Report of the SSHRC International Expert Panel
for
Imagining Canada's Future

9 December 2012

1. Introduction and Context

The Panel is honoured to have been asked to participate in the "Imagining Canada's Future" project. The Panel recognizes the importance of thinking ahead to identify Canada's future challenges. It believes deeply that the social sciences and humanities have much to contribute to understanding and addressing these challenges. The Panel recognizes the obligation of scholars to work on these challenges and to articulate to Canadians the nature and contribution of their research.

At the same time, the Panel stresses the importance to society and our future of an unconstrained quest for knowledge, not limited by an "instrumentalist " definition of inquiry that seems to frame the approach of this project, a utilitarian framing which may narrow the range of aspects of social science and humanities on which we can draw. The Panel regards Humanities as quite important, along with Social Science, in providing insights that help citizens, groups and governments in various ways, some of them influencing policy, others influencing how people conduct their lives.

The best preparation for fully understanding Canada's future challenges lies with very strong support of a diverse, curiosity-driven community of social science and humanities researchers. These researchers will often study the challenges we have all recognized; sometimes they will recognize the unexpected; sometimes they will tell us what we do not know and ask that we reflect on what it means to know; and sometimes they will offer criticism of the choices made by government, often giving voice to the marginalized. All these are vital to Canada's future.

Canadians must focus on the interconnection of things. What to do about climate change or health or the economy or inequality or First Nations or Quebecois? – these all involve exploring what is valued and what is valuable, and to whom. We must develop new ways of knowing, evaluating, judging, and deciding: better health outcomes turns on having better social situations, not purely on medicine and genes; responding to the environment turns on how people understand risk, what they are willing to pay today to improve their future, and on who pays the costs.

Seeing the interconnection of things requires cutting across methods and procedures. Should the natural science panels in Canada have several people from SSHRC on them and vice-versa? Do we really think the climate, environment, health, and economics panels can work effectively without knowledge–about what is valued, how decisions are made, whose influence counts, how people interpret their experiences, and with whom do people feel solidarities and a sense of shared experience? The Panel thinks research initiatives in science, engineering, and other so-called "technical fields" would benefit significantly from cooperative research with the Humanities and the Social Sciences.

2.   General Comments on Foresight Process

The Expert Panel read through the various reports generated by the SSHRC process (see Appendix B for a summary list of those reports). The Panel found this process was a good way of drawing out information on what people think, involving many Canadians in deliberation and discussion. In particular, the Expert Panel was very impressed with the depth and quality of the analysis presented in all of the regional reports. It thanks all the colleagues that participated in drawing up the regional panel reports.

That said, in the view of the Expert Panel, the process was not particularly successful in identifying interdisciplinary and cross-cutting topics to address what the panel members understood to be the highest priority challenges.

The Panel recognizes that a key success factor in any foresight process is the ability to minimize the level of uncertainty associated with its recommended areas of focus. At the same time, we are also keenly aware of the relatively low rate of success associated with the use of foresight methodology. The challenge for the Panel is made more difficult by the rapid changes occurring as a result of technological advances, social transformations, and changes in the natural environment. The continued use of tools to manage complex socio-ecological systems that assume changes will be linear and gradual has the potential to generate profoundly disruptive consequences for humans and their communities.   As such, the Panel considered it critical to be mindful of this warning in both its identification of potential future challenges for Canadian society and in assigning a timeframe for addressing these challenges.

In many, if not all the challenge areas it is not realistic to expect strict time boundaries in when and how these challenges will appear or require resolution. In the Panel's view, the challenge areas that have been identified are all of comparable urgency, and require immediate and sustained effort NOW.

