only and will open March 4 at www.cfenet.ubc.ca/events

BC Centre for Excellence in HIV/AIDS

- > Improve the health of British Columbians with HIV through comprehensive research and treatment programs;
- > Develop cost-effective research and therapeutic protocols;
- > Provide educational support programs to health-care professionals;
- > Monitor the impact of HIV/AIDS on B.C. and conduct analyses of the effectiveness of HIV-related programs.

Physician Drug Hotline
1.800.665.7677

St. Paul's Hospital Pharmacy Hotline
1.888.511.6222

Website
www.cfenet.ubc.ca

E-mail
info@cfenet.ubc.ca

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