



CHANGE

A newsletter for consumers, providers, researchers & policymakers

At the OHTN, we're developing innovative community-based research initiatives to ensure that knowledge gets into the hands of those who need it most

by Robb Travers, Scientist and Director of Community-Based Research

Up-to-date knowledge is one of the most crucial elements in the fight against HIV. To ensure that our community partners get the information and support they need to effectively address the social determinants of health at the community level, the Ontario HIV Treatment Network (OHTN) has laid out new priorities in our Strategic Plan to 2010.

Through actively fostering collaborative, community-based research (CBR) partnerships among people living with HIV/AIDS (PHAs), community-based service providers, researchers and policymakers, we are helping to ensure that the community sees its interests reflected in research questions, plays key roles in the research process itself, and stands to benefit directly from the results.

Over the last half-decade, CBR has become a respected means of ensuring community voice and relevance in the fight against HIV. CBR funding streams are more common, and a new generation of ideas and activities that support capacity building across both community and academic sectors to promote active brokering of research partnerships is emerging. There is a buzz in the air about effective means by which "existing knowledge" gets translated and finds its ways into the hands of community groups quickly and efficiently, and the

OHTN is providing leadership in Ontario by helping to shape best practices.

To support our new strategic priorities, we have been listening. We have held several "think-tank" sessions on housing, mental health and addictions and best practices in "knowledge transfer" that have given us some clear ideas about where to start. The OHTN is building on this momentum and driving its own partnerships with Canadian leaders supportive

of CBR—including the Ontario AIDS Network, the Canadian Institutes of Health Research, and the Public Health Agency of Canada—to ensure that our community partners have at their fingertips the necessary knowledge to drive innovations in program planning and service delivery.

As part of our broader strategy to support CBR, we are finding ways to remove or overcome systemic barriers to CBR

for community-based AIDS organizations across Ontario. And, as we understand these better, we'll be launching initiatives to enhance capacities, broker partnerships and build a new generation of CBR researchers. Many CBR initiatives are already underway in Canada, and the OHTN hopes to build on these and realize new successes to address the health needs of PHAs today and tomorrow. ☺

Community-based research involves taking issues of concern to the community and creating dynamic partnerships between community members, service providers, researchers and policymakers to improve quality of life for people living with HIV and communities at risk.



Message from the Scientific and Executive Director

People Power

The OHTN's Strategic Plan to 2010 sets out an ambitious agenda. To help us implement that plan and achieve our goals, we need the right people—on our Board, committees, working groups and staff.

Over the past year, we've searched for leaders in HIV for our committees who can help the OHTN identify emerging trends and build strong programs to meet our stakeholders' needs. We've sought out people to help us build synergy among members of the HIV community, health care providers, researchers and policymakers. We are very fortunate because the HIV field attracts skilled, talented people—many of whom we are proud to say are now working with us. We are seeing the effect of their ideas, innovative thinking and leadership every day in our initiatives.

We've taken the same approach in recruiting our staff. We've been successful in attracting key people in the field—such as Drs. Peggy Millson and Robb Travers, leading experts in epidemiology and community-based research in Canada, and Mark Fisher, our new Manager of Data Systems, who championed the development of the Ontario HIV Laboratory Database and other technologies to improve monitoring of HIV care at the Ontario Public Health Laboratory.



Edward McDonnell

The HIV field attracts skilled, talented people—many of whom we are proud to say are now working with us.

I am also very delighted to announce that Edward McDonnell has assumed the position of Associate Executive Director and Director of Planning and Operations at the OHTN. Edward has a long history of involvement in the fight against HIV/AIDS. For the past seven years, he has worked as a consultant with the OHTN and its stakeholders on a variety of projects.

Edward is taking leadership of the OHTN's program planning, implementation and review, as well as staff development. He will champion and coordinate community-based organization database initiatives, develop relationships and engage external stakeholders to build and strengthen our network, and initiate planning for the Health Care Provider Network. In addition, Edward will work with OHTN staff and stakeholders to develop innovative and effective knowledge translation strategies to improve treatment and care, support services and prevention for people living with HIV and communities at risk.

As we come to the end of our first year implementing our new Strategic Plan, I am confident that—with our "people power" and new initiatives—the OHTN is firmly positioned on an exciting trajectory that will help to realize its mission and vision.

