



# **Guidelines and Evaluation Criteria for Position Papers**

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**GenomeCanada**

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Genome Canada is a not-for-profit corporation dedicated to developing and implementing a national strategy in genomics and proteomics research for the benefit of all Canadians. By means of **investments totalling \$840 million** to date from the Government of Canada, Genome Canada has become the primary funding and information resource relating to genomics and proteomics research in Canada and has established six Genome Centres across the country (Atlantic, Québec, Ontario, Prairie, Alberta and British Columbia).

## 1 OBJECTIVES OF GENOME CANADA

- Develop and implement a coordinated strategy for genomics and proteomics research to enable Canada to be among the world leaders in areas such as agriculture, environment, forestry, fisheries, animal & human health and new technology development.
- Support large-scale genomics and proteomics research projects of strategic importance to Canada, which are beyond current capacities, by bringing together industry, governments, universities, research hospitals and the public.
- Provide accessibility to Science & Technology Platforms to researchers in all genomics and proteomics related areas through 6 regional Genome Centres across Canada.
- Sustain leadership in research areas on Ethical, Environmental, Economic, Legal and Social issues related to genomics and proteomics research (GE<sup>3</sup>LS), and promote the communication of the relative risks, rewards and successes of genomics and proteomics research to the Canadian public.
- Leverage the Government of Canada investments with other Partners to foster the translation of research results into applications that will benefit Canadian economy or society.

## 2 BACKGROUND

Two years ago Genome Canada launched the first Request for Position Papers, as part of its fund raising activity, and invited the scientific community to join with other stakeholders to identify Strategic Research Themes through an initial submission of Expressions of Interest (EOIs) and the writing of position papers. The involved communities then selected leaders who agreed to manage the process leading to the submission of completed position papers in the summer. The position papers were subject to an international peer review and so far, four of them have been recommended to the Board of Genome Canada for inclusion in Genome Canada's strategic research portfolio and budget submission to Industry Canada. In 2007-08 the papers recommended to be carried forward were in the theme areas of Agriculture – Plants, "*Crop genomics for a healthy Canada*" and, Bioproducts, "*Securing Canada's*

*future bio-based economy through genomics*". In 2008-09 the papers recommended to be carried forward were in the theme areas of Agriculture – Animals, "*Aquatic and Terrestrial Animal Genomics*" and, Children's Health, "*Child Health Genomics: An Investment in Canada's Future*".

Copies of these position papers may be viewed at <http://positionpapers.genomecanada.ca/en/>

The Board of Genome Canada has agreed that a third round of the position paper process should be initiated with the objective of defining the strategic research themes to be included in its budget submission for 2009-2010.

The following five position papers developed in the last cycle will automatically go forward for review:

<b>Theme</b>	<b>Title of Position Paper</b>
Ecosystem Health	Ecosystem Health and Wealth
GE <sup>3</sup> LS	Models, Methods and Metrics for Governance of Genomics Innovation in Canada
Infection, Inflammation, and Immunity	Securing and Improving the Health of Canadians through Advanced Genomic Studies of Infection and Inflammation
Personalized Health Genomics	Cardiometabolic Health Genomics: Personalized Strategies for Optimized Care and Public Health
Protein Interaction Networks	Protein Interaction Networks in Cancer and Neurological Diseases

The leaders of these position papers may choose to revise the position paper, step down as leaders or they may choose to withdraw the position paper. Funding will be made available for those who wish to revise their paper. Leaders who wish to restart the entire consultation process, including a national workshop, must advise Genome Canada by February 2, 2009.

### 3 POSITION PAPERS (PRIORITY-SETTING PROCESS)

Genome Canada is leading its third round of priority-setting designed to identify Strategic Research Themes that will have the capacity to generate socio-economic benefits for the Canadian public. The process has been initiated by the Request for Position Papers (RFPP - November 2008). For further background reading, please refer to the November 2008 RFPP available on Genome Canada's web site (<http://positionpapers.genomecanada.ca/en/>).

The first step in the process will again be the submission of an Expression of Interest (EOI) by a proposed theme leader who is willing to drive the process and be responsible for delivering the position paper. The EOIs will identify Strategic Research Themes that focus on Canadian S&T strengths, and on the likelihood of generating near to medium term (~ 5 to 10 years) socio-economic outputs, outcomes and impacts on the sector or discipline covered by the theme. Each chosen Strategic Research Theme will be further developed through a position paper. Only those EOIs that clearly define a strategic research theme capable of being developed as a future funding competition, rather than a research project, will be considered as candidates for position papers.

By the end of January 2009, the analysis of all EOIs should be completed and agreement reached on which strategic research themes will be developed into position papers. **No more than 10 position papers in total will be taken forward.**

Researchers are invited to propose new Strategic Research Themes in all areas of the life sciences, but note that since Genome Canada's *Strategic Research Investment Portfolios* for 2007-08 and 2008-09 include position papers in the areas of agriculture – plants, agriculture-animals, bioproducts, and children's health, additional Expressions of Interest (EOIs) in these areas will not be considered in this round.