Of the six thematic challenge areas identified by the Panel, we considered all to be important over the near-term, five-to-ten year time frame. We also determined that how we resolve these challenges during this period will influence how they evolve over the subsequent ten-year period. For example, the way in which Canadian public policy is informed and developed to addresses the themes of *Social Recognition and Inclusion, Generations in the Life Course,* and *Governance and Legitimacy in a Diverse Canada* over the near-term will significantly influence the nature of challenges that will arise over the longer, ten-to-twenty year time frame. We see the need to focus on the theme *Information: Creation, Absorption, Adaptation* now and continuously, as the nature of the challenges posed are cross-cutting and dynamic and the responses will need to be flexible and adaptive over time.   In terms of the theme of *Risk and Opportunity in a Multipolar World*, we see action being needed in the near-term to seize opportunities to strengthen Canada's position as a global player. This is important for Canadian society in order to maximize the benefits and minimize potential conflicts that might arise if this challenge area is not attended to in an informed manner consistent with Canadian principles. Finally, as a

country endowed with huge natural resources, we noted the growing demand for democratic decision-making in this thematic area and the need to focus on this challenge in the near-term. However, we also noted that, by identifying the theme as *Natural Resources and Energy in a Democracy,* there is an inherent longer-term need to address the challenges arising in this area. In addition to near-term issues, we suggest that the ten-to-twenty year period will become an essential time frame for Canada as we attempt to address both 'within Canada' and large scale 'international' challenges associated with this thematic area.

Priorities: The Panel would make a final comment on the relative priorities of the challenge areas. Our identified challenge areas are presented in alphabetical order. We quite deliberately did not prioritize them as the process of doing so seemed meaningless to us. These are six topics of great importance to Canada. Only a process of extensive consultation and engagement of citizens, groups, and organizations can establish the relative priority among the range of values and peoples involved and affected.

1.   Definition of the Priority Challenge Areas

Through its readings of materials provided and discussion, The Expert Panel identified what it felt were the top six challenge areas that Canada will face over the next several decades. For each challenge, the Panel characterized the key issue facing Canada, the topic areas associated with it, why it is important, and how the social sciences and the humanities will help address it.

These are presented in *alphabetical order* according to the titles:

a) **Generations in the Life Course**
b) **Governance and Legitimacy in a Diverse Canada**
c) **Information: Creation, Absorption, Adaption**
d) **Natural Resources and Energy in a Democracy**
e) **Risk and Opportunity in a Multipolar World**
f) **Social Recognition and Inclusion**

In the following sections, the Expert Panel describes in more detail what each of these challenge areas entails. It spent considerable time characterizing how the challenge area is understood from a social sciences and humanities perspective, and how such a challenge area could and should be addressed by social sciences and humanities research. It also identified those areas where, based on the information available to it, important opportunities exist for collaboration with researchers in the natural sciences, engineering, and health sciences.

a) Generations in the Life Course

The traditional patterns of education, work and retirement, as well as childhood and family formation are being destabilized because of transformations of the economy, transformations of family, social relations and gender roles, and the ageing of the population. These life course changes affect everyone, but present themselves differently for different groups, for example for rural-urban areas, for families of different incomes, for immigrant families, Aboriginal peoples, and visible minorities.

This challenge area includes topics such as:

➔ Youth, education, work, social relations, and work-life issues
➔ Multiple jobs/careers and changing family structures over the life course
➔ Ageing, well-being, health, and resilience
➔ Intergenerational redistribution; gendered dimensions in life course issues; new forms of work; labour rights, continuing education, and training
➔ Polarization of life chances
➔ Social/cultural representations of age, youth, ageing, stages of life, meanings of retirement, "being old," and time
➔ Ethics and mutual obligations of people to each other, end of life issues, and reproductive technologies

a.i) Importance

The movement of people through the generations has important financial implications for individuals, the family, and the government. Governments face particular challenges in financing education, training, pensions, and health services. There are also important social challenges to individuals and families, as well as their relationships with one another. These destabilizing life course changes bring about risks of social fragmentation, division, and exclusion.

a.ii) Social Sciences and Humanities Contributions

 Analysis of these themes is at the center of many of the social sciences, and the life course prism is an important lens to look at the issues that cause destabilization. For example, sociology, demography, economics, psychology, and social work continue to make major contributions to our understanding of life course. A particular strength of the humanities (literary, media, film, fine arts, and religious studies) is to give representation and meaning to the various stages of life. The above-mentioned risks and financial issues involve difficult choices that require thoughtful ethical reasoning, informed by research across the disciplines, particularly philosophy. Furthermore, Canada's ability to respond to these challenges will be enriched by historical and comparative perspectives.