SEAN B. ROURKE, PhD
Scientific and Executive Director
Associate Professor of Psychiatry, University of Toronto
Adjunct Professor of Psychology, University of Windsor

Progress Report on the Strategic Plan

- The OHTN Physician Society will be launched this spring to provide support for physicians in HIV care.
- The OHTN is funding two MD residencies—in Ottawa and Hamilton—to build capacity and specialization in HIV care.
- A group of community-based AIDS service organizations (ASOs) is working with the OHTN to develop an innovative database to help agencies understand client needs and improve programs and services.
- The OHTN, along with the Ontario AIDS Network, has launched a knowledge transfer and exchange initiative. Together, we will work with ASOs to assess and enhance their capacity to use research evidence in their work.
- The OHTN has received a record 50 submissions this year to the Investigator-Driven Research Program, representing a good balance across all types of research.

Milestones

The OHTN is delighted to announce the following staff appointments:



Laurel Challacombe returned to the OHTN as Cohort Study Manager in October 2005. We are especially pleased to welcome Laurel back to the OHTN, where she began her career as a research assistant and database manager with HOOD in 1999. In her new role, Laurel will work closely with staff, researchers and community members to ensure the implementation and ongoing support of the Cohort Study. Laurel has a Masters degree in Community Health and Epidemiology and obtained a wealth of experience as a study manager and researcher through her work at the University of Toronto HIV Social, Behavioural and Epidemiological Studies Unit. Working with Dr. Peggy Millson, Laurel has been the senior research manager of several HIV-related multi-centered studies and has co-authored many peer-reviewed publications, reports and scientific abstracts and presentations.



Mark Fisher joined the OHTN staff as Manager of Data Systems in May 2005. Mark has been an active participant in OHTN activities over the past six years. His contributions to HIIP have been significant, and he has been a source of knowledge and a mentor to OHTN staff and volunteers. A graduate of the Royal Melbourne Institute of Technology, Mark has spent the past 15 years working in the field of HIV through a laboratory perspective, which has provided him with an in-depth knowledge of the disease. He created the Laboratory Information System currently used for HIV and viral load testing in Ontario and has been involved in connecting the lab with its 12 regional sites and three major hospitals. Mark's wealth of knowledge of these initiatives and systems contribute significantly to achieving our strategic goals.



Dr. Margaret (Peggy) Millson joined the OHTN staff as a Senior Scientist on a part-time basis in January 2006. A physician and epidemiologist with training in public health/community medicine, Peggy has spent many years working in the field of HIV research, particularly conducting research related to injection drug use and women and HIV. She has a long history of involvement with the OHTN—as one of the original researchers associated with HOOD, as an OHTN Career Scientist, and, more recently, as a Board member. Peggy will provide scientific advice to the OHTN Cohort Study as well as undertake research, capacity development and knowledge translation on behalf of the OHTN. A renowned and extensively published researcher, Peggy's major areas of interest include HIV and mental health, addictions, marginalized populations and HIV cohort research.



Dr. Robb Travers joined the OHTN as Scientist and Director of Community-Based Research (CBR) in October 2005. Robb's passion for CBR stems back more than 15 years. He has held various leadership positions in key organizations that support CBR, including the AIDS Committee of Toronto and Wellesley Central Health Corporation. Robb's background includes more traditional forms of research training in addition to community development. He holds a Masters degree in Community Psychology and a PhD in Public Health Sciences, both from the University of Toronto, where he developed and taught Canada's first undergraduate course in CBR in the Health Studies Program. Robb is involved in numerous CBR initiatives focused on LGBT youth, ethical issues and capacity building.

The OHTN has mapped out an ambitious agenda for the next five years and the participation of these highly skilled and dedicated people will be a key component in achieving our goals.

Investing in Knowledge

Research with real-world impact

The Search for New Treatments

By exploring the underlying mechanisms of health and disease, basic science forms the foundation for the development of treatments and interventions.

Stem cell research. It may be possible to transform stem cells into CD4 cells, replacing those lost due to HIV disease. Leading-edge research in this area conducted by Juan Carlos Zuniga-Pflucker, of Sunnybrook and Women's College Health Sciences Centre, is attracting considerable attention. This is of special interest to our U.S. neighbours because this type of research is banned there.

Therapeutic vaccines. While preventive vaccines have the potential to keep people from becoming infected, therapeutic vaccines have the potential to strengthen the immune systems of people with HIV and significantly improve their health. Jonathan Angel and his team at the University of Ottawa (U of O) are leading a national clinical trial of the HIV vaccine Remune.

