



A Newsletter from the CIHR Institute of Nutrition, Metabolism and Diabetes

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# INMD *Connections*

*Helping you make connections and stay connected*

## Message from Philip Sherman, INMD Scientific Director



It was a privilege to participate in the announcement of the CIHR Team Grant Competition in Rare Diseases - Translating Basic Biology to Enhanced Patient Care on International Rare Diseases Day, February 29, 2012. The announcement was made by the Parliamentary Secretary to the Minister of Health, Dr. Colin Carrie, at the annual meeting of the Canadian Organization for Rare Disorders (CORD).

The overall objective of this initiative is to support research that transforms basic biological research into medical practice and

treatments in the area of rare diseases. In total, CIHR is funding nine collaborative Rare Disease research teams that will investigate a range of issues related to rare diseases, including basic biological science, health services, and policies. INMD is a proud partner of this initiative with the CIHR Institute of Genetics, as well as a number of other partners, including CORD.

INMD is pleased to provide funding, in collaboration with the Kidney Foundation of Canada, to support a team being led by Dr. Jeffrey Medin (University Health Network, Toronto). Dr. Medin and his team will conduct research on Fabry disease, a rare inherited lysosomal storage disorder caused by a deficiency of the enzyme alpha-galactosidase A. Affected patients can develop progressive

kidney disease, heart disease, and strokes. Dr. Medin's team proposes to conduct a clinical research trial involving gene therapy that builds on his previous research in the field, with the ultimate goal of establishing an effective, safe, and long-lasting treatment for this rare disease.

In the past decade, great advances have been made in understanding the genetic predisposition and pathobiology of a number of rare disorders relevant to the mandate of INMD. However, critical gaps in knowledge remain. By supporting the Rare Diseases initiative, INMD aims to foster research that will address knowledge gaps and translate into improved quality of life for affected patients, and reduce health care inequities for populations of increased vulnerability.

All the Best,

Philip M. Sherman, MD, FRCPC



Dr. Jeffrey Medin

## CONTACT US

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## Programmatic Grants in Food and Health

**Webinar:** INMD will be hosting a Webinar (in English) for the research community to learn more about this funding opportunity on April 18th from 1:00pm to 2:30pm. There is still time to [register](#) for this session if you've missed the sessions held in March.

The full [funding opportunity](#), is available on the CIHR website.



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# RESEARCHER PROFILE

## Elena F Verdu, MD, PhD: Recipient of the Canadian Association of Gastroenterology's 2012 Young Investigator Award

*Associate Professor, Farncombe Family Digestive Health Research Institute (McMaster University)  
Canada Research Chair in Intestinal Microbiota, Inflammation and Nutrition*

Dr. Verdu's research has focused on the pathophysiology of inflammatory and functional gastrointestinal disorders. As a member of the Farncombe Family Digestive Health Research Institute at McMaster University, Dr. Verdu has developed animal models to study host responses to microbial and dietary antigens such as gluten. Her studies have identified gluten as a critical antigen in the development of enteropathy and insulinitis in genetically predisposed mice, and demonstrated that in some cases gut dysfunction can be triggered by gluten, even in the absence of enteropathy. This has led to the concept of "non-celiac gluten-sensitivity". Dr. Verdu's lab is working on the preclinical

development of a novel gluten-binding polymer for the treatment of gluten sensitivity. She has been honored with the New Investigator Award (Canadian Celiac Association), the New Investigator Award (Functional Gut-Brain Research Group, USA) and the Campbell Research Award in celiac disease (Canadian Celiac Association). The American Gastroenterology Association and the Canadian Association of Gastroenterology have awarded her the prestigious "Master's in Gastroenterology Award" for basic science and "Young Investigator's Award", respectively.



## FUNDING LINKS

### [Canada-China Joint Health Research Initiative \(CCJHRI\)](#)

A joint CIHR-National Natural Science Foundation of China (NSFC) program that aims to promote the development of Canadian-Chinese scientific co-operation between universities, hospitals, research institutes or affiliated research organizations in Canada and China through the support of collaborative research grants.

### [Canadian Epigenetics, Environment and Health Research Consortium \(CEEHRC\)](#)

The key focus for this funding opportunity is the exploration of gene-environment interactions where epigenetics may play a role. This program will support collaborative research teams that have the capability to transform epigenetics research, enhance our understanding of gene-environment interactions, address major health research questions and foster the application of knowledge gained to the clinic and/or to populations.

## Meeting Report: DIABESITY - A World-Wide Challenge

*(Brussels, February 9-10, 2012)*

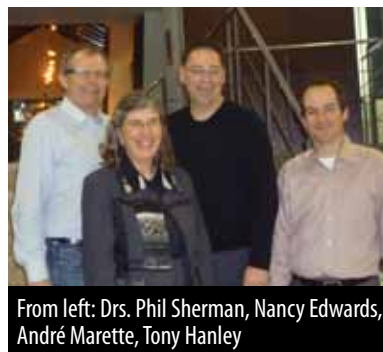
### ***Towards a global initiative on gene-environment interactions in diabetes and obesity in specific populations***

*Anthony Hanley, PhD, Department of Nutritional Sciences, University of Toronto*

The Directorate General for Research and Innovation of the European Commission hosted an international meeting in Brussels, Belgium on DIABESITY. The objectives of the meeting were to foster new international cooperation and partnerships and to identify key issues in the area of gene-environment interactions in diabetes and obesity in specific populations.

The meeting brought together leading experts in diabetes from across the globe, representatives of national funding agencies from different parts of the world, policy makers and other stakeholders in the area of diabetes and obesity. Canadian representatives included Nancy Edwards (Scientific Director, CIHR Institute of Population and Public Health), Philip Sherman (Scientific Director, INMD), Mary-Jo Makarchuk (Assistant Director, INMD), André Marette (Laval University), and Anthony Hanley (University of Toronto).

A roundtable session, which included Phil Sherman and representatives of other international funding agencies, focused on research challenges, collaboration trends, and potential opportunities.



From left: Drs. Phil Sherman, Nancy Edwards, André Marette, Tony Hanley

European Union (EU)-funded research projects then were presented, each of which had a strong emphasis on either intrauterine or early life determinants of chronic disease. Research project examples were also presented by scientists supported by non-EU agencies, including those in New Zealand, Australia, and Mexico.

Attendees then participated in one of 4 parallel workshops. The discussion in each of these workshops focused on the potential development of global collaborations in research related to diabetes and obesity, the scientific and organizational challenges, and potential benefits related to such international efforts.

Members of the Canadian delegation felt that the ideas generated and potential opportunities presented at this meeting are very promising for members of the Canadian diabetes research community. The presentations and the conference recordings are available [online](#).

**The Institute of Nutrition, Metabolism and Diabetes (INMD)** supports research to enhance health in relation to diet, digestion, excretion, and metabolism; and to address causes, prevention, screening, diagnosis, treatment, support systems, and palliation for a wide range of conditions and problems associated with hormone, digestive system, kidney, and liver function.