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The Institute of Infection and Immunity provides national leadership and creates programs that promote innovative research aimed at reducing the global burden of infectious diseases and disorders of the immune system.

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Message from the Scientific Director



It is with pleasure that I am reaching out to you at the beginning of the festive season.

As you know, CIHR has lived through a number of changes. The reorganization of the structure of the Institute Advisory Boards (IABs) is now ongoing. A recruitment campaign for the new IABs has now started and I encourage you to apply (see p. 3).

Surveys indicate that 'Funding opportunities' is one of the most popular items of the Newsletter. We thus try to capture the CIHR opportunities as best as we can (see p. 3-4). We wish you the best chance of success in your proposals. Initiatives in different stages of planning relate to antibiotic resistance (see p. 5), human immunology and finally HIV vaccines.

The Institute has always paid particular attention to the new generation of researchers. I am thrilled to mention that Dr. Matthew Miller, from McMaster University, is the 2015 recipient of the Bhagirath Singh Early Career award (see p. 2).

As always, the Institute is happy to hear about your success stories originating from CIHR funding. On p. 3, we highlight the work of Dr. John Pezacki from the university of Ottawa and a member of the CanHepC group. On page 2, we highlight the work of a large team working on a cure for HIV. Please do not hesitate to tell us about your success stories at serge.desnoyers@crchudequebec.ulaval.ca.

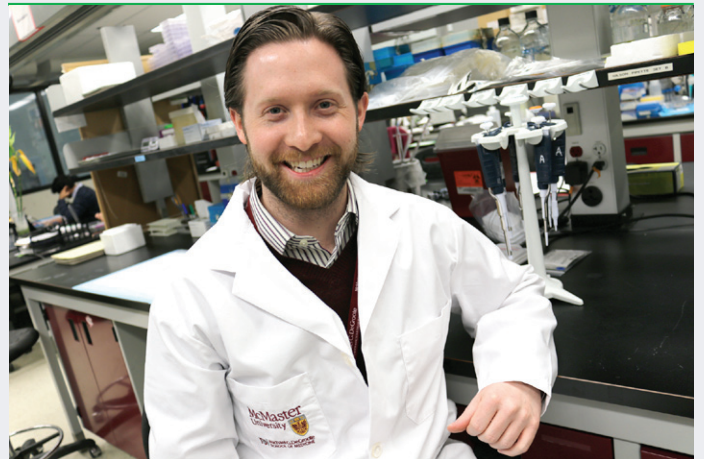
I wish you all the best for this holiday season and a productive 2016.

Marc Ouellette

The 2015 Bhagirath Singh Early Career Award in Infection and Immunity

Dr. Matthew Miller, Ph.D., Assistant Professor at McMaster University is the 2015 winner of the Bhagirath Singh Early Career Award in Infection and Immunity. Dr. Miller's application "Understanding the generation and protective functions of broadly-neutralizing humoral immune responses against influenza A virus" was ranked the highest among all new investigators in the field of infection and immunity in the March 2015 Open Operating Grant Program competition.

Dr. Miller completed his Ph.D. at the University of Western Ontario in the Department of Microbiology and Immunology. During this time, he was supported by a CIHR Frederick Banting and Charles Best Canada Graduate Scholarship Doctoral Award. He went on to pursue postdoctoral studies with Dr. Peter Palese at the Icahn School of Medicine at Mount Sinai in New York, NY. These studies were also supported by a CIHR Fellowship. During this time, Dr. Miller made major contributions to the understanding of how sequential exposures to influenza virus shape the humoral immune compartment. Dr. Miller was recruited by the Department of Biochemistry and Biomedical



Dr. Matthew Miller

Sciences at McMaster University in October 2014. His laboratory continues to study diverse aspects of virus-host interactions, including the humoral immune response. The Miller Laboratory is also interested in the influenza virus pandemics, and the role of infection and inflammation in neurodegenerative disease.

CanCURE 2nd annual meeting

Last November 11th to 13th, members of [CanCURE](#), a research collaboration focused on studying HIV persistence and developing strategies towards a functional HIV Cure, gathered at the *Institut de recherches cliniques de Montréal* (IRCM) for their second Annual Meeting. Liz Stirling, Project lead for the CIHR HIV/AIDS Research Initiative participated in the meeting. On this occasion, the Team's Scientific Investigators presented the progress of their research projects. Students, postdoctoral fellows

and research assistants showcased the results of their work during poster sessions and prizes of distinction were awarded by Merck Canada to the best presenters. Members of the Scientific Advisory Board attended the meeting to give their insight on the Team's research orientations. In addition, members of the Community Advisory Board joined the event to interact with the scientists and share the views of people living with HIV.



