



dedicated to finding a cure



engagée à découvrir une guérison

JUVENILE DIABETES RESEARCH FOUNDATION CANADA

SUBMISSION / BRIEFING NOTE PRE-BUDGET CONSULTATIONS

HOUSE OF COMMONS STANDING COMMITTEE ON FINANCE

August 12, 2011

RECOMMENDATION:

That the Standing Committee on Finance recognize the importance of partnerships between private and public sectors, like that between Juvenile Diabetes Research Foundation (JDRF) and the Federal Economic Development Agency for Southern Ontario, which promotes cutting-edge diabetes research, innovation and commercialization.

EXECUTIVE SUMMARY:

- Juvenile Diabetes Research Foundation (JDRF) is the leading charitable funder of diabetes research worldwide.
- On November 23, 2009, the Federal Economic Development Agency for Southern Ontario and JDRF Canada launched the government's first partnership to create and implement a Clinical Trial Network for diabetes research.
- This partnership and the launch of JDRF Canadian Clinical Trial Network (CCTN) marks a significant first-step in making Canada a premier hub and home for international, cutting-edge diabetes research. JDRF is proud of the remarkable progress that has been made since the partnership's announcement in 2009.
- JDRF's partnership with the Federal Economic Development Agency for Southern Ontario is a concrete example of the important role that research excellence and scientific success plays in improving the competitiveness and productivity of our economy while also serving as a means to achieve a better standard of living for all Canadians.
- This partnership emphasises the importance of direct government investment in research, development and commitment to private-public partnerships that lead to real society and economic gains.
- While CCTN studies are currently focused on type 1 diabetes; the administrative platform underlying CCTN is not disease-specific and could be adopted to promote research in other diseases. Companies and organizations around the world have expressed interest in using CCTN as a model for clinical trial work abroad.
- CCTN is currently developing and implementing a broad range of clinical trials in association with leading diabetes researchers at partner universities and medical centres across Southern Ontario. The first of these trials enrolled its first patient in March, 2011.
- This broad focus will allow early access to innovative therapeutics and technologies through clinical trials and faster adaptation of new treatment standards.
- CCTN is leading the charge to bring new treatments and technologies to Canadians affected by diabetes.

SUBMISSION

This submission demonstrates how investing directly in research and development and facilitating partnerships between private and public sectors create jobs, strengthens the economy and improves the quality of life of Canadians.

OVERVIEW

In 2008, the House of Commons Standing Committee on Finance recommended that “the federal government create a specialized fund for medical research for children’s health and in this regard, priority should be given to the establishment of a partnership with the Juvenile Diabetes Research Foundation (JDRF).” On November 23, 2009, JDRF Canada and the Federal Economic Development Agency for Southern Ontario launched the government’s first partnership to benefit diabetes and the diabetes research community. This partnership is a hallmark achievement for our organization and is a significant first step in making Canada a premier hub and home for international, cutting-edge diabetes research.

JUVENILE DIABETES RESEARCH FOUNDATION (JDRF)

JDRF is the leading charitable funder and advocate of type 1 diabetes research worldwide. JDRF’s mission is to find a cure for diabetes and its complications through the support of research. JDRF funding and leadership is associated with most major scientific breakthroughs in type 1 diabetes research to date in Canada and around the world. It has raised more than \$1.5 billion for diabetes research since its inception in 1970, including \$107 million in 2010. JDRF raises funds in 7 countries and is funding research in 19, including over 50 human clinical trials.

JDRF CANADIAN CLINICAL TRIAL NETWORK (CCTN)

Created in partnership with the Government of Canada, JDRF CCTN is funded by a commitment of \$20 million by the Federal Economic Development Agency for Southern Ontario (FedDev) in 2009, with an additional \$13.9 million contribution from JDRF. This \$33.9 million investment is helping to bring new technologies and treatments to the marketplace and ensuring that Canadians living with type 1 diabetes are among the first to benefit from the latest research.

JDRF CCTN is a groundbreaking effort to accelerate “Made-in-Canada” solutions for the management, care and cure of type 1 diabetes. JDRF CCTN is currently developing and implementing a broad range of high-profile clinical trials in association with leading diabetes researchers at partner universities and medical centres across Southern Ontario. By enhancing the existing clinical trial infrastructure in the province and providing high-profile training opportunities for seasoned and emerging investigators alike, JDRF CCTN aims to position Southern Ontario as an international hub for diabetes translation research, innovation and commercialization of new therapeutics and enabling technologies.

CCTN inspires exemplary network innovation and management which it plans to implement across a Canada-wide platform. This includes:

- Reduction in the incidence and prevalence of diabetes;
- Implementation of clinical trial-validated best practices;
- Clinical Trial innovative management;

- Facilitation of a national knowledge translation, data and technology network;
- Creation of a new class of capital investment to accelerate and leverage gains in Canadian research, development and commercialized delivery as well as an up-and-running electronic health record model;
- Creation of virtual infrastructure which can be used anywhere in Canada for any type of disease research.

This partnership exemplifies the four main principles of the government's Science and Technology Strategy and is already furthering Canada's world-leading expertise in the area of diabetes research. Now that the infrastructure is currently being established, additional funds secured will go directly into research priorities.

IMPORTANCE OF PARTNERSHIPS

Partnerships are a key component of JDRF's approach to research. Thanks to the partnership between the Government of Canada and JDRF, CCTN is inspiring exemplary network innovation and management across a Canada-wide platform and is a shining example of scientific excellence in Canada and around the world. This unique partnership is catalyzing world-class research excellence in diabetes and other disease research. The core objective is to improve the lives of Canadian children, youth and adults living with diabetes, encourage partnerships between the private sector and Government of Canada and demonstrate accountability through research management policies founded on a proven business model.

