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March 15th, 2017

The Honourable Jane Philpott, P.C., M.P. Minister of Health 70 Colombine Driveway, Tunney's Pasture Postal Location: 0906C Ottawa, Ontario K1A 0K9

Dear Minister Philpott,

On behalf of the 26 leading Canadian HIV vaccine investigators that attended the Canadian HIV Vaccine Research workshop, December 14-15, 2016 in Ottawa and the signatories to the attached, we are pleased to share with you a summary of the meeting proceedings and draw your attention to the funding and research priorities identified during the discussions at the meeting. The Canadian HIV vaccine research community is facing unprecedented uncertainty regarding stable funding due to the termination of CHVI program in March 2017, compounding the situation brought on by changes in CIHR's funding mechanism over last two years. We urge the government to consider our recommendations and act now to provide long term and stable mechanisms of funding to continue to build the research momentum and keep Canadian research internationally competitive.

The four key areas that emerged as priorities from our discussion on the state of the Canadian HIV Vaccine Initiative are highlighted here for your attention:

- **Funding-**a substantial increase in funding for HIV vaccine research is urgently needed for Canadian researchers to maintain momentum attained in this area. Funding for leveraging meaningful participation with international consortia, strategic translational projects, continued basic research and trainee support were all recommended.
- **Infrastructure**-funding for establishing and expanding centralized facilities across Canada that provide easier access to prohibitively expensive animal models and good manufacturing processes is essential for translational research, which is key for vaccine development.
- Sustaining research capacity-funding mechanisms that allow continuity for large teams working successfully towards important international capacity building, partnership

development and scientific milestones are needed to secure optimum return on investment.

• Advocacy-the need for co-ordinated communications on the value of Canadian HIV vaccine research contributions to government, the international scientific community, the affected community and the general public was identified.

We urgently request the government to address these research and funding priorities and would welcome the opportunity to participate in discussions on how these priorities could be integrated into the government's strategy for Canadian HIV vaccine research and facilitate Canadian leadership in ending the HIV/AIDS epidemic.

Thank you for your attention to our concerns and we look forward to your reply to the Conference Co-chairs indicated below.

Yours sincerely,

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Dr. Charu Kaushic Professor and OHTN Applied HIV Research Chair Dept. Pathology and Mol. Med. McMaster University Hamilton, Ontario Co-Chair Workshop Planning Committee Contact: <u>kaushic@mcmaster.ca</u> Tel: 905-525-9140 Ext 22988

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## **Executive Summary**

This document summarizes the proceedings of a one and half day meeting in December 2016, where twenty six leading Canadian HIV vaccine researchers from across the country, along with international experts and representatives of government funding agencies met to review the current state of the Canadian HIV Vaccine Initiative and discuss its future. Four key areas emerged as priorities from these discussions, highlighted here for attention and further action.

- 1. **Funding-**a substantial increase in funding for HIV vaccine research is urgently needed for Canadian researchers to maintain momentum attained in this area. Funding for leveraging meaningful participation with international consortia, strategic translational projects, continued basic research and trainee support were all recommended.
- 2. **Infrastructure**-funding for establishing and expanding centralized facilities across Canada that provide easier access to prohibitively expensive animal models and good manufacturing processes is essential for translational research, which is key for vaccine development.
- 3. **Sustaining research capacity**-funding mechanisms that allow continuity for large teams working successfully towards important international capacity building, partnership development and scientific milestones are needed to secure optimum return on investment.
- 4. **Advocacy**-the need for co-ordinated communications on the value of Canadian HIV vaccine research contributions to government, the international scientific community, the affected community and the general public was identified.

## Preamble

December 14<sup>th</sup> and 15<sup>th</sup> 2016, the Canadian HIV Vaccine Initiative (CHVI) Research and Development Alliance Coordinating Office (ACO) hosted Canadian researchers supported by CHVI funding or otherwise involved in HIV vaccine research. The group gathered in Ottawa, to discuss past successes and current priorities related to HIV vaccine research in Canada.

