



## Project Updates

### Academic Rounds

Many thanks to past presenters:

Luciano Ieraci  
Marcio Machado  
Mike Drummond  
Matthew Kowgier  
Ava John-Baptiste  
Mark Roberts  
Andy Briggs  
Susan Griffin

Rounds will resume on Sep 4<sup>th</sup> with guest speaker Mike Carter

#### **Ontario Pressure Ulcer Model (OPUM)**

*Cost-effectiveness Analysis of Minimum Standard for Patient Support Surfaces in Operating Rooms and Emergency Departments to Prevent Hospital-Acquired Pressure Ulcers*

A draft manuscript is currently being circulated to Investigators for their review.

*Risk Assessment and Alternative Foam Mattresses to Prevent Community-Acquired Pressure Ulcers: A Cost-Effectiveness Analysis*

Results of the cost-effectiveness analysis of risk assessment and alternative foam mattresses for the prevention of pressure ulcers in long-stay clients of Community Care Access Centres were presented to OHTAC. The data were in support of providing high quality pressure redistribution mattresses to all long-stay clients (service duration > 90 days) at high risk for pressure ulcers (i.e. persons having 3 or more hours of daily pain, shortness of breath, history of resolved ulcers, bowel incontinence, weight loss, extensive impairment in walking, or extensive impairment in bed mobility).

#### **The Ontario Cardiovascular Economic Model (OCVEM)**

The initial cost-effectiveness results are in and model outputs are currently being analyzed by our group. Preliminary findings on the cost-

effectiveness of heart failure clinics in Ontario were presented to the Ministry of Health and Long-Term Care on June 30<sup>th</sup>.

In addition, all investigators collaborating with the research throughout the province met July 7<sup>th</sup> to discuss the current findings and next steps of the project. [Dr. Simon Capewell](#) made a special visit from Liverpool, England to meet with our group.

#### **Systematic Review of Economic Evaluations of Biologics for Rheumatoid Arthritis in Adults**

The updated systematic search of medical and economic electronic databases has been completed. The review teams have completed the standardized data extraction process and are currently undertaking the quality appraisal process.

#### **Using Mathematical and Economic Models to Guide Screening Policy in Cervical Cancer**

Both the natural history model of HPV infection and cervical cancer and the sexual network model have been developed and will be parameterized over the summer. The data to be used will come mainly from literature and ICES. Currently, the first batch of data from ICES has arrived.



## Project Updates<sup>Cont'd</sup>

### **Turning for Ulcer Reduction (TURN) Study**

Participant recruitment was initiated in the US in the fall of 2008. Recruitment in Ontario began in April, 2009 and will continue until September, 2010. Currently, almost 90 participants have been recruited from 4 long-term care facilities in the GTA. Recruitment targets for the US and Ontario are 900 and 500 participants respectively.

### **A Clinical Evaluation of Subcallosal Cingulate Gyrus Deep Brain Stimulation for Treatment-Resistant Depression**

We are currently awaiting approval from Health Canada. Participant recruitment will commence towards late August/early September, 2009.



## Research Grants

### ***Phase-specific and lifetime costs of cancer in British Columbia and Ontario***

Murray Krahn has been awarded a 4-year grant by the Canadian Cancer Society (NCIC) starting July, 2009 to investigate healthcare costs of treating 18 of the most common cancers in Ontario and BC. Co-Investigators include Morris Barer, Farah Farahati, Jeffrey Hoch, Audrey Laporte, Marcio Machado, Gary Naglie, Lawrence Paszat, Stuart Peacock, and George Tomlinson.

### ***Androgen deprivation therapy (ADT) in Ontario: Patterns of care, lifetime costs, model-based and real-world cost-effectiveness***

Murray Krahn has been awarded a 3-year grant from the Ontario Drug Innovation Fund starting July, 2009. Co-investigators include Shabbir Alibhai, Jeffrey Hoch, Audrey Laporte, Gary Naglie, Ba' Pham, Paul Ritvo, George Tomlinson, John Trachtenberg, and Padraig Warde.

### ***Government of Canada announces funding for research to further protect Canadians from the H1N1 flu virus***

The Honourable Leona Aglukkaq, Minister of Health, is pleased to announce another step to protect Canadians from the spread of the H1N1 flu virus.

The Government of Canada will fund a national influenza research network focused on pandemic vaccine evaluation. The network will strengthen Canada's capacity to evaluate the safety and effectiveness of a pandemic influenza vaccine and vaccination programs.