Unlocking the mysteries of HIV. There is still much to learn about how the virus replicates. Alan Cochrane and his colleagues at the University of Toronto (U of T) are working to discover the details of the replication cycle, looking particularly at factors that "put the virus to sleep," or make it dormant, which could be used in treatment.

Immune system studies. Several researchers across Ontario—including Jonathan Angel, John Chamberlain and Karen Copeland (U of O); Rupert Kaul, Kelly MacDonald and Mario Ostrowski (U of T); and Ashok Kumar (Children's Hospital of Eastern Ontario)—are trying to understand the relationship between the virus and the immune system. Their findings may lead to techniques that replenish the immune system and to treatments that keep the virus from damaging it.

The blood-brain barrier. HIV treatment is complicated by the fact that not all therapies cross the blood-brain barrier and therefore cannot reduce HIV replication in the brain. Reina Bendayan and her team at U of T are examining the mechanisms that transport antiretrovirals to the brain, potentially paving the way for new and better therapies.

Improving Quality of Life

Antiretroviral treatments for HIV infection have been a dramatic breakthrough, but side effects, adverse events, adherence and resistance issues remain to be resolved.

Side effects and adverse events. Researchers are working hard with OHTN support to resolve issues related to adverse events and side effects, including hardening of the arteries and the potential for strokes and heart attacks (Marek Smejka, McMaster University), lipoatrophy (Mona Loutfy and Colin Kovacs, Maple Leaf Clinic), and other metabolic disorders and side effects (Sharon Walmsley, Toronto General Hospital). Lizanne Beique (U of O) has studied various self-reporting tools for capturing the information required to track side effects and adverse events.

Drug interactions. Studies of pharmacokinetics (drug levels and interactions) by Laura Park-Wyllie (St. Michael's Hospital), Rolf Van Heeswijk (U of O) and other researchers aim to better understand the dynamics of drug concentrations and interactions that may cause adverse events or treatment failure.

Drug resistance. Mona Loutfy, Sharon Walmsley and the team at the BC Centre for Excellence in HIV/AIDS have done leading-edge research into drug resistance to T-20 (Fuzeon).

Adherence. Dorothy Pawluch and Roy Cain of McMaster University have examined the complex social and psychological factors that affect a person's ability to consistently take their medication; Laura Park-Wyllie and Louise Balfour (U of O) have investigated ways to improve adherence.

Emerging conditions. Long-term HIV is leading to new problems, such as anal cancer and cognitive difficulties. The OHTN has funded Irving Salit, from the Toronto General Hospital, to carry out key research into anal cancer detection and prevention. Despite the introduction of highly active antiretroviral therapy (HAART), one out of every three people with HIV still experiences some cognitive (brain) impairments. Sean Rourke, from St. Michael's Hospital, is studying these complications and testing the effectiveness of a cognitive rehabilitation program to reduce these problems.

Diet and nutrition. Johane Allard (Toronto General Hospital) and Wendy Wobeser (Kingston General Hospital) have studied how specific diets might minimize the impact of HIV therapy or side effects. The OHTN recently provided funding to Sergio Rueda (St. Michael's Hospital) and Sean Rourke to assess the effect of controlled cannabis in improving weight gain.

Co-infections. Several researchers are exploring how other infections may interact with HIV. Jill Tinmouth (U of T) is looking at the recent outbreak of LGV among gay men, and Scott Gray-Owen (U of T) is exploring the complexities of gonorrhea and HIV infection at the molecular level. Curtis Cooper (Ottawa Hospital) is conducting research on HIV/hepatitis C treatment issues.

Over the past seven years, the OHTN has funded nearly 200 research grants and projects and provided financial assistance to more than 100 students, fellows and scientists, as well as investing in other knowledge-building initiatives, including the OHTN Cohort Study. Our investment in developing new knowledge—and in the people who create it—is paying off for Ontario and for the world. The knowledge being generated through OHTN-funded research is helping people with HIV/AIDS (PHAs) everywhere.

To create knowledge that changes policy and practice, the OHTN invests strategically in different types of research—from basic science research that explores how the virus interacts with the immune system to psychosocial studies that ask PHAs about the social issues affecting their lives. Our goals are to search for new treatments, improve quality of life for PHAs and strengthen HIV prevention efforts. Below is a snapshot of some of our funded research.

