

Institute of Circulatory and Respiratory Health (ICRH)

ICRH's Young Investigators (YI) Forum



May 21 - 23, 2009

*Symposium of the Friends of CIHR in partnership with the
National Young Investigators Forum for Circulatory and Respiratory Health*

**“Global Heart and Lung Health: The Challenges, Opportunities
and Contributions for Health Researchers”**

PROGRAM & ABSTRACTS

Friday, May 22nd, 2009, Ottawa ON

8:00 – 9:30 AM

Brookstreet Hotel, Signed Sealed Ballroom



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The Challenges, Opportunities and Contributions
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PROGRAM

- 8:00 am **Chair:** *Dr. Aubie Angel*, President, Friends of CIHR
 Co-Chair: *Dr. Bruce McManus*, Professor & Director, James Hogg iCAPTURE
 Centre and Providence Heart + Lung Institute at St. Paul’s Hospital/University of
 British Columbia
 Welcome: *Dr. Peter Liu*, Scientific Director, ICRH
- 8:05 am **Introductory Perspective on Global Health –
Canada Leading the Way**
 Dr. Bruce McManus
- 8:15 am **A Time for Global Action against Non Communicable Diseases**
 Dr. Sylvie Stachenko, Dean, School of Public Health, University of Alberta
- 8:35 am **Pulmonary Disease and the Global Opportunities**
 Dr. Jack Gauldie, Prof., Pathology & Molecular Medicine, McMaster University
- 8:55 am **Addressing the Global Cardiovascular Disease
Burden**
 Dr. Andy Wielgosz, Chief of Cardiology, Ottawa Hospital
- 9:15 am Discussion
- 9:30 am Adjourn

SPEAKER ABSTRACTS

Bruce McManus

Prof. & Director, James Hogg iCAPTURE Centre, University of British Columbia

Introductory Perspective on Global Health – Canada Leading the Way

We have all seen the world shrink. Readily available international transportation and electronic systems of communication have brought us face to face with the world in which everyone resides, rich and poor, productive and unproductive, developed and under-developed, politically fair and unfair, unsusceptible and susceptible, healthy and unhealthy. Enormous and expanding heart and lung health burdens are starkly apparent from data sources like the WHO. Canada has an opportunity to make large and special contributions along the pipeline of knowledge creation, transfer, translation and evaluation. Investments in people who can see the continuum of discovery through to public health implementation is the key. Connecting to organizations that work on the frontlines of health including Doctors without Borders, Scientists without Borders, Canadian International Development Agency, and others will enable our best and brightest health researchers and translators to impact in strategic ways on the erupting epidemics of coronary heart disease, COPD, diabetes, obesity, renal failure and related conditions. The contemporaneous opening of several schools of public health across Canada in the wake of the SARS outbreak has provided new venues for young stars (and some older stars) to receive advanced training in disciplines that are pertinent to solving the world's biggest health problems. With the passion to implement solutions we must also go prepared with deep domain knowledge in heart, lung and vascular disease, and with expertise that complements others ranging from epidemiology, primary clinical care, community health programs, political science, statistical genetics, genomics, health economics, environmental health and the biological basis of disease. Our distinguished experts today will provide us with an in depth view of where we can all make the most difference through the power of cardio-respiratory health research and its application.

Sylvie Stachenko

Dean, School of Public Health, University of Alberta

A Time for Global Action against Non-Communicable Diseases

Globalisation through increasing interconnectedness of culture, economies and trade are having a powerful effect on peoples' lives and health. As a result, we are witnessing a growing health and economic burden in low and middle income countries imposed by a number of non-communicable diseases more specifically cardiovascular diseases (CVD), cancer and respiratory diseases. In absolute terms, CVD deaths in the developing world are staggering; 19M out of 25M CVD deaths are in the developing world. This situation was predicted at the First International Heart Health Conference in Victoria, Canada, which released the Victoria declaration that stated that *there is enough knowledge to act to stem the global epidemic of CVD*. Following this landmark document, there has been a number of other international heart health declarations that address the global nature of the determinants of heart health. More recently, the WHO has released a global action plan to address the challenge of non-communicable diseases which includes a global research agenda. One key area of emphasis for the research agenda is the need for more implementation research, studies of models of care programs and policies, and economic modelling. In this regard we will need to build on existing platforms in Canada and elsewhere such as knowledge networks, observatories and demonstrations to develop a global learning system. In addition, comprehensive information systems and multidisciplinary programs of research will be needed to guide the multi-level and multi-sectoral responses for chronic disease prevention and control. Finally, new skills in communication, networking and a new breed of scientist such as *knowledge brokers* to bridge the *know-do gap* will be required.

Jack Gauldie

Professor, Department of Pathology and Molecular Medicine, McMaster University

Pulmonary Disease and the Global Opportunities

Despite numerous advances in medical care, drug development and diagnostic evaluations, the incidence and mortality from pulmonary diseases is increasing in the world, and with air pollution and smoking abuse increasing throughout the non-western world, this will keep pulmonary disease amongst the most lethal and debilitating of human disorders on this planet. The fields of lung research in physiology, pharmacology, inflammation, immunity, infectious disease and cancer are all open for business and hungry for participation now, and for years to come. In addition to extensive investigations in basic mechanisms using cell, molecular and genetic techniques, there are needs for novel academia-industry partnerships, societal and behavioral modifications and government policy developments, opening many and varied avenues and opportunities for new investigators to participate in helping the world breathe right, a goal that seems basic, but appears difficult to achieve.

Andy Wielgosz

Chief, Division of Cardiology, University of Ottawa

Addressing the Global Cardiovascular Disease Burden

The global community is experiencing an epidemic of cardiovascular diseases. It has been said that we possess already the knowledge to prevent at least 80% of cardiovascular diseases. We have model health care systems, we have a variety of proven tools and we understand the determinants of health and disease as never before. Yet, we are falling short of applying that knowledge and effecting the desired changes. Consequently the expectations from research are shifting. While we still need to understand better the genetics and the biomolecular mechanisms of health and disease and how delivery of integrated healthcare systems can be improved, it is imperative that we move from theory to application and we need to act quickly. We need research to inform us how to apply our knowledge and achieve results. We also need to act with integrity and respect for all, not only locally but also globally. Today the call to research is also a call to leadership.