

McGill Division of Adult Infectious Diseases
Annual Report of Highlights
2015



2015 Infectious Diseases Annual Report of Highlights

Most Prestigious Honours and Awards

Dr Marina Klein received a CIHR Foundation Award. Dr. Brian Ward was elected Chair of Canadian Association for Immunization Research & Evaluation (CAIRE). Dr. Momar Ndao was nominated as an Executive Member of the Committee World Federation of Parasitologists (WFP)

Major Successes in Research

Researchers in the Division continued their track record of success in attracting new peer-reviewed funding including a CIHR Foundation award (Klein); CIHR operating grants (Ndao, Olivier, De Pokomandy); (a \$12 million MDIEI partner grant (Ward); Two CIHR PPP grants (Sheppard, Bruckner); three US Dept of Defence grants (Zaharatos, Sheppard, Ndao/Vinh); funding from the Canadian NCEs ArcticNET (Yansouni) and GlycoNET (Sheppard); and industry grants from Gilead (Costiniuk, Lebouche), Merck (Costiniuk, Lebouche) and BD (Yansouni). Dr Falutz is the Canadian coordinator and MUHC primary investigator for the NIH-sponsored, multinational REPRIEVE study (Randomized Trial to Prevent Vascular Events in HIV), which will investigate whether statins prevent the known increased cardiovascular risk occurring in HIV patients.

Members also continued their tradition of publishing innovative and significant research at multiple levels. Fundamental science investigators continued to shed light into the pathogenesis of mycobacterial (Behr PNAS), fungal (Sheppard, PLOS Pathogens, JBC; Vinh, J Allergy Clin Immunology) and parasitic (Olivier, Cell Reports, PLOS Pathogens) diseases. Pivotal clinical studies from members of the CVIS group reported on sexual wellbeing in HIV infected women (de Pokomandy) and the applicability of trial data to real-world populations (Klein, Clin Inf Dis). Drs Frenette and Lee highlighted the risk of recurrent *C. difficile* colitis in patients receiving PPI therapy (JAMA: Internal Medicine).

Major Achievements in Pedagogy

1. Recruited first fellow in Tropical and Parasitic Disease.
2. Integration of Tropical Medicine Course (Libman, Yansouni) and Diagnostics for Tropical Diseases (Yansouni) into the McGill Summer Institute in Infectious Diseases & Global Health.
3. Dr. Todd Lee was awarded the American College of Physicians/American Board of Internal Medicine's award for "Best Innovation" in teaching health care value for his work on antimicrobial "self-stewardship".
4. International Teaching Activities: Summer course in Molecular Mycology, Woods Hole, Massachusetts (Sheppard), Gorgas Course in Tropical Medicine, Lima, Peru (Ward), IDSA/ASTMH Tropical Medicine Update Course and International Short Course in Clinical Tropical Medicine, Vellore, India (Libman); and the Neurology Clinical Update Course, Port O'Prince, Haiti (Bourgault)

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Involvement in the Community

1. Drs. Todd Lee and Vivian Loo are playing leadership roles in the National Choosing Wisely campaign as Quebec lead for the campaign (Lee), members for AMMI Canada guidelines.
2. Members participated as lead authors in national and international clinical care guideline development: *Quebec Guidelines for the Diagnosis of Sexually Transmitted Infections* (Lebel); *Society of Hospital Epidemiology C. difficile Guidelines*. (Loo); *INESS antibiotic usage guidelines* and *CATMAT Zika virus guidelines* (Libman).
3. Dr. Brian Ward was asked to represent Canada and CIHR on *Scientific Advisory Board of Global Infectious Diseases Research (GloPID-R)*, a consortium of major international funding agencies to respond to emerging threats.
4. Dr. Marina Klein was appointed the Chair and Co-Organizer of the 2nd International HIV/Viral Hepatitis Co-Infection Meeting in Vancouver, BC (July 17-18, 2015).
5. Dr. Donald Vinh and his translational research program co-hosted, with the Association des Patients Immunodéfectifs du Québec, the *World Primary Immunodeficiency Awareness Day* at the RI-MUHC (April 23, 2016).
6. Dr. Lebouche is leading *Le Projet Engagement Patient*, a study designed to increase engagement of persons living with AIDS in the design and conduct of clinical studies
7. Other activities include participation in the Royal College of Physicians (Zaharatos & Oughton), Comité des Infections Nosocomiales du Québec (Dr. Longtin), International Society of Travel Medicine (Greenaway), Committee to Advise on Tropical Medicine and Travel [advisory committee to the Public Health Agency of Canada] (Greenaway), and the Comité du programme provincial de diagnostic de laboratoire de l'infection à VIH (Zaharatos), AMMI Canada Grants and Awards Committee (Sheppard Chair, Vinh, Vice Chair).

Novel Clinical Initiatives

1. Implementation of rapid referral system for cellulitis, Outpatient Antimicrobial Therapy, and febrile travelers from the Emergency department and OHS access for MUHC employees with transmissible infectious diseases. In addition to decreasing ER overcrowding these initiatives also permit rapid evaluation of employees and help to prevent transmission of infectious agents to patients and other employees.
2. Organization of pre-biologics vaccination and infectious diseases clinic at the Tropical Diseases Center.
3. The development of a comprehensive infection control surveillance program at the MUHC that includes outcome measures such as nosocomial infections but also extensive HH audits and cleaning and disinfection audits on a regular basis (over 50000 audits). This initiative has led to dramatic reductions in hospital associated infections including:
 - Rates of VRE / MRSA colonization and infection have dropped to a record low over the last 9 years, not only in the new Glen site but also at the MGH site.
 - We have decreased our rate of Nosocomial Bloodstream Infections (BSI) over the same period, documenting a reduction in 200 nosocomial BSIs
 - The cardiac SSI has been reduced by over 50%.