

Summary of Discussion
Science Advisory Board Meeting

January 10-11, 2007

Participants

<p>Science Advisory Board Members</p> <p>Arnold Naimark, Chair Linda Lusby, Co-Chair Mark Goldberg Renaldo Battista Renee Lyons Arminée Kazanjian Keith Bailey Kathryn O'Hara Jacques Simard Lorne Babiuk Chris Loomis Mamaru Watanabe Rémi Quirion Stephen Bornstein Louise Lemieux-Charles Andreas Laupaucis</p>	<p>Ex-Officio Member</p> <p>Morris Rosenberg Susan Cartwright Wendy Sexsmith Neil Yeates David Butler-Jones Frank Plummer Alan Bernstein</p>
<p>Alternates</p> <p>Monique Stewart Dawn Walker Ross Leeder Mark Raziene</p>	<p>Invited Guests</p> <p>Christina Hastings Tim Hunt Ian Rodger Guy Bujold Alain Beaudoin Robert Clarke David Mowat Sylvie Stachenko Lisa Drouillard Lisa Wardell Karen Lloyd Ken McAllister Richard Paolini Val Marshall Miriam Halevy Denis Girard Ernie DelGrande</p>
<p>Secretariat</p> <p>Laird Roe Catherine Rotor Suzi Vivolo</p>	<p>Regrets</p> <p>Howard Palley Stanley Vollant Ian Potter Karen Dodds Carolina Giliberti Susan Fletcher Frank Fedyk Marcel Nouvet Chantale Cousineau-Mahoney Bernard Dickens</p>

**Boardroom 0115C, Brooke Claxton Building
Tunney's Pasture**

Wednesday, January 10, 2007

1. Preliminary matters

1.1 *The Chair:*

- welcomed members, guests and the new Acting Chief Scientist, Wendy Sexsmith;
- reviewed the meeting agenda and its focus on six main topics:
 - o completion of briefings on the context for developing a Health Canada Science and Technology (S&T) Plan;
 - o discussion of the elements of (or framework for) a Health Canada S&T Plan;
 - o developments in the Public Health Agency of Canada (PHAC), related to S&T and the role of the Science Advisory Board (SAB) in relation to PHAC;
 - o the SAB's Terms of Reference and the role of the Chief Scientist within Health Canada - generally and in relation to the SAB in particular;
 - o the current status of Health Infoway; and
 - o the organization, timing and focus of the SAB's annual program of work.

1.2 *The Deputy Minister:*

- thanked Arnold Naimark for the invitation to attend the SAB meeting;
- informed the SAB that the Department is in a transitional phase, as it is involved in a competitive selection processes, to replace senior personnel, including:
 - o Pierre-Gerlier Forest, Chief Scientist;
 - o Ian Shugart, Assistant Deputy Minister (ADM), Health Policy Branch; and
 - o H  l  ne Goulet, Associate ADM, Health Products and Food Branch.
- noted the challenge faced by the public service in a minority government situation and the need to focus on short term policy issues;
- outlined the new round of Prime Ministerial priorities, and their implications for, Health Canada and the work of the SAB where applicable;
 - o presentation of a budget that controls spending, lowers taxes and adjusts the federal-provincial jurisdictional balance in Canada;

