I. Highlights

The Division of Infectious Diseases continues to be extremely busy, a reflection of the ongoing and important role of infectious diseases in our local, national, and international communities. Building on a strong tradition of clinical service, research, and teaching, the Division has expanded its activities in the following fields:

- Clostridium difficile-associated disease (CDAD)
- Refugee and immigrant health
- Vaccine-preventable diseases
- Tuberculosis
- Emerging infections (e.g. *Clostridium difficile*, MRSA, VRE)
- Bioterrorism, pandemics
- New vaccines (i.e. Human Papillomavirus [HPV])
- HIV vaccine delivery system
- New antibiotics for the treatment of infectious diseases

Members of the Division co-published an in-depth analysis of the Montreal outbreak of *C. difficile-associated disease* (CDAD), and continue to perform ground-breaking research in this area. Studies have been organized or are underway to investigate better diagnostic tests, improved therapies, and DNA sequencing of this bacterium.

As well, large grants were received from both public and private sources for the continued studies into vaccine-preventable diseases in the Canadian foreign-born population of immigrants and refugees.

The division has maintained an extremely active and high-profile clinical research unit, with new studies related to infectious disease vaccines (HPV and hepatitis B), overwhelming sepsis (“SIRS”), prevention of tuberculosis with short-course treatments, and ultra-rapid diagnostic methods for “super-bugs” such as VRE, MRSA, and *C. difficile*.

Dr. Portnoy continues to serve the Hospital in the capacity of Director of Professional Services.

Dr. Miller has been the Chairman of the Infection Prevention and Control Committee for the Hospital for the past 15 years.

All members serve as teachers and examiners for medical students, and also serve on various Hospital committees.
II. Evaluation of Past Academic Year

1) Teaching Activities

Dr. T.F. Brewer

-March 2006  Department of Epidemiology, Biostatistics and Occupational Health departmental lecture series. “Epidemic Intelligence: The Role for a Non-Governmental Reporting System” Lecturer for 30-40 McGill University Faculty and Graduate Students 20 hours of preparation; 1.0 hour lecture

-April, 2006  Back to Basics Course “AIDS in the Tropics”  15-20 McGill University Medical Students.  15 hours preparation; 1.0 hour lecture; 1.0 hour supervised discussion

-May, 2006  Tropical Diseases: A review of clinical and laboratory medicine Lecturer for McGill University Health Centre Continuing Medical Education Course 15 hours of preparation; 1.0 hour lecture

Dr. Andre Dascal

-March 2006: Back to Basics Course (15 medical students) for 3 weeks.

-Unit 7 (Infectious Diseases) teaching - McGill University Faculty of Medicine

Dr. Mark Miller

- November 2006: Healthcare-associated infections and the legal system. McGill University Faculty of Law. 2 hours lecture.

-Unit 7 (Infectious Diseases) teaching - McGill University Faculty of Medicine
Topic: Medical mycology and antifungal therapies

Dr. Christina Greenaway

-“Back to Basics” course (McGill University Faculty of Medicine): International Health and Tropical Medicine.

-Tropical Diseases: A review of clinical and laboratory medicine (McGill Centre for Tropical Diseases).

2) Research Activities
Dr. Andre Dascal

- “Consortium de recherche québécois sur le Clostridium difficile” FRSQ, 2006
- Consortium de recherche sur le Clostridium Difficile, CIHR, 2005-7
- Developing Genome Resources for Clostridium difficile, Genome Canada 2007

Dr. Christina Greenaway

- “Developing a Point of Care Test to Measure the Susceptibility to Infectious Diseases in Immigrants” BioVeris Corp.
- Canadian Institutes of Health Research (CIHR). Interdisciplinary Capacity Enhancement Grants.
- “Linking community, practitioner and policymaker in building a preventive care strategy for disease prevention in immigration and other migrants from developing countries”
- United States Centers for Disease Control and Prevention (CDC). “Tuberculosis Trials Consortium (TBTC), US Public Health Services Studies.” (Shared with Dr. D. Menzies)

Dr. Mark Miller

- PPD Development # Protocol # 03-031 – A Double –Blind, Placebo-Controlled Study of E5564, A Lipid A antagonist Administered by Twice Daily Intravenous Infusion in Patients with Severe Sepsis
- Optimer Pharma Inc. Protocol #: 04-117: An Open-Label, Dose Ranging, Randomized Clinical Evaluation of OPT-80 in Patients with Clostridium difficile-Associated Diarrhea (CDAD)
- Protocol # 03-033 A prospective Randomized, Double-Blind, Placebo Controlled Study Evaluating Prophylactic Administration of lactobacillus GG (LGG) for the Prevention of Clostridium difficile-Associated Disease and Antibiotic-Associated Intestinal Problems.
- Protocol # 04-058: A phase III, double-blind, randomized, controlled, multi-center study to evaluate the efficacy of GlaxoSmithKline Biologicals’ HPV-16/18 VLP/AS04 vaccine
compared to hepatitis A vaccine as control in prevention of persistent HPV-16 or HPV-18 cervical infection and cervical neoplasia, administered intramuscularly according to a 0, 1, 6 month schedule in healthy females 15 – 25 years of age