b) Governance and Legitimacy in a Diverse Canada

We face great challenges in making social decisions on important issues that people accept as legitimate. Canada faces declining participation in the political process, and people in many diverse communities feel disconnected or disempowered from decisions made far away. At the same time, the spread of information, technology, and non-government structures are empowering people in ways not dreamt of previously. Nonetheless, many groups continue to be seen as, or feel as, outsiders to the political process, and under-represented in our legislatures–women, aboriginals, ethnic minorities, and regional interests.   Solving these governance issues lies at the core of our ability to make decisions, and to make decisions that stick because they are acceptable to our population.

This challenge area includes the following issues.

➜ The appropriate location of decision-making authority among levels of government (local, provincial, federal, international) and the appropriate balance between the greater national good versus local interests

➜ The expansion of under-represented groups in political decision-making

➜ The rights of Aboriginal Peoples

➜ The authority boundary between public and private, the role of non-governmental groups (NGOs) (such as professions, interest groups, and other forms of expertise), and the role of regulatory bodies in the governance of private and semi-private groups whose activities affect the public (e.g. shareholder-manager relations, corporate governance, banking rules)

➜ Legitimacy created from the interaction of varying "social imaginaries" (a group's beliefs about its defining values) among groups and regions in contemporary Canada (such as First Nations, Quebecois, English and other European origin peoples, and recent migrants)

➜ The design of institutions that favor ethical behavior in social processes

➜ New processes of involvement, such as social media, deliberative democracy, NGOs, and new social movements

b.i) Importance

Canada faces problems in making important decisions that have procedural and substantive legitimacy.   In a world of constrained resources, global change, and moving social structures, governments must be able to make critical funding allocations, regulatory arrangements, and public policy based on valid inputs and processes that people regard as legitimate.

b.ii) Social Sciences and Humanities Contributions

Effective government rests on a legitimate decision-making process.   Legitimacy rests on values, meanings, desire to participate, models of government, effective political processes, and constitutional arrangements. Political scientists study the way political institutions aggregate values and preferences. Anthropology and sociology examine the meanings people give to participation, voice, and exclusion. The faculty in literature, critical studies and film studies examine the cultural expressions that help provide meaning and voice to changing realities. Economists study the impact of incentives on behavior and behavioral economists look at the psychology of risk and calculation. Historians, anthropologists, and political scientists compare the present to the past in ways that help understand how people decide and what is effective policy.   Specialists in social philosophy and social movements examine the meaning of participation, the causes of alienation, and protests.

c) Information: Creation, Absorption, Adaptation

Innovative digital media technologies challenge every aspect of our lives. These changes have globalized mass communication and made social media ubiquitous. Accessing personal data has become easier and more vulnerable to attack, threatening our economic, psychological, and personal security. New digital media technologies have created social, moral, and political problems that have forced us to reflect on the relationship between technology and human beings.

Key issues surrounding this challenge include:

➔   Unanticipated consequences arising from disruptive technological change forcing social and individual adaptations

➔   Innovations in digital media technology on modes of self presentation and building social relationships

➔   Mass communication and greater global connectivity

➔   Threats to privacy arising from the accessibility of personal information and radical transparency

➔   The advent of big data and data science are transforming industries, including health services, financial services, and business practice, with unanticipated consequences

➔   The ease of access to information and data, absorption capacity, adaptation and transformation of how we learn

➔   The future of education and research

c.i) Importance

Massive changes in technology over relatively short periods of time have, for better or worse, impacted the social cohesion and economic well-being of Canadian society. A handheld wireless phone can now easily and quickly access vast bodies of

information on the Internet, reinventing how we understand the world while deeply affecting the ways we interact with each other. Social media programs like Facebook, Twitter, Tumblr, and Instagram have redefined how we understand human interaction. In one sense, technology has alienated human interaction; in another sense, it has created vast meaningful social networks, especially among the youth.