Robarts Clinical Trials, a unit within the Robarts Research Institute (an Institute operated by the University of Western Ontario), acts as JDRF CCTN's Clinical Operations Centre to develop, manage and apply international standards of quality across all clinical trials. Three main CCTN Clinical Centres in the province act as regional clinical trial hubs. These centers include the University of Western Ontario with Lawson Health Research Institute in London, the Children's Hospital of Eastern Ontario (CHEO) in Ottawa, and the Hospital for Sick Children (SickKids) in Toronto. In order to amplify the network across the province and provide opportunities to as many patients as possible across the province, CCTN also supports Clinical Partner sites and Affiliate Clinical Sites throughout the province, in addition to the three main hubs.

The establishment of CCTN has drawn interest from a variety of companies internationally. The Immune Tolerance Network, a non-profit, government-funded consortium of researchers based in the United States who are working to establish new treatments for diseases of the immune system, has expressed interest in partnering with CCTN to conduct clinical trials here in Canada. Both large pharma and small biotech companies have come to JDRF with proposals for potential consideration under CCTN. These proposals are currently going through JDRF's review process and would have not come to Canada without the leadership of CCTN.

The CCTN model has also received attention from JDRF counterparts globally. JDRF Australia is looking to emulate CCTN and have been granted \$5 million from the Australian government based on the Canadian model.

Furthermore, the Boston Pizza Foundation donated \$1 million dollars for research and clinical trials related to the Artificial Pancreas Project (APP). This generous donation will support JDRF's research related to APP, a device which, when fully developed, would be the first automated system to dispense insulin based on real-time changes in blood sugar levels, helping people better manage type 1 diabetes. This is a clear and concrete example of the measurable and impressive returns on investment leveraged through this partnership.

JDRF & CCTN ACHIEVEMENTS TO DATE

JDRF Canada is pleased to be able to report that in collaboration with the federal government, significant strides are being made in furthering diabetes research in Canada and around the world. The research leadership demonstrated by JDRF has a direct impact on the hundreds of millions of children, youth and adults worldwide who suffer from diabetes. While the research conducted by JDRF has a type 1 focus, the ability to translate and apply the research for the benefit of type 2 diabetes is very real.

CCTN has attracted global interest in conducting research at our hospitals and universities through the development of the medical and technology job sectors in Southern Ontario by creating highly-qualified jobs through CCTN contributing to the shift towards a knowledge-based economy.

When the CCTN partnership was originally proposed, JDRF set a goal to initiate three human clinical trials in Southern Ontario. CCTN has met its obligation and will exceed its goals. The first of these trials enrolled its first participant on March 28, 2011.

The government's investment is furthering the main objectives of *Advantage Canada*. This partnership continues to foster a "people advantage" by attracting and retaining our best researchers, a "knowledge advantage" by addressing a recognized gap in Canadian research and an "entrepreneurial advantage" through an operational Electronic Health Record System leading to a more competitive and dynamic research environment.

JDRF hopes to build on the strong foundation which has been established through its partnership with the federal government. In the future, further capital investment will accelerate and leverage immediate and impressive momentum gains in Canadian research, development and commercialized delivery.

This initial effort is just the beginning. In the coming year, JDRF is working to expand CCTN to become nationwide in scope, with the goal of a coast-to-coast research network. This network will change the Canadian research landscape forever and stand as a testament to the fact that the ongoing research breakthroughs delivered by Canada's world-renowned diabetes researchers and institutions are second-to-none in the world.

CANADA'S COMMITMENT TO SCIENCE & TECHNOLOGY

The Government of Canada has a history of recognizing the important role that research excellence and scientific success plays in improving the competitiveness and productivity of our society while also serving as a means to achieve a better standard and quality of living. In 2007, the Government of Canada introduced its Science and Technology (S&T) Strategy – *Mobilizing Science and Technology to Canada's Advantage* – setting out the government's multi-year science and technology agenda. The S&T strategy has since been supported by continued government investments which have led to real societal and economic gains.

The Science & Technology Strategy is founded on four core principles: world-class excellence; focusing on priorities; encouraging partnerships and enhancing accountability. Canada's S&T Strategy is evidence that the federal government understands that progress in science and technology, research and development, and innovation will enable Canada to make contributions to the world in vital fields, including in health and life sciences.

Critics have remarked on the progress that Canada has made in innovation over the last few years but note that there is still room for improvement as other countries are improving faster and Canada remains a mid-level performer. In particular, Canada requires stronger private-sector commitment and investment in science and technology. Collaboration between the business, academic, non-profit and public sectors is essential to Canada's future economic and social success. This underscores the notion that, in order to continue moving Canada forward, science and technology investments and partnerships like the one with JDRF, must remain a priority.

RECOMMENDATION TO GOVERNMENT:

That the Standing Committee on Finance recognize the importance of partnerships between private and public sectors, like that between Juvenile Diabetes Research Foundation (JDRF) and the Federal Economic Development Agency for Southern Ontario, which promote cutting-edge diabetes research, innovation and commercialization.

As evident by the progress and success to date of the Government of Canada's partnership with JDRF, a commitment to research and innovation allows Canada to continue to make strides in meeting the objectives set out in the *Advantage Canada* Strategy and the Science and Technology Strategy. At the same time, sustained government investment in science and technology will continue to leverage real and significant social and economic returns for Canada.