Health services delivery research, an area crucially related to quality of life, includes such issues as access to care and its barriers, effective use of health and social service resources, and developing best practice guidelines based on current medical evidence. Ahmed Bayoumi and Kelly O'Brien (St. Michael's Hospital), Alan Li (Regent Park Community Health Centre) and others are supported by the OHTN to carry out this type of research.

Social determinants of health. There is an urgent need to address policy issues by understanding the impact of social factors on PHAs. Ruthann Tucker, from Fife House, is leading the first major CBR project exploring the impact of housing on health for PHAs. Sean Rourke is studying the impact of social determinants of health on health-related quality of life and everyday functioning.

Strengthening HIV Prevention

Preventing new HIV infections involves biological, epidemiological and social science research.

Vaccines. Kelly MacDonald and her team at U of T are working on a novel “3-D” approach to developing an HIV vaccine. They use X-rays of viral components to ensure that the vaccines they develop will really mimic the virus and therefore produce the right shape and size of antibody to prevent infection. At McMaster University, Ken Rosenthal and Charu Kaushic are examining vaccine and immune system responses at a key viral point of entry, the mucous membranes of the genital tract.

Microbicides. Charu Kaushic is investigating potential designs for microbicides, which may hold particular promise for women who want to protect themselves from HIV.

Understanding risk behaviour. Understanding risk behaviour and what works to reduce the risk of HIV infection is an important area of research for the OHTN. One essential aspect of this type of research is to understand the nature and extent of the epidemic in Ontario. The U of T's Rob Remis, Liviana Calzavara, Ted Myers and Peggy Millson, along with Lynne Leonard (U of O) and others, carry out research on either specific vulnerable populations or the province as a whole to help us understand where prevention efforts need to be focused.

Understanding HIV fear, stigma and discrimination

is critical when it comes to developing new prevention policies and programs. The OHTN supports many research studies to improve our understanding of the issues and what needs to be done. These include many in-depth studies of the social complexities of vulnerable groups such as immigrants and refugees (Alan Li); prison populations (Liviana Calzavara); injection drug users, or IDUs (Peggy Millson, Lynne Leonard); gay men (Ted Myers, Barry Adam); youth and others.

Specific populations:

IDUs. To help formulate the correct policies to reduce HIV infection and other blood-borne infections in IDUs, such as hepatitis C, the OHTN supports a wide range of research projects regarding behaviours. Lynne Leonard in Ottawa is working with IDUs on the very complex issues related to HIV and HCV infection in this population. Carol Strike, from the Centre for Addiction and Mental Health,

and Peggy Millson are working with IDUs in Toronto with a focus on the impact of methadone treatment options.

MSM. Ted Myers (U of T) and Barry Adam (University of Windsor) are leaders in the field of understanding sexual behaviours and researching and developing both primary and secondary prevention messages for gay men.

Youth. At-risk youth are a major concern for prevention efforts. Eudice Goldberg and Stan Read, from the Hospital for Sick Children, are conducting research into issues related to incarcerated youth as well as prevention efforts for HIV positive youth.

African-Caribbean communities. ACCHO Co-chairs Winston Husbands and Esther Tharao are collaborating with Liviana Calzavara and her U of T team to examine barriers to access of care and other issues affecting the African-Caribbean community. Dennis Willms at McMaster University is doing research on ways to translate knowledge into HIV prevention messages for this particular community.

We plan to make the research and the researchers that the OHTN supports a focus in future issues of the exCHANGE. We would be pleased to hear from you with your suggestions for future articles on specific research priorities. Let us know which areas intrigue you. 🗣️

To qualify for OHTN funding, research must:

- help us achieve our mission of improving the lives of PHAs
- engage the broader HIV community
- be rigorous and scientifically sound

OHTN Research Conference 2005

Conference Highlights

MICRONUTRIENT THERAPY AS PART OF THE COMPREHENSIVE TREATMENT OF HIV

Keynote speech by Jon Kaiser, MD

Numerous studies have demonstrated a high prevalence of nutrient deficiencies in PHAs. Research suggests that micronutrient therapy could play an important role in a comprehensive treatment program for HIV by:

- possibly delaying the onset of illness and the need to initiate drug therapy for newly diagnosed patients;
- extending life for patients on salvage therapy;
- providing a low-cost treatment option for people living in resource-poor settings.