Changes in technology have also profoundly affected how we do research, and what counts as research. For example, more precise and powerful magnetic resonance imaging (MRI) scanners have opened up fields of study, such as neuroscience, that have increased our understanding of the brain, how we learn, and what it means to think. At the same time, cutting edge technology is very costly, which has put certain fields of study out of reach for those institutions that cannot afford them. Education and research have been essential for nurturing technological innovation, but have also been radically transformed in the process. As information and bodies of knowledge become more easily accessible on the Internet, universities will have to incorporate these changes in productive ways.

c.ii) Social Sciences and Humanities Contributions

The Social Sciences and Humanities are playing a more important role in assessing the effects of technology in a digitized world. The Social Sciences and Humanities can help us understand how technology enables new forms of learning, while transforming the way we interact with each other and the world. Essentially, we change the culture of learning to generate greater cognitive skills and engaged healthy citizens. Political scientists are using MRI technology and genetics to understand emotion and decision-making. Sociologists, anthropologists, and psychologists study the impact of computers on friendships, social bonds and capacities for action. Economists and management experts explore the ways electronic information changes the global supply chain, the geographical distribution of design and manufacturing, the location of engineering and basic research, and job markets. Psychologists and education specialists explore how information systems impact learning, school systems, universities, the acquisition of skills, and the distribution of employment opportunities. Communications specialists study the transformation of media systems and the diffusion of culture by changes in electronic delivery of information.

d) Natural Resources and Energy in a Democracy

Population groups and communities in Canada are affected in diverse ways by the development of natural resources and energy. These differences in impact highlight issues of social justice and employment, non-renewable resources, and environmental limitations. They also affect economic, social, and quality of life. While the topic of natural resources and energy is conventionally associated with the natural sciences, the challenge of articulating the choices and trade-offs to be made in a democratic and heterogeneous society requires thoughtfully constructed tools and decision-making processes.

Key aspects associated with this challenge area include the following:

➔ Values and principles underpinning decision-making across different regions (e.g., sustainability and the right to develop)

➔ Resource limitations and increasing pressures on social-ecological systems

➔ Choices associated with natural resources exploitation and energy production, including opportunities for present and future generations, and protection of natural areas

➔ Impacts of cultural representation and understanding information through the lens of cultural specificity

➔ Choices to open new areas of exploitation such as the Canadian North

➔ Decision making in the context of federal/provincial/territorial relationships and with Aboriginal Peoples

➔ Stakeholder representation and social consent

d.i) Importance

The question of how democracies make decisions to develop natural resources and energy has urgent implications for Canadian society and its environment. There are also longer-term challenges (over the ten to twenty-year period) that can benefit from social sciences and humanities research. These include examination of community value systems that give meaning to the scientific assessment of risk. What people do with assessments of risk differs depending on their value framework and historical experience.

The governmental units and communities in which development occurs are often engaged in difficult and sometimes contentious political decision-making processes. Decisions about who will regulate natural resource development, including all forms of energy development, are made at different levels of government. The results of these decision-making processes have implications for how the costs and benefits of natural resource development are assessed and distributed among people and places.

Because of increasing global consumption of natural resources and carbon-based energy sources, more knowledge is needed on Canada's potential responses in the long-term (ten-to-twenty years). These potential responses go beyond the creation of new technologies to an understanding of choices and the values under-pinning them. Canada can play a significant leadership role in linking technological advances to their human consequences. For example, the growing global discourse on geo-engineering as an adaptation response to climate change and the near future consequences are important decisions for Canadian society.

d.ii) Social Sciences and Humanities Contributions

This challenge area requires research that is inherently interdisciplinary and opens the possibility for collaboration between social scientists, humanists, and natural scientists. Within the social sciences and humanities, some examples of contributions to knowledge in resource development and energy decisions in a

democracy include areas such as communications studies, which can address the ways in which people learn about and understand scientific issues and policy choices. Sociology and anthropology focus on meaning-making and the development of value positions that underpin resource and energy decision-making. They also contribute to knowledge about the capacity of communities to address complex decision-making and resource management issues. Geographers, economists and public policy experts contribute to the evaluation of the total costs and benefits of resource and energy development, including employment gains and losses associated with resource development choices. Political scientists and legal scholars examine the levels of governmental policy-making, how they intersect and affect the distribution of resource development costs and benefits.