Photography: IRCM

In the News

MicroRNAs regulate the immunometabolic response to viral infection in the liver

A member of The CanHepC network, Prof. John Pezacki, from the University of Ottawa Department of Chemistry and Biomolecular Sciences, along with his research team and his Ph.D. student, Ragunath Singaravelu, sought to identify the key molecules in our body controlling virus' access to our key structural and energy components. The team identified microRNA-185, which inhibits the expression of metabolic genes crucial to the synthesis of fatty acids and

cholesterol. Their [study](#) suggests that, during viral infection in the liver, our immune system increases microRNA-185 levels to suppress liver fat content and impede viral infection. They also identified a virus that actively decreases miR-185 levels to promote fat accumulation in the liver and circumvent our immune response. Overall, this work highlights microRNA-185 as a novel mediator of the innate immune response through regulation of liver metabolism. To read the complete publication, please click [here](#).

Recruitment - The new Institutes Advisory Boards (IABs) model

Comprised of five (5) horizontal boards serving all 13 Institutes, the new advisory model will boost collaboration across Institutes and within our multitude of stakeholder communities by bringing together a wide range of perspectives within each IAB. The five (5) new IABs are:

- IAB on Research Excellence, Policy and Ethics
- IAB on Health Innovation
- IAB on Indigenous Peoples' Health
- IAB on Health Promotion and Prevention
- IAB on Chronic Conditions

CIHR is launching a recruitment campaign to fill up to 75 positions within the five new IABs. An open nominations process is the most appropriate and transparent way to

attract the ideal mix of expertise for the new IABs.

Stakeholders spanning the full spectrum of health research are encouraged to apply. For more on the IAB nomination process and the *Terms of Reference*, please consult the CIHR website's updated [IAB section](#).

Governing Council's [Nominating and Governance Committee](#) will review all applications received by the deadline and put forward recommendations for the approval of Governing Council at its February 24, 2016 meeting.

An orientation of IAB members, and first meeting of each of the new IABs are anticipated for May-June 2016. In the interim, IABs will continue operating under their current mandate (through April 30, 2016).

Funding opportunities

Infection and Immunity Focus

Operating Grant: Innovative Biomedical and Clinical HIV/AIDS Research

The CIHR HIV/AIDS Research Initiative is pleased to announce the [Operating Grant: Innovative Biomedical and Clinical HIV/AIDS Research](#) Funding Opportunity.

The Operating Grant: Innovative Biomedical and Clinical HIV/AIDS Research will support innovative or high-risk biomedical and clinical research directly relevant to the priority objectives of the CIHR HIV/AIDS Research Initiative.

The specific objectives of the funding opportunity are to:

- Enable new and established investigators to undertake innovative research projects in new

areas of investigation or take previous discoveries in new directions;

- Promote the development and testing of novel research tools and methodologies); and
- Support high-risk research projects with the potential for high impact, breakthrough and/or transformative advances.

Application Deadline : 2016-06-01

Anticipated Notice of Decision: 2016-10-31

Funding Start Date: 2016-11-01

Please feel free to contact the CIHR HIV/AIDS Research Initiative (HIVAIDS-VIHSIDA@cihr-irsc.gc.ca) for more information.

Funding Opportunities (continued)

[Joint Canada-Israel Health Research Program \(2016\)](#) -

New frontiers in immunology
 Registration Deadline: 2016-01-18
 Application Deadline: 2016-02-15
 Anticipated Notice of Decision: 2016-09-01
 Funding Start Date: 2016-09-01

[Operating Grant: Environmental Urban Health Research Consortium](#)

For those with successful LOI
 Application Deadline: 2016-03-15
 Anticipated Notice of Decision: 2016-06-01
 Funding Start Date: 2016-06-01

[Team Grant: Environments and Health: Intersectoral Prevention Research](#)

For those with successful LOI
 Application Deadline: 2016-07-13
 Anticipated Notice of Decision: 2016-11-30
 Funding Start Date: 2016-12-01

[Planning and Dissemination Grants – Institute/Initiative Community Support \(Winter 2016 Competition\)](#)

Application Deadline: 2016-01-20
 Anticipated Notice of Decision: 2016-04-29
 Funding Start Date: 2016-05-01

General Focus

Update on 2015 Foundation Live Pilot Competition

The summary of the results of Stage 1 and an update on Stage 2 of the 2015 Foundation Grant Live Pilot competition is now available on CIHR's [website](#).