Complementary Medicine Plenary session panelists: (top) Brian Cornelson, Ron Rosenes, Brian Foster, Devan Nambiar (bottom) Sean Hosein, Jon Kaiser, Hal Huff and Sharon Walmsley

DEVELOPING COMMUNITY ACTION RESEARCH ON REDUCING MENTAL HEALTH SERVICE ACCESS BARRIERS FOR IMMIGRANTS AND REFUGEES WITH HIV

Alan Li et al., Regent Park Community Health Centre

PHAs who are immigrants, refugees or without legal status in Canada face complex barriers in accessing mental health support and services related to their status as newcomers and PHAs. This CBR development process resulted in a two-phase, six-component study that will involve knowledge building and transfer from both service users and providers, capacity building in affected communities, identification and development of best practice models, training curriculum and policy recommendations.

HEALTH AND HOUSING: ASSESSING THE IMPACT OF TRANSITIONAL HOUSING FOR PHAs

Ruthann Tucker et al., Fife House

Using qualitative, one-on-one interviews, the investigators studied the impact of transitional housing for PHAs who have lived in the up to nine-month-long communal, supportive Hastings housing program. Supportive housing is key to creating stability and improving the health and well being of PHAs who have been chronically homeless.

INTEGRATED COMMUNITY APPROACH TO HARM REDUCTION IN OTTAWA

Lynne Leonard et al., University of Ottawa

The multi-person use of crack-smoking implements, with its associated HIV- and HCV-related risk, is almost universal among young IDUs in Ottawa. Because the vast majority of crack-smoking IDUs access needle exchange programs (NEPs), these programs are well positioned to implement a safer-crack-smoking initiative, including education and distribution of safer-crack kits. Ottawa's NEPs now distribute safer-crack-smoking devices and their successful experience may be useful in assisting other NEPs or AIDS service organizations to mount their own safer-inhalation equipment distribution program.

VACCINE AND NEW DRUG DEVELOPMENT

Immunologists and virologists continue to unravel some mysteries related to developing HIV vaccines and new therapeutic agents.

- Brad Jones of University of Toronto described one way that the virus manages to evade the immune response to HIV.
- Clifford Lingwood of the Hospital for Sick Children provided evidence that a special class of compounds known as glycolipids shows promise in effectively stopping HIV replication and is not susceptible to resistance.
- Francisco Diaz-Mitoma of The Children's Hospital of Eastern Ontario described a new approach to therapeutic vaccines using antigenic variable regions of the virus.



Round-Table Discussion Group: Barriers Facing Immigrant and Refugee PHAs

Mark your calendar for next year!

The OHTN held its annual conference in November 2005 at the Toronto Hilton. The event was a huge success with more than 450 delegates in attendance and very enthusiastic feedback on the conference program. Highlights included a popular keynote address from Dr. Jon Kaiser of San Francisco and the Susan King lecture by Dr. Steffanie Strathdee, of the University of California San Diego, who spoke about several prominent women in the field of HIV research. The conference was made interactive with round-table discussions and guided tours of poster presentations. On a cultural note, the event featured the artwork of Joe Average as well as a documentary film about the HIV positive Vancouver artist, and several panels of the Canadian AIDS quilt were on display. A silent auction was held in support of the Positive Action Fund, which provides emergency financial assistance to PHAs through the Ontario AIDS Network.

Didn't make the conference? We'll fill you in. Video feeds of plenary, keynotes and select oral presentations from the 2005 research conference are now available on the OHTN website at www.ohtn.on.ca



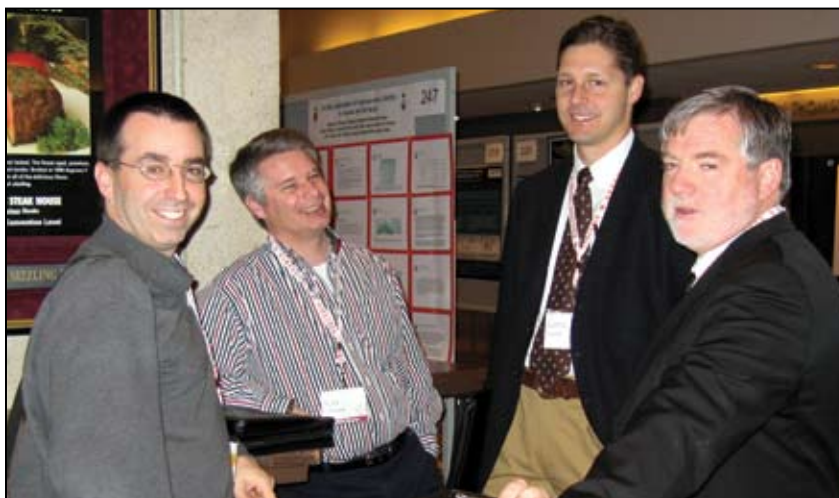
One of several panels of the Canadian AIDS Quilt on display