- o implication: An increase in fiscal transfers to the provinces specifically for health is unlikely. There will be a focus on clarifying federal jurisdiction and interest in this area and on identifying instruments that can be brought to bear in promoting the federal interest.
- o continued efforts to make streets and communities safer by following through on the government's criminal justice agenda and related legislation before Parliament;
 - o implications: (1) Development of a strategy to deal with supply and use of illicit drugs, balanced by policies that deal with treatment, education and awareness programs. The latter will involve Health Canada in the policy development process. (2) Initiatives related to the root causes of criminal behavior - consideration will be given to social policy interventions related to family violence, alcoholism, fetal alcohol spectrum disorders, inadequate housing, mental health and education. This represents a balanced social determinant of health approach that includes special attention to the needs of aboriginal communities.
 - o making Canada's institutions more democratic and more accountable;
 - o standing up for Canada's interest and values on a world stage; and
 - o implication: Canada has shown leadership in global public health and Health Canada needs to bolster this role in a manner consistent with our interest and values.
 - o taking more action to protect the environment and health of Canadians, with a special focus on greenhouse gas emissions.
 - o implication: Fits well with the SAB ongoing theme on environment and health.
- noted the Prime Minister's announcement that a Cabinet Committee will be created, chaired by Jim Prentice, to deal with the environment and energy security – its objective is to pursue practical results-oriented solutions to decrease greenhouse gas emissions, reduce pollution and improve health and well-being of Canadians. He identified the departmental need to articulate its views and directions on the environment agenda, given its high profile and noted that he would appreciate receiving advice from the SAB on how to ensure that the health dimensions of a national agenda are fully addressed;
- advised the SAB that despite the absence of wait time guarantees in the new round of priorities, the government has not abandoned this priority and is still deeply involved; and
- indicated that he is looking forward to learning SAB's views on the role of Health Canada's Chief Scientist.

In the ensuing discussion, the SAB:

- thanked the Deputy Minister (DM) for his commentary;
- requested confirmation that the purview of the Cabinet Committee on Environment and Energy Security included health. The DM replied in the affirmative.
- inquired as to the 'fit' of the SAB's work with respect to pilot projects for the Aboriginal community in health (prenatal care, diabetes etc.)
 - The DM indicated that he was uncertain about the fit, but assured the Board that he would return to discuss the pilots at a later date.
- noted its desire to be involved in the design of the evaluation framework/process and in reviewing the outcome as this is where it feels it would provide the greatest value added (SAB's focus should be on the 'science' involved in the matter during the initial steps as opposed to deliberations on 'clinical' or 'service aspects' – after the fact);
- asked for advice as to how the SAB should conduct business in times of political uncertainty. The DM noted that it is the task of senior executives to ensure that appropriate evidence-based advice is sought from the SAB.
- raised concerns about its role in relation to global health issues in that the SAB's Terms of Reference seem limiting in this respect. The DM suggested that the SAB could propose revisions that would broaden its Terms of Reference.

The DM offered to sit with Arnold Naimark, SAB Chair, to look at ways that the SAB can help with the evaluation framework and view outcomes of the pilot projects; and suggested that the Board should maintain an ongoing dialogue with the Minister's Office to ensure the mutual understanding of the importance of the work.

1.3 The Chief Scientist:

- highlighted science related activities, both internal and external to Health Canada, that would interest SAB members;
 - strengthening linkages within the Health Portfolio – in particular – the development of a Memorandum of Understanding (MOU) on Science and Research between the Public Health Agency of Canada, the Canadian Institutes of Health Research (CIHR) and Health Canada;
 - Research Integrity – Health Canada, as Chair of the Canadian Research Integrity Committee, is working with interested partners across Canada to develop a pan-Canadian approach to research integrity;
 - Listening for Direction – gathering information on priorities for health services and policy research;
 - Scientists as Leaders – a federal government program to develop skills of scientists to enable them to become senior managers;

- o Post Doctoral Fellowships (PDF) –contrary to the SAB’s understanding, there has not been a decision to cancel the PDF program, rather the period of initial funding of the program is coming to an end. In accord with Treasury Board requirements, the program will be evaluated to determine if it meets the needs of the Department, or whether a different type of program or approach is more appropriate;.
- o Enterprise Approach – the interdepartmental ADM Science and Technology (S&T) Integration Board is developing an Enterprise Approach for describing federal S&T;
- o Science Forum – thanked the SAB members for their valuable contribution to the Forum;
- o SAB membership – confirmed the Minister’s Office renewal of the memberships of L. Babiuk, M. Goldberg, C. Loomis and S. Vollant on the SAB. The SAB was reminded that L. Lusby’s second term will come to an end in May 2007, and requested that members forward names of possible candidates for the upcoming vacancy; and
- o role of Chief Scientist – reiterated the request, made by the DM, to provide input and advice on the role of the Chief Scientist.

