

## TRANSLATIONAL RESEARCH:

“TRANSLATIONAL RESEARCH TRANSFORMS SCIENTIFIC DISCOVERIES ARISING FROM LABORATORY, CLINICAL OR POPULATION STUDIES INTO CLINICAL APPLICATIONS TO REDUCE DISEASE INCIDENCE, MORBIDITY AND MORTALITY.”

## “Translational Science and Research in Medicine: Scope, Challenges and Implementation”

« La science translationnelle et la recherche en médecine: portée, défis et mise en œuvre »

September 19, 2012

1:30pm - 3:30pm

1 Rideau Street

Fairmont Chateau Laurier Hotel, Drawing Room

In collaboration with  
the 2012 Henry G. Friesen International Prize Program  
September 19th, 2012 - 4 pm to 5:30 pm

# Translational Science and Research in Medicine

1:30pm - 1:40pm **Welcoming Remarks from Co-Chairs**



Dr. Bruce McManus  
VP, Friends of CIHR  
St. Paul's Hospital, UBC



Dr. Brent Winston  
U of Calgary,  
President, CSCI

1:40pm - 2:05pm **Ninety Years of Insulin Therapy : A Model of Translational Science & Medical Care**



Bernard Zinman, CM MD FRCPC FACP  
Director, Leadership Sinai Centre for Diabetes  
Senior Scientist, Samuel Lunenfeld Research Institute, Mount Sinai Hospital  
Professor of Medicine, University of Toronto

The discovery of insulin in 1921 and its first administration to a patient on Jan 11th 1922 was an example of translational medical research with enormous clinical implications. However, this represented only the first step in the ultimate goal of achieving physiologic insulin replacement. Ninety years of continued research, exploring the role of hyperglycemia in the development of complication, developing designer insulin with superior pharmacokinetics and establishing innovative ways of insulin delivery have all had important benefits for patients with diabetes. In fact, the discovery of insulin spawned an entire field of clinical/basic science research which continues to provide remarkable improvements in medical care.

2:05pm - 2:30pm **The Role of Regulatory Science in Translating New Discoveries to Innovative Medical Care**



Vicki Seyfert-Margolis, Ph.D.  
Senior Advisor, Regulatory Science and Innovation  
Office of the Commissioner, United States Food and Drug Administration

The concept of translational medicine or translating a discovery into a medical product or new standard of practice is a complex process involving many players that comprise the medical product ecosystem. Within this ecosystem, academic scientists are one of many critical stakeholders that include industry, government, small businesses, large biotech/pharma, payors, physicians, consumer groups and most importantly patients. Currently this ecosystem is at risk, as our level of innovative product development is lagging well behind our research investments. Thus a comprehensive approach must be taken, including identifying and supporting the importance of regulatory science as a discipline critical for translational medicine to succeed.

2:30pm - 2:55pm **Training Programs in Translational Research: Preparing for the Future of Biomedical Research and Health Care**



Allan S. Kaplan, MSc MD FRCP (C)  
Director, Institute of Medical Science  
Chief of Clinical Research, Centre for Addiction and Mental Health  
Vice Chair Research and Professor of Psychiatry,  
University of Toronto

Translational research, as defined in this context, is research that fosters an environment of innovation and interdisciplinary collaboration and that encourages the translation of basic scientific findings into patient benefits aimed at reducing the burden of human disease. This presentation will briefly describe the few translational research training programs that currently exist in North America and Europe. The presentation will then focus on the rationale for the establishment of and the curriculum for a new degree granting graduate training program in Translational Research that has been developed at the Institute of Medical Science at the University of Toronto. The implications of such a training program for future young clinician investigators will be discussed.

2:55pm - 3:30pm **Audience Participation**

3:30pm - 3:55pm **Nutrition Break**

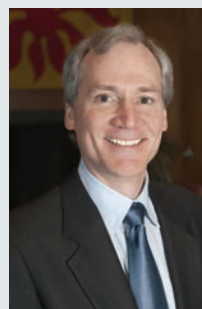
4:00pm - 5:30pm



**Friesen Prize Public Forum**

2012 Friesen Prizewinner

Dr. Marc Tessier-Lavigne  
President of Rockefeller University



**"The Future of Translational Medicine and Drug Discovery: Is the Glass Half Empty or Half Full?"**

« L'avenir de la médecine translationnelle et la découverte de médicaments : le verre est-il à moitié vide ou à moitié plein? »