A position paper is expected to be a brief, non-technical paper defining the importance of the problem(s) to be tackled, and how genomics/proteomics tools can be brought to bear to provide solutions. It must describe the current state of the science in Canada and internationally, the infrastructure and human resources capacity available in Canada, the estimated total funding required over four years and the expected socio-economic outputs, outcomes and impacts on the sector or discipline covered by the strategic research theme.

It should be noted that leaders of Strategic Research Themes and position papers will be required to spend a significant portion of their time over a period of at least six months championing their proposed research theme, and bringing together researchers to coordinate the writing of the position paper. It should also be understood that researchers involved in the position paper process will not be accorded any advantage over other applicants in future competitions for funding.

In the summer of 2009, completed position papers will be reviewed and prioritized by an International Review Committee for recommendations on which position papers should be included in the *Genome Canada Strategic Research Investment Portfolio*, a detailed investment proposal intended for submission to the federal government in the fall of 2009.

Successful position papers will provide the foundation for subsequent Requests for Applications (RFAs) in competitions for project funding.

## **4 SUBMISSION AND EVALUATION PROCEDURES**

### **4.1 Time Line**

November 5, 2008	Release of RFPP and Guidelines
November 17 – December 15, 2008	Submission of Expressions of Interest (EOIs)
January 15, 2009	Consolidation meeting in Ottawa
End January, 2009	Decisions on new Strategic Research Themes
February 2, 2009	Deadline for 2007-08 theme leaders to request workshop
March, 19, 2009	Information Session in Ottawa
Late April, 2009	Workshops in Ottawa
June 1, 2009	Deadline for submission of Position Papers
September 3, 2009	International Review Panel meeting (Toronto)
September 24, 2009	To Board of Directors for decisions

Genome Canada may adjust the process for the identification of strategic research themes where warranted by the volume of proposals or other relevant factors. Any adjustment will be rapidly communicated through Genome Canada's website and through the Genome Centres.

### **4.2 Who Can Submit**

Genome Canada will accept EOIs from researchers from all Canadian academic institutions, government laboratories, companies, and research institutes. Scientists who may be taking up substantive positions in Canada in the near future are encouraged to consider participation in the process, but should contact Genome Canada in the first instance.

### 4.3 Expression of Interest (EOI)

The first step in the process is the submission of an Expression of Interest (EOI). EOIs will be accepted from November 17, 2008 to December 15, 2008. The EOI must be supported by a regional Genome Centre. EOIs that satisfy the basic eligibility criteria (see Appendix A) will be made public through posting on the Genome Canada website (<http://positionpapers.genomecanada.ca/en/>). The web site will be the vehicle for the dissemination of information to all interested individuals. In addition to viewing the EOIs, the web site will allow readers to post a comment on an EOI.

Each EOI must be presented on the form available on the Genome Canada website and include the following:

1. Title of proposed theme
2. Name, address and contact information of proposed leader(s) (a maximum of two leaders may be listed)
3. Date of submission
4. Discussion of the scientific basis of the research and the 'omics' tools to be applied.
5. The importance of the problem(s) to be tackled and the expected socio-economic outputs, outcomes and impacts on the sector or discipline covered by the theme in the near to medium term (~ 5-10 years).
6. Discussion of the current state of the science in Canada and internationally, demonstrating an awareness and experience of current progress.
7. Discussion of the infrastructure and human resources capacity available in Canada to undertake the research required
8. Proposed process to develop a position paper, including methods to be used to ensure inclusiveness in the consultation process, timeline and resources required.

After the deadline date of December 15, 2008, EOIs will be assessed for their eligibility to be developed into Position Papers. Particular regard will be given to whether or not they describe a strategic research theme that could support a competitive call for applications. EOIs that are judged to describe a research proposal of only limited general application will be disqualified and not considered further.

Although ideally, all EOIs that fulfill the eligibility criteria to move to the position paper process (see section B in Appendix A) would move forward, no more than 10 Strategic Research Themes will be developed into position papers at one time.

Because submitted position papers are not published (with the exception of those that are recommended for inclusion in Genome Canada's budget submission), there is likely to be some overlap between the current themes in the pipeline and new themes proposed through the EOIs. On January 15, 2009 a Consolidation Meeting will be held in Ottawa which will include representation from each of the interested EOIs and current

themes as well as from the Genome Centres to address any overlap issues and help the community to reach a consensus about which themes should move forward into the development phase.

Note that the Strategic Research Themes that go forward may not match the EOI titles as originally submitted since some EOIs covering related sectors or disciplines may be merged to form broader themes.