[Project Scheme: 2016 1st Live Pilot](#)

Registration Deadline: 2016-01-18
 Application Deadline: 2016-03-01
 Anticipated Stage 1 Notice of Decision: 2016-05-16
 Anticipated Stage 2 Notice of Decision: 2016-07-15
 Funding Start Date: 2016-07-01

There is now no limit to the number of applications an individual can submit to the Project Scheme per competition and/or per calendar year.

[Knowledge Synthesis Grant : Fall 2015 Competition](#)

Application Deadline: 2016-01-13
 Anticipated Notice of Decision: 2016-06-30
 Funding Start Date: 2016-06-01

[Best Brains Exchange Travel Awards \(2015-2016\)](#)

[Embedded Clinician Researcher Salary Award](#)

Application Deadline: 2016-03-03
 Anticipated Notice of Decision: 2016-06-30
 Funding Start Date: 2016-05-01

[Team Grant: GACD Lung Diseases](#)

Application Deadline: 2016-02-24
 Anticipated Notice of Decision: 2016-08-31
 Funding Start Date : 2016-06-01

[Team Grant: Pathways Implementation Research Team – Component 2 \(2016\)](#)

LOI Application Deadline: 2016-02-15
 LOI Anticipated Notice of Decision: 2016-04-28
 LOI Funding Start Date: 2016-05-01
 Application Deadline : 2016-10-03
 Anticipated Notice of Decision: 2017-02-15
 Funding Start Date: 2017-01-01

[Undergraduate: CIHR Health Professional Student Research Award \(2015-2016\)](#)

Application Deadline: 2016-02-01
 Anticipated Notice of Decision: 2015-01-30
 Funding Start Date: 2015-04-01

[Undergraduate: Summer Studentship Award – Institute Community Support \(2016\)](#)

Application Deadline: 2016-01-21
 Anticipated Notice of Decision: 2016-03-24
 Funding Start Date : 2016-05-01

Pre-Announcement: Antimicrobial Resistance: The Complexity of Transmission

JPIAMR 3rd Joint Call: JPI-EC-AMR ERA-NET co-funded Call on Transmission Dynamics

The CIHR Institute of Infection and Immunity (III) is pleased to announce its participation in the 3rd joint call for proposals of the Joint Programming in Antimicrobial Resistance (JPIAMR) on transmission dynamics **to be launched January 18th, 2016**. This call will involve over 20 participating countries and will support multidisciplinary research networks in conducting collaborative and complementary studies that will unravel the complex dynamics of selection and transmission of antimicrobial resistance to understand the mechanisms that contribute to the spread of resistance.

JPIAMR is dedicated to “One Health” where multiple disciplines work together to identify and characterise the

determinants that contribute to the spread of resistance in and between different reservoirs; including animals, the environment, and people. Investigating the complex biology and epidemiology of selection and transmission of resistance is crucial in order to design preventive measures to address this public health threat.

The topic of this call is to unravel the dynamics of transmission and selection of antimicrobial resistance (AMR) at genetic, bacterial, animal, human, societal, and environmental levels, in order to design and evaluate preventive and intervening measures for controlling resistance.

Further information may be found [here](#).

