



Addendum to Genome Canada's Corporate Plan 2010–11

1. ABOUT THIS DOCUMENT

The *Addendum to the Corporate Plan 2010-11* has been prepared in compliance with the terms and conditions stated in the Amending Agreement of March 25, 2010 between Genome Canada and Industry Canada (Article 14, clause 14.7):

“By June 30, 2010, Genome Canada shall provide to the Minister an addendum to the 2010-11 Corporate Plan. This addendum shall provide the information required by Section 14.6 with respect to the Up-Front Multi-Year Funding. Information relating to the Up-Front Multi-Year Funding shall be included in all future Corporate Plans.”

The information in this document outlines plans for those new programs and activities which will be implemented in 2010-11 as a direct result of the Government of Canada's 2010 federal budget announcement of \$75M of new funding to Genome Canada. These plans not only align with Genome Canada's five objectives, but also are reflective of the Board of Directors' decisions to allocate funding to strategic priorities which will deliver social and economic benefits to Canadians. The implementation plans for the additional funding of \$75M support the Government of Canada's Science and Technology Strategy.

2. AMENDMENT TO SECTION IV - *Plans for 2010-11*

In 2010-11, Genome Canada will continue to deliver its mandate as the primary funding and information resource for genomics research in Canada, aligning its activities to its five objectives. It will continue to conduct, as required, on-going monitoring and interim reviews of its large-scale research projects and Science and Technology Innovation Centres in order to ensure milestones are met and to identify areas for improvement. Genome Canada will continue to consult broadly with its research community and other stakeholders with respect to determining future strategic priorities for Canada as well as assessing and staying apprised of international developments in science and research.

In addition to those activities outlined in the Corporate Plan which are currently supported through funding commitments from previous funding agreements, the infusion of an additional up-front multi-year \$75M in new funding from the Government of Canada will be allocated to the following activities to be undertaken in 2010-11:

- \$15M of new funding plus \$9 M of previously allocated funding to this program, will be targeted to a competition for Science and Technology Innovation Centres (previously called Science and Technology Platforms) Operations support;
- a minimum of \$30M will be targeted to a large-scale applied genomics research competition focused on forestry and environment; and,
- the balance of the up-front multi-year funding of \$75M will be available for a large-scale applied genomics research competition in Genome Canada's other strategic sectors, i.e., human health, agriculture and fisheries.

Also, at the March 25, 2010 Board of Directors meeting, funding of up to \$4.6M was allocated to the International Barcode of Life project, a six-year project initially approved by the board in 2008. This Canadian-led international consortium initiative is a flagship program for Genome Canada, with over 250 researchers based in 21 countries.

2.1 Science and Technology Innovation Centres

Genome Canada provides state-of-the-art technologies, expertise and infrastructure to Genome Canada-funded researchers and over 1500 others from academia and industry, across Canada and internationally, through its support of six Science and Technology Innovation Centres (previously called Science and Technology Platforms) across Canada. These Centres provide the entire spectrum of genomics technologies, including DNA sequencing, genotyping, RNA expression, protein identification and quantification (proteomics), metabolomics and the most advanced bioinformatics analyses to manage the vast quantities of complex data produced.

New funding to support the Science and Technology Innovation Centres offers Genome Canada an opportunity to develop a strategy which includes not only a) a competition to support the operations of the innovation centres; but also, b) opportunities to explore other mechanisms to leverage incrementally more funding for the innovation centres; and c) creation of a national network of innovation centres for purposes of better coordination and efficacy in the delivery of services to researchers across the country as well as to increase Canada's international competitiveness.

2.1.1 The Competition

The \$15M of new funding to be targeted to a competition for Science and Technology Innovation Centres Operations Support for fiscal years 2011-12 and 2012-13 will augment the \$9M in funding support which was previously allocated to support the operations of the innovation centres for those years. The competition will be launched in June 2010 with a decision from the Board of Directors on successful applicants given in March 2011.

The competition will be open to all currently funded innovation centres (6) in Canada, as well as potential new innovation centres that meet the eligibility requirements. To ensure the most excellent innovation centres are funded, all applications will be assessed by an international panel of experts through a rigorous review process.

The successful applicants from this competition must demonstrate that they are centres of innovation, and that they have the ability and desire to build collaborations amongst each other in order to build even stronger hubs of technological innovation. The successful applicants must demonstrate their ability to develop and adopt new technologies and methods, ability to provide high quality technology services, including bioinformatics and data analysis, to their clients.

2.1.2 Partnerships and Collaborations

In parallel to the launch of the competition for Science and Technology Innovation Centres Operations Support, discussions will be underway with specific external stakeholders to determine if there are opportunities to coordinate funding of infrastructure and operations of the innovation centres; as well as partnerships to address specific scientific queries using the latest genomics technologies.

2.1.3 National Network of Innovation Centres

Successful applicants of the competition for Science and Technology Innovation Centres Operations Support will be founding members of the proposed national network of innovation centres. The proposed mandate for the National Network of Innovation Centres is to encourage innovation centres

to collaborate and work together to meet researcher technology needs, and adopt and advance the latest genomics technologies. Further consultation with respect to the mandate and concept of the national network will be undertaken with current and potential new innovation centre leaders, Genome Centres, and other external stakeholders. Terms of reference and details on how the network will function will be posted on Genome Canada and Genome Centre web sites.