e) Risk and Opportunity in a Multipolar World

Over the past three quarters of a century, we have experienced the wide and varied challenges and implications of a bipolar world (i.e., the Cold War) and a unipolar one (i.e., the United States post-1989). The continuing decline of the United States as the dominant global superpower, and the consequent emergence of other sites of power and influence (e.g., Brazil, China, India, Russia, EU, and the Global South), has resulted in a less stable, secure, and predictable world order. This newly multipolar world will generate both risks and opportunities for Canadians and Canadian decision-makers. Minimizing the risks while maximizing the opportunities will require careful examination of the globe's still-shifting and changing social, cultural, economic and political conditions, and circumstances.

Areas of specific concern include:

➔ The significance of new multipolar geo-political circumstances for trade, finance, security, society, and culture
➔ Identification of nations and regions that could constitute new partners for Canadian policy (e.g., trade and security agreements, and environmental partnerships)
➔ New vectors of the movement of people (e.g., immigration, tourism, and work)
➔ Changes in cultural production and reception, as well as the emergence of new agents and forms of culture
➔ Cosmopolitanisms and new conceptions of citizenship and belonging
➔ Distinct opportunities in a multipolar world for federal and provincial governments, as well as for Aboriginal communities and minority groups

e.i) Importance

Over the next two decades, the world will continue its shift to multiple national and regional sites of power and influence, a development with significant repercussions for trade, finance, politics, social experience, and cultural expression. If Canada is to

retain its status as a country with global influence and a high standard of living, and is to maximize its capacities to shape and guide decisions (at home and abroad) that will impact Canadian society, it is essential that researchers in the humanities and social sciences direct their attention and energies to making sense of the complex, new map of global power now emerging.

e.ii) Social Sciences and Humanities Contributions

A multipolar world creates demands for an enhanced understanding of the precise character of the world we inhabit today. The research of economists and political scientists connect shifts in power and influence to policy decisions, enabling government and industry to make informed choices about emerging areas of trade in a highly competitive global market for goods and resources. Sociologists, anthropologists, and urban studies scholars explore the changing movements of people across the globe, and the specific role of cities in a multipolar world. Philosophers, literary scholars, and cultural critics examine evolving ideas of citizenship and belonging, including theories of cosmopolitanisms. Historians study distinct moments of global power in relation to the present configurations, including the relationship of contemporary multipolarities to the bipolar and unipolar contexts out of which it developed. Finally, environmental studies scholars examine the impact of a multipolar world on global environmental policies.

f) Social Recognition and Inclusion

Diverse societies that are thoroughly integrated in the world economy face a variety of challenges in terms of inclusion, participation, and social cooperation. Designing policies and processes, and promoting forms of recognition that can counter exclusion, anomie, and fragmentation are a major priority for our society. Rethinking the social contract for improving social justice and fostering collective well-being is of crucial importance. The "grand bargain" of the welfare state included the right to a job, which is now challenged by apparently chronic unemployment. These new conditions require rethinking how to secure economic and other forms of inclusion.

This challenge area includes topics such as:

➔ Redistribution and recognition as two key dimensions of full social membership manifested at the economic, social, cultural, and political levels

➔ Growing polarization of life chances and unequal access to education, training, income, and other resources

➔ Creation of opportunities across groups, including their potential symbolic and material gains, in the context of a changing economy

➔ Isolation and exclusion from institutions and decline in social cohesion

➔ Stigmatization of various groups, including Aboriginal Peoples, sexual orientation/religious/ethnic/racial minorities, immigrants, low-income

    populations, the unemployed, people with disabilities, and francophones in certain regions

➔ Restrictive definitions of cultural belonging, social esteem or who is a worthy member of the polity, in the media, education, and elsewhere

➔ Difficulty of inspiring collective social projects and stronger collective identities in the context of growing diversity and contested interpretations of the past