The SAB:

- congratulated the Department in its efforts related to the communication of science to the public and private sectors;
- indicated that it is willing to be involved in the process of evaluation of the PDF program – the Office of the Chief Scientist (OCS) will provide names of SAB members to Audit and Evaluation and they will approach members for input;
- noted the importance of the issue of research integrity and encouraged the OCS to include individuals other than just scientific groups in the upcoming workshops, (e.g. the media and lay public);
- asked the Chief Scientist about the role of Chief Scientists in other departments. She noted that the Department of Natural Resources Canada (NRCan) has a Chief Scientist. Other Departments have similar positions but they tend to have more of a line responsibility for science activities. The Office of the Chief Scientist in Health Canada and NRCan serve a corporate function in addressing horizontal matters that cut across branches within the departments and across federal departments;
- inquired about re-instating the peer review process – this topic is to be raised in discussions during the forthcoming Director General (DG)-Science retreat as part of the deliberations on an S&T Strategy; and
- noted that the development of the MOU between CIHR, PHAC and Health Canada, on science and research, could be a major mechanism in which to integrate national strategies and research into everyday activities.

1.4 Statements from members:

Members identified areas of work/experiences that may be of interest to the SAB as well as possible topics for future agendas.

- Linda Lusby, Vice-Chair of the SAB and its representative on the Council of Science and Technology Advisors, provided a brief update on the developments of the FOCUS report, noting the lack of movement;
- Arnold Naimark, SAB Chair, updated the Board on the Joint Task Force between the SAB's of Agriculture and Agri-Food Canada (AAFC) and Health Canada – teleconference call was held on December 12, 2006, where the members agreed that the two Secretariats would work jointly to develop a background paper on – Pathogen Detection and a Farm to Fork Traceability System.

2. Science, Technology, Innovation

2.1 *Canada Health Infoway*

Christina Hastings, Chief Information Officer and Director General, Information Management System Division (IMSD), Corporate Services Branch (CSB), provided background information on Canada Health Infoway, including its creation, governance, funding and accountability mechanisms. She noted that a federal review was undertaken in the summer of 2006 to validate the information technology (IT) soundness of the initiative and its worthiness from a policy perspective.

The review endorsed the pan-Canadian approach and the role of Canada Health Infoway; found that Infoway's technological approach is sound; identified a few relatively minor issues for improvement; and determined that Infoway is taking appropriate steps to guard against the risks of failure often associated with large IT projects. Christina noted that federal participation to date has been important in kick-starting health IT which will modernize the health system, help to contain escalating costs and help reduce wait times. In addition, the federal role has encouraged a national approach to health IT, including development of standards and reduced duplication of effort. She also noted that there is good momentum in every jurisdiction and the Federal Government is examining whether it should have an ongoing role and priorities for future federal spending.

Sarah Muttit, Vice President, Adoption and Innovation, Canada Health Infoway, presented further information on the electronic health record (EHR) initiative. She defined the EHR as a secure and private lifetime record of an individual's health data and health care history and gave examples of the types of information included, and the origins of and the control of access to EHRs.

She reported that Infoway's goal calls for the health data of fifty percent of Canadians to be in EHRs by the end of 2009.