By the end of January 2009, the analysis of all EOIs should be completed and agreement reached on which strategic research themes will be developed into position papers.

If, at any time during the process, it is determined that an EOI does not satisfy the eligibility criteria as defined in Appendix A, Genome Canada will NOT accept the EOI into the position paper process.

#### **4.4 Position Paper Process**

The Strategic Research Themes must be national in scope and encompass an understanding and evaluation of related work being done internationally. Key responsibilities of the Genome Centres will be to help make contacts, identify appropriate participants to ensure inclusiveness, and find support (including potential co-funding) at the regional level for these national efforts. Each Strategic Research Theme must be supported by a Genome Centre. The primary supporting Centre will administer the funding allocated to the theme, however, all Genome Centers will work cooperatively with each other and with Genome Canada to ensure that the consultation processes are national in scope.

Genome Canada will play a coordinating role in the process, ensuring that the principles of openness and inclusiveness are respected.

##### **4.4.1 Fact Finding**

Theme leaders should begin the process by identifying other Canadian researchers working on the proposed Strategic Research Theme in other related sectors or disciplines where expertise will be required to ensure that the position paper will be informed by the most appropriate experts. Researchers who have registered their support for the EOI will serve as a starting point for the identification of interested participants. Other research, such as literature searches or market analyses, may also be required.

##### **4.4.2 Consultation / Workshops**

It is expected that leaders of the new themes will choose to hold a national workshop and bring together interested stakeholders to elucidate the goals of the position paper and build consensus on the actions that should be undertaken to meet these goals. Specific guidelines for the conduct of national workshops will be made available on the Genome Canada website. Workshops are tentatively scheduled to be held in Ottawa in

late-April 2009. This timing is provisional and Genome Canada would like to be informed of any significant clashes with international meetings that might adversely affect attendance.

#### **4.4.3 Writing**

Position papers are expected to be brief (no more than 10 pages of descriptive text, excluding a one page executive summary, diagrams, tables, citations and acknowledgements.), must expand the contents of the EOI and address the review criteria described in Appendix A. In addition, the estimated total funding required over a four-year period along with possible co-funding sources must be included. Position papers must be submitted in English.

#### **4.4.4 Submission**

The deadline date for submission of position papers is June 1, 2009. The prioritization process will be completed by September 2009. Acceptance of a position paper by Genome Canada should not be construed as a guarantee of inclusion in Genome Canada's *Strategic Research Investment Portfolio*. It should also be understood that while theme leaders might be principal applicants in future competitions funded through this process, being a theme leader will not guarantee or confer any advantage in subsequent competitions for funds.

### **4.5 Evaluation of Position Papers**

During the summer 2009 a multidisciplinary review panel comprised of international scientific, GE<sup>3</sup>LS and financial and management experts will review the completed position papers submitted in June 2009. The panel will meet on September 3, 2009 to evaluate and prioritize each position paper taking into consideration the evaluation criteria presented in Appendix A.

There will be an opportunity for theme leaders to have a face-to-face meeting with the panel to discuss various aspects of the position paper. In order to limit the length of the panel meeting, the face-to-face meeting will be restricted to a question & answer session – presentations by the theme leaders will not be permitted.

The review panel's recommendations will be submitted to the Board of Directors of Genome Canada in September 2009. The Board of Directors will make the final decision on the prioritization of position papers for the purpose of inclusion in the *Strategic Research Investment Portfolio*.

Genome Canada may adjust the evaluation process where warranted by the complexity of the proposals or other relevant factors. Any adjustments will be rapidly communicated through Genome Canada's website and through the Genome Centres.

## 5 FUNDING

For each approved theme, funding will be made available from Genome Canada to support the process of developing each position paper. In February 2009, a maximum of \$15,000 for each position paper will be made available through the lead Genome Centre to be used at the discretion of the chosen theme leader(s) towards any direct costs related to the position paper process, with the exception of salary costs for the theme leaders. Examples of eligible costs include:

- Literature search
- Administrative support and supplies
- A writers' meeting (where there is more than one author)
- Market studies
- Teleconferences

To request funds from Genome Canada theme leaders should send a detailed budget and confirmation of which Genome Centre will administer the funds.

In addition to these development funds, Genome Canada will coordinate and fund all national workshops. These thematic workshops are provisionally scheduled for late April 2009 at the Lord Elgin Hotel in Ottawa to assist those who may be participating in more than one workshop as well as to minimize costs. The specific dates for each thematic workshop will be made available at a later date.

## 6 Submission of a Position Paper

Position Papers should be submitted by a Theme Leader on or before 5:00 pm Eastern Time, June 1, 2009 by e-mail to [gcardin@genomecanada.ca](mailto:gcardin@genomecanada.ca).