➔ Balance between responsibilities, rights, and benefits among citizens. Reciprocity between what is expected from the states and institutions on the one hand, and citizenry on the other, according to needs and capabilities

f.i) Importance

Reducing growing inequality and empowering marginal populations is an enormous challenge. From the perspective of improving social inclusion, there is a need to increase social participation—namely, involvement in social associations, NGOs, religious organizations, social movements, political activities, and community building. More generally, social resilience requires identifying cultural and institutional mechanisms that may bolster social action.

f.ii) Social Sciences and Humanities Contributions

There are many areas of research in the social sciences and the humanities that address these challenges. Here are a few examples: Political philosophy, ethics, epidemiology, social work, and psychology focus on the societal benefits of greater redistribution and recognition. Economists, sociologists, geographers, urban studies experts, and others contribute to describing and explaining patterns of mobility and distribution of resources, spatial distribution, and segregation. Historians, anthropologists, sociologists, psychologists, and experts in literary studies study stigmatization (including racism and xenophobia) and responses from individuals, groups, social movements and institutions. Humanists contribute to the study of expressive cultures and their impact on collective imaginaries, identities, and recognition. Policy experts consider Canadian approaches to tackling poverty, early childhood development, and uneven regional development.

3.　　Methodologies of investigation

The panel identified in its deliberations a number of methodologies that can contribute substantially to these challenge areas and that break down boundaries across disciplines and topics.   These include:

➔ Cultural analysis of discursive, artistic, or media productions, including the use of ethnography, photo-voice, and other textual, visual, and sound techniques for gathering cultural data;

- ➔ Network analysis, which helps better understand conditions for human collaboration and integration;
- ➔ Natural experiments, which may be particularly useful to understand how to implement change, presuming that they take into consideration the context in which individual live;
- ➔ Action or collaborative research, which will engage citizens in learning in their pursuit of collective societal projects and enable a greater collaboration between researchers and the public;
- ➔ Applied ethics informed by the social sciences and legal scholarship, and interdisciplinary normative inquiry; and
- ➔ Techniques for mining large data set, which will enable us to mobilize the enormous potential of digital data.

4.   Summary and Conclusion

The view of the Expert Panel is that Canada must deal with six areas of importance to its future well being. We list them here in reverse alphabetical order than presented in the text above to emphasize that we have not prioritized them:

- ➔ **Social Recognition and Inclusion**
- ➔ **Risk and Opportunity in a Multipolar World**
- ➔ **Natural Resources and Energy in A Democracy**
- ➔ **Information: Creation, Absorption, Adaption**
- ➔ **Governance and Legitimacy in a Diverse Canada**
- ➔ **Generations in the Life Course**

Canada must learn how to recognize and include the peoples that comprise it; how to interact with a rapidly changing global system that may lack hierarchy and structure; how to develop its economy, natural resources and energy in a context of democracy, and social inclusion; how to handle the explosion of knowledge transmission and information; how to develop decision-making processes that have high legitimacy and effectiveness; and how to reflect rapid change in the risks, opportunities, and resources available in a heterogeneous population to the life course from cradle to grave, in the context of a rapidly changing economic environment.

The expert Panel's observations are based on close study of the many inputs provided by the regional panels and documents provided to us by SSHRC. The Panel members engaged in extensive discussion via telephone, email and face-to-face meetings.

The Expert Panel does not believe that prioritization or temporality of these challenge areas make any sense. The areas interact so closely that it would make little sense to pull them apart in a ranked list. The logic of time planning has not been shown to be fruitful.

In closing, the Expert Panel thanks the colleagues who have provided their thoughtful input into this foresight exercise, and the SSHRC staff that supported this initiative with dedication and professionalism. The Expert Panel 's members feel honored to be invited to participate in this process. We hope we have contributed to this discussion, so important to Canada as a whole and to researchers in particular, who are engaged so deeply in understanding the many dimensions and peoples that make up modern Canada.

Appendix A: Panel Membership

Chair

Peter Gourevitch, UCSD, founding Dean, School of International Relations and Pacific Studies at UCSD, and Visiting Professor, Munk School of Global Affairs University of Toronto (fall of 2011-2014).