With this in mind the SAB noted:

- the lack of a relationship with CANARIE;
- the lack of information about counterparty funding so that the total cost of projects in which Infoway is involved can be considered;
- the goal is of having EHRs for fifty percent of Canadians by 2009 and questioned how realistic is this target? The SAB was informed that, so far, the project is on track.
- with the 30 million dollar decrease in telehealth funding and the obvious shortage in physicians, what impact will this have on Canadians and in particular on minorities;
 - o telehealth is under its own MOU – the need is understood but they can't reinvest – they are trying to find other ways to work with the first nations – hampered with the structure of the MOU – strategy is being revised – solutions are cheaper and huge hurdles in infostructure – registry's function is vital in telehealth.
 - o Progress with the telehealth investments has been slow due to a number of factors including constraints of the MOU such as the inability to invest in federal entities like First Nations and Inuit Health Branch (FNIHB) and the 50:50 investment ratio. Another challenge is the lack of network infrastructure in remote and northern communities to support telehealth applications. The telehealth strategy is currently undergoing revision to optimize investment opportunities.
- the lack of involvement of researchers in developing and carrying out Infoway's blueprint or evidence of a role for them in the organizational structure. She advised that Infoway is putting in place a research advisory council and is actively engaged with the Canadian Institute for Health Information (CIHI) and the CIHR to address issues of the secondary use of EHR data for research and system management. It was unclear to the SAB whether researchers will be included as an integral part of the organizational structure.
- the challenge of ensuring data portability in a federal structure; and
- the critical need to facilitate the use of the system by physicians and to facilitate access by patients through patient portals.

2.2 *Federal S&T Strategy*

Mr. Guy Bujold, ADM, Science and Innovation, Industry Canada, provided an update on the evolution of the Federal S&T Strategy. He noted that:

- the importance of S&T as a driver of the quality of life for Canadians can be captured in three words: Wealth; Wellness; and Well-Being and that Canada's challenge is to improve on the progress made in building on previous investments and a solid university research base.
- the government is focusing on accountability and this applies to the S&T strategy as well. The Strategy will seek to extend Canada's talent base in the sciences.
- in 2005-06, \$9 billion was spent on S&T, including \$5.8 billion on research and development (R&D); the business sector has the lead, performing 54% of the R&D in Canada, whereas the government of Canada performs only 8%.

Objectives of the S&T Strategy are to:

- stimulate a more productive internationally competitive economy to ensure that the government investments in S&T yield a maximum value to support Canada's competitive advantage;
- to improve accountability to Canadians for the dollars that are being spent in the area of S&T;
- become a more productive, internationally competitive economy capable of attracting foreign investment and talent;
- enhance the climate for private sector investment in S&T;
- ensure government investments in S&T yield maximum value; and
- improve accountability to Canadians.

Guiding principles include:

- partnerships;
- coordinated efforts; and
- a more transparent decision making and reporting structure.

Framework for developing the Strategy (triangle):

- knowledge, transfer and commercialization – translating research results into practical applications to improve Wealth; Wellness; and Well-Being;
- research – supporting excellence in higher education and intramural research to generate new ideas and advance knowledge;
- develop talent and deploy highly skilled individuals to perform and apply science, technology and innovation.

The expected roll-out of the Federal S&T Strategy is Spring 2007.

In the ensuing discussion, the SAB:

- encouraged the developers of the Strategy to recognize that private business and industrial concerns will not invest in research that has little or no potential to produce monetary gain even though such investment may produce a significant return in terms of improved methods of prevention, diagnosis and treatment and ultimate economic benefit to Canadian society as a whole;
- indicated its desire to see health as a priority in the Strategy; and
- identified the need to include accountability and sustainability in the Strategy.

2.3 Industry/Regulatory Perspective

Ian Rodger, Vice President, Research and Academic, and Director, Father Sean O’Sullivan Research Centre, St. Joseph’s Healthcare Hamilton, provided an industry and regulatory perspective on the evolving landscape of science and innovation. He noted the dominance of the United States market for pharmaceuticals, the exorbitant increase in cost of developing new drugs and mounting pressures to reduce the cost of drug development both within firms and in regard to regulatory processes.