-Becton-Dickinson / Geneohme. Clinical validation of the molecular-based assay IDI-VRE for the direct detection of vancomycin resistance in rectal and stool specimens

-Becton-Dickinson / Geneohme. Clinical validation of the molecular-based assay IDI-MRSA/MSSA for the direct detection of methicillin-susceptible and methicillin-resistant Staphylococcus aureus in nasal and wound swabs

-Becton-Dickinson / Geneohme. Clinical validation of the molecular-based assay IDI-MRSA/MSSA for the direct detection of methicillin-susceptible and methicillin-resistant Staphylococcus aureus in blood cultures

Dr. Jerry Zaharatos


3) Clinical Activities

The walk-in Infectious Diseases Clinic operates on a daily basis (Monday to Friday) in the mornings (09-11h00). The clinic is staffed on rotation by Infectious Diseases specialists (i.e. Dr. Jack Mendelson, Dr. Mark Miller).

The Division also has a weekly Tuberculosis (TB) Clinic (Thursday afternoons) which handles patients with active tuberculosis as well as a screening for potential TB. The clinic is involved with the Public Health Department for TB contact-tracing in the Montreal area. This clinic is staffed by Dr. C. Greenaway, Dr. Mark Palayew, Dr. Karl Weiss, and Dr. Mark Miller.

There were 7,761 patient visits in both Infectious Diseases and Tuberculosis Clinics during the past year.

Drs. Portnoy, Miller, Greenaway, and Dascal see patients in their clinical offices. There were 9,000 patients seen in these offices last year.

There were over 1,500 inpatient consultations for the Infectious Diseases consult service at the JGH during the year.
4) Faculty

Full-time (GFT) members:
Dr. Mark Miller (Chief)
Dr. Andre Dascal
Dr. Christina Greenaway
Dr. Jack Mendelson
Dr. Joseph Portnoy
Dr. G. Zaharatos

Part-time (associate) members:
Dr. Timothy Brewer
Dr. David Portnoy
Dr. Karl Weiss

5) Consulting Activities

None reported

6) Honors, Awards and Prizes

None reported

7) Service to Academic Community and other contributions

Dr. Timothy Brewer

-ECDC Consultation with Members States on Epidemic Intelligence, Stockholm, Sweden, 2006

Dr. Andre Dascal

-“Clostridium difficile Outbreak: The Montreal Experience. Infectious Diseases Special rounds, Cornell Medical Centre, New York, March 2006


Dr. Christina Greenaway
-“Susceptibility to Vaccine Preventable Diseases in New Immigrants.” Presented at Epidemiology Rounds, Department of Clinical Epidemiology, Montreal General Hospital. January 31, 2006. Montreal, Quebec

-“Health Issues of Immigrants and Refugees” Tropical Diseases. A Review of Clinical and Laboratory Medicine, McGill Centre for Tropical Diseases. May 24-26/06. Montreal.


-“Screening Immigrants to Canada. Why do we Screen for TB and not for other Diseases?” The Dorothy Wiselberg Seminar. Mtl Chest Institute. June 12/06. Montreal, Quebec.

-“Seroprevalence of Vaccine Preventable Diseases among Immigrants to Montreal, Canada.” Monthly rounds at the Montreal Department of Public Health. September 20/06. Montreal.

-Seroprevalence of Vaccine Preventable Diseases among Immigrants to Canada.” Presented at the 55th American Society of Tropical Medicine and Hygiene (ASTMH), Annual Meeting. Symposium on “Refugee and Immigrant Health Issues in the US and Canada- a two part clinical care series”. November 12-16, 2006. Atlanta, Georgia.

-“Seroprevalence of Vaccine Preventable Diseases among Immigrants to Montreal, Canada.” Presented at Monthly rounds at the CLSC Côte-des-Neiges. December 13, 2006. Montreal, Quebec.

**Dr. Mark Miller**


-“C.difficile: Update on a new disease”. Update on digestive diseases for physicians and
surgeons 2006. CME University of Toronto and Mount Sinai Hospital, Toronto, Ontario. November 2006


8) Publications & Abstracts

--Brewer T. Association of Faculties of Medicine of Canada Resource Group on Global Health. Towards a Medical Education Relevant to All: The Case for Global Health in Medical Education. Ottawa: Association of Faculties of Medicine of Canada; 2006:25


III. Objectives and Priorities

The objectives of the Division of Infectious Diseases remain:

- high-quality service to the outpatients and inpatients of the Hospital
- continued research in the fields of new anti-infectives, novel vaccines, and cutting-edge diagnostic techniques
- ongoing education in the vast field of Infectious Diseases for students, residents, fellows, nurses, other healthcare personnel, and affiliated fields

The priorities of the Division of Infectious Diseases continue to be the expansion of our clinical and basic science research platforms. Since this Division has been in the forefront of *C. difficile* research for the past 3 years, we have prioritized this as an important continuing endeavor. We hope to expand our group to include new members with expertise in the analysis, typing, and control of *C. difficile*, while we maintain a high profile in our other areas of expertise.

Respectfully submitted,

Mark Miller, MD
Chief, Division of Infectious Diseases