













('onnections

Message From Philip Sherman, INMD Scientific Director

Reproducibility in Pre-clinical Health Research



Reproducibility is an issue of increasing intérest and concern to all participants in the health research enterprise. A symposium held in Toronto over the summer addressed some of the underlying causes of reproducibility issues in pre-clinical research and how researchers, funders of the research, partners in the private sector, professional societies, and peer reviewed journals can help address these concerns. Leonard Freedman, president of the US non-profit

organization **Global Biological Standards Institute** discussed how implementing consensus-based scientific standards can lead to increased rates of reproducibility and to improved returns on research funding investments. Aled Edwards (Univ. Toronto) spoke about contributions of the **Structural Genomics Consortium**, a global open collaborative network of researchers based at universities and pharmaceutical companies, tackling reproducibility issues by providing a framework for the sharing of data and for the development of

transnational technical standards. A detailed, topical and highly relevant review on the subject of reproducibility in science was written by Dan Drucker (Mt. Sinai Hospital, Lunenfeld Foundation, Univ. Tóronto) and published last year in Cell Metabolism [2016;24(Sept. 13):348-360]. In 2016, Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council of Canada (NSERC), and Social Sciences and Humanities Research Council of Canada (SSHRC) released the **Tri-Agency Framework for the Responsible Conduct of Research**, which sets out responsibilities for researchers, institutions, and the Agencies, that together help support and promote research integrity, a vital component of reproducibility. The funding agencies require that all researchers applying for, or in receipt of, Agency funds comply with the policy.

Best wishes for the Fall season,

Philip M. Sherman, MD, FRCPC Scientific Director, CIHR-INMD

Pre-announcement: National Research Core

Canadian Microbiome Initiative 2: A Focus on Function and Translation

CIHR, under the scientific leadership of the Institute of Genetics, Institute of Infection and Immunity, Institute of Nutrition, Metabolism and Diabetes and Institute of Gender and Health, in collaboration with the Institute of Aging, Institute of Cancer Research, and Institute of Human Development, Child and Youth Health, is pleased to announce an upcoming new funding opportunity for a National Research Core as part of the Canadian Microbiome Initiative 2 (CMI2): A Focus on Function and Translation.

The overall goal of the CMI2 is to enable the development of effective preventative and therapeutic interventions through a deeper understanding of the role of microbiome in human health. CMI2 will build on previous CIHR investments in microbiome research, and support the next phase of microbiome research in Canada through two funding opportunities: (1) Research Core (current competition) and (2)

Research Teams (future competition). This funding opportunity will focus on the development of a sustainable pan-Canadian Research Core to coordinate research activities, facilitate sharing of expertise, knowledge and resources, to support the integration of **sex- and** gender-based analysis (SGBA) and ethical considerations in research related to the microbiome and human health, and to promote the translation of research outcomes into improved health, social, and economic benefits for Canadians, including both preventative and therapeutic interventions. Partnerships are in development.

The anticipated launch date of this funding opportunity is Fall 2017. Please look for application instructions at that time through ResearchNet.

Researcher Profile

Mathieu Lemaire, MDCM, PhD, FRCPC Hospital for Sick Children, University of Toronto



Dr. Mathieu Lemaire is a pediatric nephrologist on faculty at the Hospital for Sick Children, a scientist-track investigator in the hospital's Research Institute and an Assistant Professor of Paediatrics at Univ. Toronto. Mathieu completed medical school at McGill Univ., a fellowship in pediatric nephrology at Univ. Toronto, and a PhD in Investigative Medicine under Dr. Richard Lifton at Yale Univ. in the United States. His translational research program pertains to rare childhood

kidney diseases, using genomic tools for gene discovery followed by functional dissection of candidate genes using complementary microscopic, cell biology and biochemical approaches. He identified the first non-complement gene causing a recessive form of atypical hemolytic-uremic syndrome, diacylglycerol kinase epsilon, and is now assessing novel candidate genes causing thrombosis restricted to small caliber vessels in the kidney of infants. Dr. Lemaire is the recipient of the 2017 KRESCENT/CIHR New Investigator Award, sponsored by INMD in partnership with the Kidney Foundation of Canada and the Canadian Society of Nephrology.

Congratulations Mathieu!

Competition launch for Networks of Centres of Excellence

The Networks of Centres of Excellence (NCE) is pleased to announce the launch of a competition for NCE networks. The funding available is \$75 million over five years. Both new and established networks are eligible to apply for funding in this competition. Networks must be challenge-focused and solution-driven. They are expected to foster innovative research, training and the co-creation of new knowledge on critical issues of intellectual, social, economic and cultural significance. They must engage partners in the design and execution of all network activities, including knowledge creation, mobilization and exploitation. **The LOI deadline is November 15, 2017**. For more information on this **competition**, consult the competition documents and frequently asked questions.

CIHR Funding Opportunities

Catalyst Grant: Indigenous Approaches to Wellness Research

The CIHR Institutes of Aboriginal Peoples' Health, Aging, Circulatory and Respiratory Health and Musculoskeletal Health and Arthritis are pleased to announce the launch of the *Catalyst Grant: Indigenous Approaches to Wellness Research*. This funding opportunity will support researchers who, in collaboration with the Indigenous community, will develop, evaluate, and build on existing tools and methods to better incorporate Indigenous concepts of wellness in health research designs. **Application deadline: October 17, 2017**. Visit **ResearchNet** for more information.

Fellowship: Fall 2017 Priority Announcements in Clinical Nutrition, Diabetes and Gastroenterology

Together with the Canadian Nutrition Society, Diabetes Canada and the Canadian Association of Gastroenterology, INMD is pleased to announce the launch of the *Fellowship: 2017 Priority Announcements in Clinical Nutrition, Diabetes and Gastroenterology*. **Application Deadline: November 1, 2017.** Visit **ResearchNet** for more information.

National research platform holds answers to healthy aging

Canada's health researchers have access to a valuable national research platform to answer important questions related to health and aging. Launched in 2010, the Canadian Longitudinal Study on Aging (CLSA) involves 51,000 Canadians, aged 45 to 85 at recruitment, who will be followed for 20 years.

The platform includes data on health status, physical assessments, diseases, cognition, psychological well-being and mental health, social well-being, economic aspects of aging, and blood-based biological markers. The initial baseline data set is now ready and available for use by researchers and trainees working in all areas of health and psychosocial well-being. Follow-up data collection events will be repeated every three years for 20 years.

Please visit the <u>CLSA website</u> to find out more about the platform and how you can access the data for your research. Development of the CLSA has been led by a team of more than 160 researchers and collaborators from 26 Canadian universities. The CLSA is supported with funding from the Canadian Institutes of Health Research, the Canada Foundation for Innovation, provincial governments, universities and other partners.



The CIHR Institute of Nutrition, Metabolism and Diabetes (INMD) invests in research on diet, digestion, and metabolism. By addressing the causes, diagnosis, treatment, and prevention of a wide range of conditions and problems associated with hormones, the digestive system, kidneys, and liver function, INMD seeks to improve health for all Canadians.