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Connections

Message from Norman Rosenblum, INMD Scientific Director



Front Row (from left): Norm Rosenblum, Stephanie Atkinson, Peter Jones, Catherine Field, and Gillian Booth; Back row (from left): Bruce Verchere, Rickey Yada, Chris Kennedy, George Tolomiczenko, and Steve James; Absent from photo: Erica Samms-Hurley, Tony Lam, and Doug Manuel.

The INMD Institute Advisory Board (IAB) met in Toronto, April 4-6, 2018. This was my first IAB meeting as Scientific Director, and it was also the first IAB meeting for **two new members**, Tony Lam (Univ. Toronto) and George Tolomiczenko (Univ. of Southern California). Thanks to all of the trainees from Univ. Toronto, Ryerson, and York who presented posters along with the faculty who welcomed our IAB to Toronto at the opening Meet & Greet and poster session.

The main focus of the IAB meeting was strategic planning and priority-setting. At its best, strategic planning can prompt in organizations the kind of imagination and commitment that can help effectively address the challenges they face (Bryson, JM. Strategic Planning for Public and Nonprofit Organizations. 2009). I truly believe that we need imagination and inspiration to tackle the health challenges faced by Canadians, many of which are relevant to the INMD mandate.

Over the coming months, I will be working closely with the IAB to gather and synthesize data and information from INMD stakeholders. We will be reaching out to partner organizations to seek their input in

regard to INMD strategic priorities. This is a chance for us to reflect on past priorities and to identify new scientific opportunities where INMD can play a catalyst role.

It was a pleasure to interact with the IAB members, to engage in creative thinking and planning, and to learn more about their perspectives and research communities. Meeting highlights included a First Story Tour of Univ. Toronto that showcased the local history and contributions of Indigenous People, and the presentation from Drs. Cathy Whiteside and Gary Lewis on **Diabetes Action Canada**, the Chronic Disease Network that they are co-leading with Dr. J.P. Després funded through the Strategy for Patient-Oriented Research.

Worman Rosenblum

Norman Rosenblum, MD, FRCPC Scientific Director, CIHR-INMD

What's Norm Reading?

Ethical Considerations: A Role for Researchers and Physicians in Artificial Intelligence in Healthcare

Artificial Intelligence (AI) may be defined as the ability of a system (such as a computer or robot) to mimic human cognitive functions. As AI technology advances, there has been much discussion of the promise of AI for improving healthcare delivery. The implications of AI for the management of chronic diseases — a key area of focus within the INMD mandate — are considerable. Although AI offers great potential for improving healthcare, it is also imperative to consider the ethical challenges as this new technology is developed.

A recently published commentary in the New England Journal of Medicine, highlights some of the challenges in the application of machine learning. One challenge is that algorithms could mimic human biases in decision-making as different types and sources of data are combined and interpreted. Moreover, if algorithms begin to act as a repository of clinical memory, challenges may arise if this

collective memory is used as an authoritative source for diagnosis and treatment advice, rather than as a support tool. Physicians and researchers will play a crucial role in addressing these ethical challenges, to ensure that the AI that is built reflects sound scientific evidence and ethical guidelines.

Char, D.S., Shah, N.H. and Magnus, D. Implementing Machine Learning in Health Care- Addressing Ethical Challenges. 2018. N Engl J Med; 378:981-983. doi: 10.1056/NEJMp1714229.

CIHR Funding Opportunities

Collaborative Health Research Projects (CHRP) with a Special Call: Artificial Intelligence, Health and Society

The Collaborative Health Research Projects initiative supports innovative, interdisciplinary, collaborative research projects, requiring participation from the natural sciences or engineering community together with the health sciences community. This initiative focuses on the translation of the research results to knowledge/technology users and related stakeholders outside the academic or training environment. As such, the proposed research projects must have a strong focus on knowledge translation and lead to health and economic benefits for Canadians, more effective health services and products, and/or a strengthened health care system.

Special Call — AI, Health and Society: Building on an established record of collaboration between NSERC, CIHR, and SSHRC, the granting agencies will use the CHRP funding opportunity to pilot a Tri-Agency collaboration intended to support multidisciplinary collaborations

amongst researchers from natural sciences and engineering, health sciences, social sciences and humanities. The research intersection chosen for this Special Call is Artificial Intelligence (AI), Health and Society. Given the pace of technological advancement, the scope of potential uses of Al in health, and the complex ethical, legal and societal considerations involved, the three granting councils wish to support multidisciplinary research efforts in this domain.

Funds available

The total amount available for this funding opportunity is \$24.875 million. Of this amount, up to \$5.975 million is available to fund applications relevant to the Special Call — AI, Health and Society. This amount may increase if additional funding partners participate. The maximum duration of support for any one grant is three years.

For more information and details regarding an upcoming webinar, visit the **CIHR website**.

Research Network: Rare Diseases

INMD is pleased to partner with the Institute of Genetics and Genome Canada to support the launch of a Request for Applications for a Research Network: Expediting collaboration between basic and clinician scientists in functional studies of novel rare disease genes. Details are available on ResearchNet.

CIHR Institute of Indigenous Peoples' Health

Last month, the Scientific Director of the Institute of Aboriginal Peoples' Health, Dr. Carrie Bourassa, announced the change in the name of the institute to the Institute of Indigenous Peoples' Health. "Indigenous" as opposed to "Aboriginal" in the name of CIHR's institute focuses on First Nations, Inuit and Métis Peoples and is consistent with federal activities, as well as with the adopted terminology used in CIHR's Action Plan to strengthen Indigenous health research in Canada. The French name of the Institute remains Institut de la santé des Autochtones as the term "Autochtone" translates to both "Aboriginal" and "Indigenous" in French.

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