2.2 Large-Scale Project Competition

Genome Canada's approach to ensure that large-scale genomics research projects of the highest calibre are funded is to issue calls for proposals in sectors of strategic importance to Canada - health, agriculture, environment, forestry and fisheries. Projects are selected for funding through a rigorous scientific peer-review process involving international experts, as well as a due diligence process that examines the excellence of the proposals' financial and management elements. Central to Genome Canada's strategy is ensuring that the GE³LS implications and potential socio-economic benefits related to genomics research are addressed as an integrated component of each proposal.

Up to \$60 M of new funding will be available to launch a large-scale project competition, of which a minimum of \$30M will be targeted to projects from the forestry and environment sectors. The funding support will be awarded for a period of three years (2011-12 to 2013-14). The goal of the competition will be to ensure a competition process that meets or exceeds international standards for peer review and results in projects being funded with a high probability of success as measured by the excellence of the research outcomes and a high potential for benefits for Canada, with a particular emphasis on economic benefits.

2.2.1 Benefits to Canada

The Request for Applications for the 2010 Large Scale Applied Research Project competition will focus on the application of genomics research such that there is a high potential for benefits for Canada (with an emphasis on economic benefits) to be realized or initiated before the end of the project. Potential economic benefits could include one or more of the following: a) job creation and economic growth in Canada, b) development of a product or service, or c) creation of intellectual property (e.g., filing a patent) leading to potential licenses and/or new start-up companies. Other benefits could include: d) an impact on society, quality of life, better health, or the environment, e) knowledge generation and translation, or, f) the creation of new policies and best practices.

2.2.2. Targeted Research Areas – Forestry and Environment and Multi-Sectoral Areas

The 2010 funding agreement between Genome Canada and Industry Canada specifically requires that a minimum of \$30M of the new funding be allocated to funding successful research projects in forestry and the environment. Both of these sectors are of economic importance to Canada.

Proposed forestry projects should lead to the development of innovative approaches to help transform and strengthen Canada's forest industry, while also serving to protect and enhance the environment. Proposed environment projects should lead to outcomes that employ genomics approaches to understand the underlying biological processes involved in areas such as environmental remediation, restoration and habitat rehabilitation; development of new sources of energy and cleaner production technologies; pollution and contaminant abatement, prevention and detection; environmental adaptation to climate change; synthetic biology; and water stewardship.

The balance of the up-front multi-year funding of \$75M will be available for successful projects from a large-scale applied genomics research competition in Genome Canada's other strategic sectors, i.e., human health, agriculture and fisheries.

PLANNED RECEIPTS AND DISBURSEMENTS 2010-11

The following table provides a estimate of the receipts and disbursements for 2010-11 and subsequent fiscal years.

Planned Revenues and Expenditures 2010-11 and Subsequent Years *

Details <i>(In millions of dollars)</i>	Genome Canada				Estimated Co-funding From 2000-01 to 2014-2015	Total Genome Canada and Co-funding	%
	Actual 2000-01 to 2009-10	Planned 2010-11	Planned 20011-12 To 2014-15	Planned Cumulative 2000-01 to 2014-15			
RECEIPTS							
Government of Canada	719.1	46.9	149.0	915.0		915.0	44.0%
Investment Income	85.8	0.5	1.0	87.3		87.3	4.2%
Co-Funding					1079.3	1079.3	51.8%
	804.9	47.4	150.0	1002.3	1079.3	2081.6	100.0%
PROGRAM DISBURSEMENTS							
Research Projects							
Competition I	80.6			80.6	73.7	154.3	7.4%
Competition II	146.2			146.2	137.5	283.7	13.7%
Competition III	188.1	17.8		205.9	210.0	415.9	20.1%
Multi-Sector Competition			30.0	30.0	30.0	60.0	2.9%
Forestry and Environment			30.0	30.0	30.0	60.0	2.9%
Applied Genomics In Human Health Competition	59.9			59.9	69.8	129.7	6.3%
Applied Genomics in Bioproducts and Crops	6.4	15.8	32.8	55.0	59.0	114.0	5.5%
Bovine Genome Sequencing Project	6.0			6.0	63.4	69.4	3.3%
Structural Genomics Consortium	27.4	4.2	0.7	32.3	175.3	207.6	10.0%
Public Population Project in Genomics	13.0	2.9		15.9	43.1	59.0	2.8%
International Regulome Consortium	2.6			2.6	0.4	3.0	0.1%
International Barcode of Life	1.1	4.4	1.2	6.7	6.7	13.4	0.6%
Genome Canada-Genoma Espana Competition	7.7			7.7	7.8	15.5	0.7%
C. difficile	0.2			0.2	0.2	0.4	0.0%
New Technology Development	8.9	1.0		9.9	9.8	19.7	1.0%
Canadian Stem Cells Consortium	0.0	10.0	15.0	25.0	60.0	85.0	4.1%
	548.1	56.1	109.7	713.9	976.7	1690.6	81.5%
S&T Platforms	91.8	10.9	24.0	126.7	47.0	173.7	8.4%
Genome Centres Operations	52.4	5.5	9.0	66.9	55.6	122.5	5.9%
GENOME CANADA OPERATING EXPENDITURES	62.7	8.0	16.0	86.7		86.7	4.2%
Total Disbursements	755.0	80.5	158.7	994.2	1079.3	2073.5	100.0%
Excess (Deficiency) of Receipts over Disbursements	49.9	-33.1	-8.7	8.1			
Opening Cash Balance		49.9	16.8				
Closing Cash Balance	49.9	16.8	8.1	8.1			

* As at June 2010