HIV/AIDS Research Initiative – Community-Based Research Grants

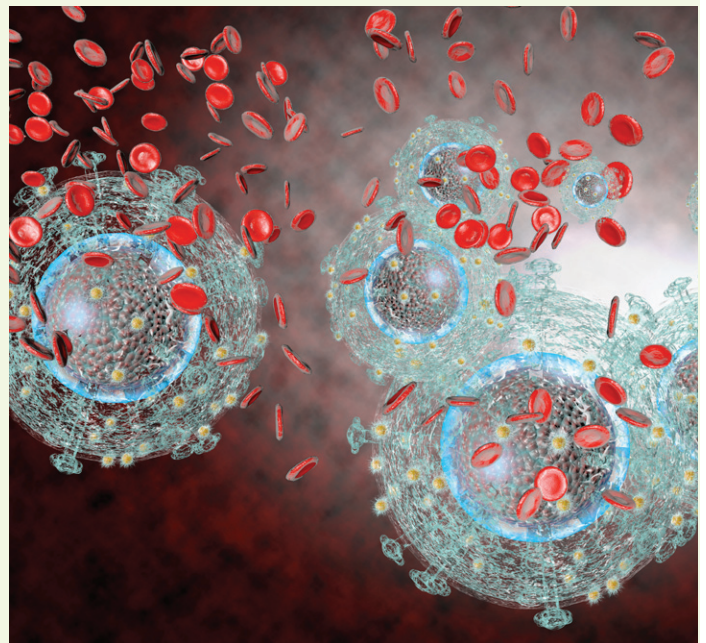
CIHR has recently made decisions regarding the timing of HIV community based research funding opportunity launches in order to streamline its review processes. Please take note of the upcoming scheduled launches for both the CIHR HIV/AIDS Research Initiative **Community-Based Research (CBR) Operating and Catalyst Grant funding opportunities**:

The next **CBR Catalyst Grant funding opportunity** will be launched in **March 2016**.

The next **CBR Operating Grant funding opportunity** will be launched in **June 2016**.

Moving forward, both the CBR Catalyst and Operating Grant funding opportunities are expected to be launched at the same time each June, effective June 2017.

Should you have any questions or concerns, please do not hesitate to contact the CIHR HIV/AIDS Research Initiative: HIVAIDS-VIHSIDA@cihr-irsc.gc.ca.



Meetings of Interest

[5th Canadian Symposium on HCV - We're not done yet: Remaining Challenges in Hepatitis C](#), February 26, 2016, Montreal, QC

[Annual conference Association of Medical Microbiology and Infectious Disease Canada](#), March 30 to April 2, 2016, Vancouver, BC

[29th meeting of the Canadian Society for Immunology](#), April 1 to 4, 2016, Ottawa, ON

[Canadian National Transplant Research Program Annual Scientific Meeting](#), April 24 to 25, 2016, Vancouver, BC

[Sparkling Solution](#) – Research for a Healthier Future – An International Summit, April 25 to 28, 2016, Ottawa, ON

[Canadian Association of HIV Research \(CAHR\) Annual Conference](#), May 12 to 15, 2016, Winnipeg, MB

[Globalizing Advances in Allergic Disease Research- AllerGen's 8th Research Conference](#), May 29 to June 1, 2016, Vancouver, BC

[66th Annual Conference of the Canadian Society of Microbiologists](#), 12 to 15 June 2016, Toronto, ON

[Canadian Society of Transplantation - Annual Scientific Meeting 2016](#), 12 to 15 October 2016, Quebec, QC

[Health System Research 2016](#), Fourth global symposium on health system research, November 14 to 18, 2016, Vancouver, BC

[The Canadian Association for HIV Research \(CAHR\) Workshops:](#)

[Cool, Calm and Collected: CAHR/University Without Walls \(UWW\) Data Collection Skill Development Workshop](#), January 21 to 22, Toronto, ON

[New and Early Career Investigator Workshop: Career Pathways for Biomedical Scientists](#), February 4 to 5, 2016, Toronto, ON

Pathways Implementation Research Teams Component 2 Webinars

A series of webinars will be held to assist applicants in understanding the focus and the application process for the [IRT Component 2](#) funding opportunity.

Webinar in French: on January 6th, 2016 from 12-1pm (ET).

The webinar will feature Dr. Sarah Viehbeck, Assistant Director, for the [Institute of Population and Public Health](#) and Adrian Puga, Competition Lead for CIHR.

For more information on the webinar please visit the [registration page](#). (Event address for attendees: <https://gts-ee.webex.com/gts-ee/onstage/g.php?d=556579619&t=a>)

Webinar in English: on January 7th, 2016 from 12-1pm (ET).

The webinar will feature [Dr. Malcolm King](#), Scientific Director for the [CIHR-Institute of Aboriginal Peoples' Health](#) and Adrian Puga, Competition Lead for CIHR.

For more information on the webinar please visit the [registration page](#). (Event address for attendees: <https://gts-ee.webex.com/gts-ee/onstage/g.php?d=555285942&t=a>)

*May you have a restful and happy festive season
and a productive 2016!*

The III Team