The meeting was set against the background of two decades of commitment by the Canadian government to support HIV Vaccine research through the Canadian Network for Vaccines and Immunotherapeutics (CANVAC, 1999-2007), followed by the Canadian HIV Vaccine Initiative (CHVI), renewed in 2010 and establishment of the Alliance Coordinating Office (ACO) in 2011. The CHVI, concluding in March 2017, provided \$139 million to over 196 HIV vaccine related projects and programs (2009-2014). Twenty-six (26) Canadian researchers were joined by scientific representatives from the International and European AIDS vaccine initiatives (IAVI and EAVI, respectively), and from Federal government funding agencies, including PHAC, HC and CIHR. The one and half day meeting highlighted large and small research projects funded by the CHVI over the last 10 years, internationally renowned speakers in the area of HIV vaccine research delivered plenary talks and CIHR representatives highlighted current funding opportunities in the HIV vaccine area. Significant time was spent discussing strengths, needs and future directions of Canada's contribution to HIV vaccine research. These discussions are summarized below. This consensus statement, contributed to and signed by Canadian HIV Vaccine research representatives, addresses four general areas identified as critical to sustaining and enhancing CHVI's positive national impact, while promoting Canada's contribution to international HIV vaccine effortsfunding, infrastructure, sustained capacity and advocacy.

**Funding:** The strongest consensus among those present was a need for dedicated and substantially increased Canadian Federal Government funding towards the development of an HIV vaccine. Funding through CHVI has helped to cultivate a Canadian HIV vaccine community with internationally recognized strengths capable of making major contributions. The keen interest shown by IAVI and EAVI to involve Canadian researchers was seen as clear evidence of their ability to make unique contributions. Researchers favoured a two-pronged approach directing strategic funding towards specific areas where translational progress was most likely, while maintaining support for innovative projects that address unresolved basic and social research issues. Dedicated funding for trainees in this area was also recommended as a strategy offering immediate and longer term benefits. Of particular concern, voiced also by invited international speakers, was the observation that the current scale of Canadian HIV funding, relative to overall international funding for HIV vaccine research, enforces collaboration with international consortia to achieve desirable impacts. Thus, attendees identified programs supporting international partnerships with seed or leverage funding as highly desirable. In summary, there was a strong consensus, supported by international scientists, on the need for greater strategic and basic funding dedicated towards HIV vaccine research in Canada.

**Infrastructure:** Prohibitive costs of translational vaccine studies for most Canadian researchers drove unanimous support for more centralized facilities across Canada to enable broader access to transgenic animal models, humanized mouse models, non-human primates and other expensive infrastructure and resources that are easily accessible in the US and Europe and key to vaccine development and testing. This would provide reciprocal benefits to the research community and the primary operators of the facilities, allowing them to support more specialized staff, house more animals and expand on experimental procedures offered to maximize utilization of rare resources. The prohibitive costs of preparing vaccine materials under certified good manufacturing practices (GMP) conditions was seen as another major obstacle to translational vaccine studies and as something that needs to be addressed.

**Sustaining research capacity**: Team grants are significant investments both from a funding perspective and the time and effort spent by team members. Researchers involved in team grants commented on the lack of mechanisms to obtain competitively renewable funding for their programs, leading to the inevitable loss of significant investment and important gains attained through development of new partnerships, collaborations and capacities in key scientific, geopolitical and socioeconomic arenas. Establishment of competitive mechanism to extend or renew team grant funding based on achieved milestones and progress in targeted areas was supported. Attendees also felt that HIV vaccine research might be housed under the same programmatic umbrella as other HIV prevention strategies as there would be greater strength and a stronger voice if unified with alternative approaches to HIV prevention.

**Advocacy:** Despite its strengths that are clear to Canadian and international research community, there was a general consensus that dissolution of the CHVI ACO divests Canadian HIV vaccine researchers of a major mechanism for knowledge translation and advocacy - particularly in the area of communicating Canadian research impacts to government decision makers, the international scientific community, communities affected by HIV, and the general public. There is a particular lack of public understanding or support for vaccine research in the context of other HIV prevention measures and for the utility of pursuing vaccine innovation adjunct to other prevention efforts. Increasing public support and understanding among affected communities, against the backdrop of the renewed anti-vaccine movements, is a critical component of advocacy. Attendees felt that efforts and accomplishments of the Canadian HIV vaccine research community should be highlighted to a much greater extent at community, funding agency, media and elected government official level. Communication and collaboration across disciplines, sectors and geography was facilitated by the CHVI ACO and scholarship support was provided to encourage trainees to pursue HIV vaccine research. This was an important element of CHVI success and researchers felt strongly that a body such as the ACO should be retained.

Through this open consensus statement, on behalf of the Canadian vaccine researchers and other advocates, it is requested that the federal government, either directly or through the relevant funding agencies, provide some clarity on plans to address the above areas that will profoundly impact the future research of the HIV vaccine community.

Signed by:

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