Frank McGee, AIDS Bureau Coordinator and 2005 OHTN Research Conference co-chair



OHTN Board member Irene Masinde with Evan Collins (left) and Paul Adomako (right) of AIDS 2006



Jonathan Angel of Ottawa Hospital, Alan Cochrane of the University of Toronto and Curtis Cooper and William Cameron of Ottawa Hospital take a networking break

Don't miss the OHTN's 2006 Research Conference: Monday, November 27 and Tuesday, November 28 at the Toronto Hilton.

Announcements

Calls for Applications

The OHTN created the **Jay Browne Fellowship in Community-Based Research** in honour and recognition of the outstanding achievements and contribution of Dr. Jay Browne in the field of HIV/AIDS advocacy and policy leadership. A strong advocate for community-based AIDS education and support programs, Jay has worked tirelessly in HIV/AIDS since 1985. In 1991, he was appointed Coordinator of the AIDS Bureau. Under his leadership, the multi-sectoral, multi-disciplinary consensus-building approach to HIV/AIDS care, prevention and support developed and flourished.



photo by Sid Calzavara

This award aims to facilitate the development of HIV/AIDS community-based research (CBR) expertise, thereby ensuring a reliable supply of highly qualified personnel to meet Ontario's future needs in the fight against AIDS. The award will provide support and recognition to an individual who is pursuing a PhD or engaged in post-doctoral research in the field of HIV/AIDS CBR. Candidates must show particular promise and interest in the field and demonstrate an understanding of issues important to the HIV CBR sector.

The OHTN is calling for applications for **Studentship Awards, Postdoctoral Fellowship Awards** and **Junior Investigator Development Awards**. Applications will be accepted from across all tracks (basic, clinical, socio-behavioural, epidemiological, and community-based research). The OHTN is particularly interested in attracting, supporting and investing in socio-behavioural, epidemiological and community-based research. Award funds will be available for September 2006.

Program information and application materials are available for download at www.ohtn.on.ca

Completed applications must be received in the OHTN office no later than 5 p.m. on Tuesday, April 18, 2006.

New & Improved Website

The OHTN website has been completely redesigned from the ground up by Mark Fisher, with a bold, new look and lots of additional functionality. New features will include:

- St. Michael's Hospital HIV Rounds provided in an interactive video format.
- A Research Inventory that hosts material that the OHTN has generated through its research staff, funding and partnerships.
- Information on the OHTN Cohort Study (OCS) presented in an interactive query format so you can keep track of how we're doing. You could even use this component of the site as the basis of your next feasibility request to the OCS.

In the future, we will add the ability to submit feasibilities and track their status online. We are also actively pursuing collaborations to provide you with important training materials.

Stay tuned to www.ohtn.on.ca

Editors

RonniLyn Pustil
Derek Thaczuk

Art Direction

Dina Torrans

Contributing OHTN Staff

Beverly Deutsch
Tom Fleming
Carol Major
Sean Rourke
Robb Travers

KTE and Health Policy Consultant

Jean Bacon

OHTN Board of Directors

Jonathan Angel
Gloria Aykroyd
Alan Cochrane
Tony Di Pede
Kim Dolan
Bill Flanagan
Michael Hamilton
Rick Kennedy
Don Kilby
Lynne Leonard
Irene Masinde
Frank McGee
Anita Rachlis
Alan Stewart
Ruthann Tucker

The Ontario HIV Treatment Network

1300 Yonge Street, Suite 308
Toronto, Ontario
M4T 1X3
phone: 416 642 6486
toll free: 1 877 743 6486
www.ohtn.on.ca



Mission

To optimize the quality of life of people living with HIV in Ontario and to promote excellence and innovation in treatment, research, education and prevention through a collaborative network of excellence representing consumers, providers, researchers and other stakeholders.