### ***Format***

- A font no smaller than 11 point should be used.
- The position paper is expected to be no more than 10 pages long excluding charts, tables, references, executive summary and response to previous reviews (where applicable).
- The executive summary should be limited to one (1) page.
- Charts and tables should be limited to three (3) pages.
- References should be limited to one (1) page.
- Response to previous reviews should be limited to two (2) pages.
- The position paper must be submitted in Word or WordPerfect format. There are no specific formatting requirements for additional attachments.

### ***Attachments***

It should be noted that only the 10-page position paper and the tables, charts, references, executive summary and response to previous reviews, where applicable, will be sent to reviewers. Any other attachments received will be posted on a web site to which the reviewers will have access; however, they will not be compelled to view them. Any portion of the position paper that exceeds the page limits will be removed and treated as an appendix.

### ***Language***

To ensure that position papers can be sent to the most appropriate international reviewers, papers must be submitted in English.

### ***Posting on the Web***

By submitting a position paper to Genome Canada you agree to its posting on the Genome Canada web site in the eventuality that it is chosen to form part of Genome Canada's Strategic Research Investment Portfolio. Attachments will not be posted.

### ***Optional Element for Returning Themes***

Returning themes may, if they choose to, use up to two (2) additional pages to respond to previous reviews. Note that the previous reviews will NOT be made available to reviewers.

## **7. Lessons Learned**

The position papers international review panel has offered some advice for improving future rounds. Below are the most salient comments from the panel for writers of position papers.

- 7.1** Although the eventual audience for position papers is the Government of Canada, papers should be written keeping in mind the peer review panel, which is the first target audience for position papers. The peer review panel will be a multidisciplinary group which will include world calibre genomic scientists, economists and biotechnology business executives.
- 7.2** It is important to include references to the source documents used for statistics and assertions of economic and social impact made in the position papers.
- 7.3** Clearly state the objectives, justifications, expected social and economic benefits and GE<sup>3</sup>LS issues.
- 7.4** When describing the human resource capacity in Canada, be as specific as possible. Keep in mind that most of the members of the peer review panel will be non-Canadians who may not be aware of all the key players in Canada, especially outside of their specific area of expertise.

## **8 FOR MORE INFORMATION**

Queries should be directed to:

Dr. Michael J. Morgan  
Chief Scientific Officer  
Genome Canada  
150 Metcalfe Street, Suite 2100  
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Tel: (613) 796-1230  
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## **APPENDIX A – ELIGIBILITY AND EVALUATION CRITERIA**

### **A Eligibility Criteria for Posting Expressions of Interest (EOI) on the Web Site**

The Primary objective is to enable Genome Canada to raise funds to create new research funding opportunities. Bear in mind that successful themes will be translated into specific Requests For Applications (RFAs).

EOIs must, therefore, describe Strategic Research Themes that are national in scope, focus on Canadian S&T strengths, and address problems of major importance. They must describe how the application of genomics, or allied 'omics,' research to an identified biological problem is likely to provide a solution that could be translated into applications that will benefit Canadians (health, wealth and wellbeing) in the near to medium term. Themes in the areas of ethical, environmental, economic, legal and social impacts of genomics (GE<sup>3</sup>LS) research are welcome

1. The Theme must focus on the application of genomics or proteomics research.
2. The EOI must describe expected socio-economic outputs, outcomes and impacts on the sector or discipline covered by the theme in the near to medium term (~ 5-10 years).
3. The EOI must describe a process for the development of a position paper.
4. The EOI must identify a theme leader(s) who will drive the process and be responsible for delivering a position paper.
5. The EOI must have the support of a Genome Centre.

## **B Eligibility Criteria for Consideration to Move EOI to Position Paper Process**

The EOI must fulfil the five criteria in A above as well as the following:

1. The Theme proposed must be in an area of strategic importance to the Canadian economy and/or society.

## **C Evaluation Criteria for Position Papers**

The following criteria will be expected to be met, but the list is not exhaustive.

- 1 The Theme must focus on large-scale, 'omics' research or research in the areas of ethical, environmental, economic, legal and social issues related to such research (GE<sup>3</sup>LS), and the expected socio-economic outputs, outcomes and impact on the sector or discipline covered by the theme within the near to medium term (five to ten years).
- 2 The relevance and international impact of the proposed research. Will the research enable Canada to position itself among the world's leaders or sustain it in that position? How does it compare to research being conducted elsewhere?
- 3 Economic size or societal impact of the sector or discipline covered by the specific theme.
- 4 Demonstration of inclusiveness of the process used to develop the position paper, including the consultation process.
- 5 Demonstration that the type of research proposed builds on existing Canadian S&T strengths and expertise in genomics or proteomics research using existing infrastructure, where appropriate and/or targets a unique Canadian niche.
- 6 Demonstration of sufficient stakeholder interest and support, including potential co-funders.