Panel Members

Susan Christopherson, Cornell University, City and Regional Planning

Janet Ecker, President, Toronto Financial Services Alliance (TFSA)

George Fallis, York University, Department of Economics

Lucia Fanning, Director, Marine Affairs Program, Faculty of Management, Dalhousie University

Michèle Lamont, Harvard University, Sociology

Jocelyn Maclure, Laval University, Philosophy

Imre Szeman, University of Alberta, English and Cultural Studies

Diane-Gabrielle Tremblay, University of Quebec (Téluq), Labour Economics and Work-Life Issues

Dale Turner, Dartmouth College, Department of Government

Appendix B: Panel Mandate, Composition and Procedures

a) Panel Mandate

CIFAR was asked by SSHRC to put together an International Expert Panel (the Panel) to contribute to SSHRC's Imagining Canada's Future Project. The Panel is to provide a report to SSHRC that identifies 5-6 challenge areas that may face Canadian society in a global context over the next 5, 10, and 20 years, and to which the social sciences and humanities research community could contribute its knowledge and expertise.

The Panel is to rank and justify its choices. The Panel is also to address whether the challenge areas are likely to become more important in 5, 10, or 20 years; what unique perspectives the social sciences and humanities contribute to exploration and understanding of these challenge areas; and what opportunities exist for inter- or multi-disciplinary collaboration with health research, and natural sciences, and engineering as well as the public, private and not-for-profit sectors.

The Panel Report will be submitted to SSHRC. A Synthesis Meeting at SSHRC will consider the Panel Report, along with much other material, and will select 5-6 challenge areas. The Panel has been provided with the criteria to be used in the Synthesis Meeting. The selected challenges will be forwarded to SSHRC's governing council for endorsement. Once endorsed, the challenge areas will be integrated, as appropriate, within SSHRC's Talent, Insight and Connections programs in order to stimulate research and related activities as well as corporate activities in these areas.

b) Panel Composition

CIFAR assembled the International Expert Panel, following criteria suggested by SSHRC, to ensure a breadth and depth of knowledge and expertise. To that end, CIFAR sought panel members who would encompass the following criteria: leadership in the research community, national and international representation, disciplinary breadth, representation from the public and private sectors, diversity of Canadian regions, and demographic balance. The panel membership is listed in Appendix A.

c) Panel Procedures

The SSHRC *Imagining Canada's Future* Project used a systematic foresight approach to identifying future challenge areas. It engaged the research community as well as the public, private and not-for-profit sectors in a number of interrelated activities. The approach provides multiple lines of evidence from Canada and abroad, and from diverse sources.

The panel was provided four reports from four activities/lines of evidence:

- ➔ "Imaging Canada's Future – 2030" a report by the consulting firm Shaping Tomorrow and presented by Sheila Moorcroft, March 2012
- ➔ "Content Analysis of Canadian and International Foresight Studies" prepared by SSHRC staff, revised November 2012
- ➔ "Report from the Scenario Development Workshop" conducted by SSHRC and Scenarios to Strategy Inc., Ottawa, September 18-18, 2012
- ➔ 6 "Regional Panel Reports;" a summary of the themes identified by each panel; and a draft summary of all the panel reports. The panels were constituted in different ways and met a different times, with the draft overall summary dated November 6, 2012

Each of these reports contained a summary list of "challenge areas," although labeled somewhat differently in each. The summary lists are titled:

- ➔ in "Imagining Canada's Future – 2030": 10 changes that will shape the wider context
- ➔ in "Content Analysis": six broad themes
- ➔ in the Scenario Workshop": 12 future changes/driving forces
- ➔ in the "Regional Panel" summary: draft long list of 12 future challenge areas

The Panel considered all these sources in drawing up its list of challenge areas.

The Panel convened in a first conference call to discuss the task and agreed that each member would submit a short memo of initial impressions and a draft list of challenges areas.

The Panel convened in several conference calls to discuss the task and the submitted memos. SSHRC senior leadership gave a brief presentation, reinforcing the terms of reference and addressing a few questions. The Panel agreed that each member would submit a second short memo with another draft list of challenges, identification of cross cutting themes, and identification of new research methodologies, prior to meeting in Toronto December 1-2, 2012. A draft report was prepared at that meeting, and was finalized in the following week.