The network was created through a partnership between the Canadian Institutes of Health Research (CIHR) and the Public Health Agency of Canada (PHAC). It will be led by Dr. Scott Halperin, Director of the Canadian Centre for Vaccinology in Halifax. It will link over 80 scientists from 30 research and public health institutions across Canada. The network will be supported with funding of \$10.8 million over three years.

Dr. Babak Pourbohloul at the University of British Columbia and his team, including Chris Bauch at the University of Guelph and THETA Collaborators, will work with the Canadian Consortium for Pandemic Preparedness Modelling to create mathematical models to rapidly analyze the transmission and spread of the influenza virus and evaluate the effectiveness of various public health intervention strategies.



## 2<sup>nd</sup> Annual Symposium

THETA Collaborative held its second annual symposium on May 22-24, 2009 in Niagara-on-the-Lake. The symposium was attended by over 50 professionals who represented diverse organizations and backgrounds, including universities, research institutes, provincial organisations and hospitals, various academic departments, THETA staff, students, and government.



For those who were able to join us; thanks for attending! Once again the symposium proved to be very successful, with an excellent turnout and really great external and local speakers.

A summary of potential goals for THETA in 2009/10 will be available in the Autumn 2009 issue of THETA Quarterly. You can view a slideshow of the Symposium [here](#).



## Collaboration

### Ulysses International Master's Students Descend on Toronto

THETA is an active supporter of the international MSc in Health Technology Assessment and Management Ulysses program. In May 2009, University of Toronto hosted its first Ulysses module. From May 11-21, an international cohort of HTA&M Ulysses students descended on Toronto for the first time (the first year to include students from the University of Toronto).

By hosting the Ulysses module, THETA faculty members were able to extend their teaching to the international student community.

Participation in the Ulysses program is another example of U of T's global reach.

Dr Wendy Ungar, senior scientist, Hospital for Sick Children, and associate professor, HPME, is Ulysses' U of T program director. Students from Montreal, Italy, Spain, Belarus, Switzerland, Colombia, Austria, and Romania joined the U of T students (themselves from Toronto, Edmonton, and St. John's) for two courses.

Many MSc HTA&M students work in HTA in regional government health units, the private sector, or clinical settings.

The first course was entitled *The Incorporation of Health Technology Assessments into Clinical Practice and Micro/Meso Decision Making: The Barriers and Facilitators*. It was led by Dr Andreas Laupacis, executive director of the Li Ka Shing Knowledge Institute and professor, HPME; and Dr Roberto Grilli, director of the Regional Agency for Health and Social Care, Bologna, Italy.

The second course was devoted to the students presenting their thesis or practicum research findings. It was led by Dr Wendy Ungar, along with co-faculty Dr Mira Johri, University of Montreal; and Dr Paolo Giorgio Rossi, Agency for Public Health, Lazio, Italy. We are now looking forward to enrolling U of T students in the fifth Ulysses cohort, which begins in September, 2009. Find out more about this program [online](#) or e-mail [Wendy Ungar](#).

### Technology Assessment at Sick Kids (TASK)

Established by Wendy Ungar, Senior Scientist, Child Health Evaluative Sciences, in April 2007, the mandate includes: 1) research and research support; 2) decision support; 3) education and mentoring; 4) partnerships & linkages; and 5) knowledge exchange.

In collaboration with clinicians in Pharmacy, Hematology-Oncology and Infections Disease, a full HTA of caspofungin vs. lipid amphotericin in febrile neutropenia in kids was completed in 2008. You can read about this project on the [TASK website](#).

With funding from CIHR, Dr. Ungar is leading a study examining the validity of a parent-child dyad approach to utility assessment and is collaborating on a project establishing utility weights in neurologically impaired children.

Trainee methodological research projects include expanding the CEA reference case for pediatric allocation decisions in low- and middle-income countries (Cindy Gauvreau) and, with summer student funding from THETA, a quality appraisal of utility measurement in pediatric CUAs and updating of the [PEDE economic evaluation database](#).

TASK is partnered with HTA organizations and agencies as well as pediatric institutions and researchers across Canada and internationally. With a demographic shift pushing attention toward the health care demands of an aging population, the needs of and the impacts of health policy decision-making on other vulnerable groups, including children and low income families, may go unexamined. And yet, there is a growing awareness that it is investment in children's health, rather than diseases of the aged, that will pay the greatest dividends in terms of quality and longevity of life through prevention and attenuation of cardiovascular risk factors (e.g. obesity, diabetes) and mental health conditions. By improving a child's health status, a child may perform better in school, may reduce use of costly health care resources, and may ultimately be more healthy and successful in the productive years of adulthood.



## Summer Students

### At THETA

**Ryan O'Brodovich** is working closely with Marcio Machado on a review on the methodological issues found in international drug price comparisons, as well as on a study that will observe whether drugs that are deemed cost-effective in Canada will be cost-effective in Brazil as well. Ryan is entering his third year at Queen's University working towards a major in Economics.

**Man Wah Yeung** and **Victoria Leung** are both working under the guidance and supervision of Murray Krahn, Ava John-Baptiste, and Gabrielle van der Velde on a systematic review of cost-effectiveness analyses of hepatitis C interventions for injection drug users. Man Wah is entering her third year of undergraduate studies at the University of Toronto and is majoring in Life Sciences. Victoria is entering her fourth year at Brown University and is majoring in Economics.

**Ing Je Chen** is working with Murray Krahn on a study to determine the prevalence and role of psychosocial co-morbidities in chronic disease management of general medical inpatients. Ing Je is entering her second year of the Doctor of Medicine program at the University of Toronto.

**Mo Yu** is working with Murray Krahn and Wendong Chen on a cohort study that compares health care resource usage among different populations of hepatitis C infected patients at Toronto Western Hospital. Mo is entering her second year of undergraduate studies at the University of Toronto with plans to major in the Life Sciences.

### *Working with Ahmed Bayoumi*

**Jonathan Hong** is working at the Centre for Research on Inner City Health at St. Michael's Hospital. He is developing a microsimulation model of HIV infection that will serve as the basis of a decision aid with integrated preference measures. Jonathan just finished his first year of medical school at the University

of Toronto. He previously completed an undergraduate degree in Applied Economics and Management at Cornell University.

### *Working with Suzanne Cadarette*

**Lindsay Coyne** is a fourth year pharmacy student at the University of Toronto. Her summer research project involves a systematic literature review of the association between proton pump inhibitor exposure and fracture risk.

**Lindsay Wong** is entering her second year of pharmacy at the University of Toronto. She is working on an overview of pharmacoepidemiologic methods to study fracture risk.

**Milica Nikitovic** recently graduated from McMaster University's Honours Biology and Pharmacology Co-op Program. Her current work aims to examine the real-world implications of gaps in adherence to osteoporosis pharmacotherapy.

**Tristan Knight** is entering his second year of medicine at the Royal College of Surgeons in Ireland. His summer project involves a literature search and review of fracture risk associated with statin use. He is also coordinating the development of a research website.

### *Working with Paul Grootendorst*

**Tenneille Loo** is focusing on the methods to encourage pharmaceutical innovation on 3 levels: estimating the spending of pharmaceutical R&D into clinical and basic research as funded by industry and government sources for developed countries; researching the potential outcomes of commercializing Canada's universities as based on US laws and public/private partnerships; and correlating the activity of major drugs patents with their legal activities. The results of her findings will be utilized in a paper and book.



# Congratulations!

**Marcio Machado** – elected Chair of ISPOR Latin America.

**Murray Krahn** – recipient of the Association of Faculties of Pharmacy of Canada Research Career Award for 2009, which recognizes contribution to pharmacy research and the influence Murray’s research has had on pharmaceutical research at the national and international levels.

## Postdoctoral Research

**William W.L. Wong** is a post-doctoral fellow at THETA. He received his Ph.D. degree in Computer Science at the University of Waterloo. His primary research interests focus on the general areas of pharmacoinformatics and pharmacoconomics. He is working with Murray Krahn and Jenny Heathcote (UHN) on a project entitled *Cost-Effectiveness of Screening Immigrants to Canada for Hepatitis B*. The objective of the project is to assess the cost-effectiveness of a hepatitis B virus screening and vaccination program for new immigrants in Canada. We have drafted the Markov simulation model and we are currently implementing the model.



## Social Event



On the first Friday of each month at 4pm, THETA staff, students and collaborators will congregate at a selected pub in downtown Toronto. We will circulate an e-mail approximately 1 week before to inform you of the selected pub. If you have any suggestions please feel free to let [Karen Liu](#) know. We look forward to seeing you there!



Have a fun & safe summer!



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If you would like anything published in THETA Quarterly, please contact [Steven Carcone](#)