With respect to the health sector generally, Ian Rodger stated that clinical research needs to be improved and at the same time Pharma needs to strengthen liaisons with researchers in both academia and government. Focused research is essential to improve disease understanding and accelerate target validation. Provision of stable long-term funding is needed to improve clinically-relevant research and there is a clear need to plug the knowledge transfer “gap”, expand programs that evaluate cost-effectiveness of therapeutics, and support adoption of technological health innovations. With respect to Canada in particular, he observed that other countries process drug approvals more quickly and that more realistic regulatory requirements would contribute to a more streamlined approval process for drugs and new technologies.

2.4 Elements of an S&T Strategy for Health Canada

Arnold Naimark, Chair of the Science Advisory Board, began the discussion by reviewing his draft document *Elements of a Science and Innovation Plan for Health Canada – A SAB Perspective*. The attached version of the document has been annotated to include the main observations made by members of the SAB.

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2.5 Strategic Direction: Public Health Agency of Canada

David Butler-Jones, Chief Public Health Officer, PHAC, described the role, status and evolution of the Agency, as it relates to a strategy for science and innovation.

The Agency was created to:

- strengthen Canada's ability to protect the health and safety of Canadians;
- oversee federal efforts to strengthen national capacity to identify and reduce risks to public health; and
- develop, implement and assess policies and programs that enable Canadians to live a healthier life.

In support of its mandate the PHAC is developing a Science and Research framework to:

- provide guiding principles and set high-level objectives;
- establish the accountability of key players;
- identify related initiatives and situate specific policies and other tools;
- indicate how performance will be assessed and how the results will be reported; and
- provide the necessary tools for the conduct of PHAC science.

The PHAC is also developing a Science Plan that will ultimately:

- identify general science priorities;
- establish research priorities;
- highlight major science initiatives and activities;
- allocate resources;
- establish performance measurement parameters; and
- demonstrate application of the principles of alignment, linkages and excellence.

In the ensuing discussion, he made the following additional observations:

- Although the PHAC plans to establish a "Public Health Advisory Committee", its role would not include providing advice on the science in the Agency.
- The Agency is part of the "Health Portfolio" which is responsible to the Minister of Health. The Agency welcomes input from the SAB and its provision of advice to the Minister with respect to the Agency as it is a major component of the Health Portfolio.

- The Agency would be interested in participating in ongoing conversations with SAB members to receive input as the Agency proceeds with the development of its science framework and science plan.

During the ensuing discussion, the SAB:

- asked about progress in bringing the National Collaborating Centres (NCC) into full operation and was informed that steady, although uneven, progress was being made in addressing the challenges in building an NCC (provincial engagement, recruitment of directors, creating communities of practice);
- raised the question about lessons learned from events leading to the adoption of a national Cancer Control Strategy experience and was advised that it is too early to tell, although an evaluation of the effectiveness of the recently established mechanisms for implementing the Strategy is clearly important.
- was advised by David Butler-Jones that development of clinical guidelines isn't necessarily a public health responsibility but, since there was a recognized need in this area, the Agency undertook certain initiatives. He said he supported the idea of an organization such as this. In addition, it could possibly evolve to support clinical guidelines in other areas of Chronic Disease. This prompted the members of SAB to recommend that the major public health functions of the Agency be elaborated more specifically so that it is clearer to those outside the Agency which public health issues are encompassed by the Agency and which are not.
- expressed its appreciation to him and his senior staff for their articulation of the roles of the Agency; and indicated that the SAB was now in a better position to articulate more explicitly the relationship between the SAB and the Agency, including mechanisms for ongoing dialogue between PHAC and members of the SAB.

3. SAB Operational Issues

The SAB reviewed several matters pertaining to its internal operations.

3.1 *Role of the Chief Scientist*

The Office of the Chief Scientist was formed in 2001 on the advice of the SAB. Wendy Sexsmith, A/Chief Scientist, spoke of her commitment to continue the evolution of the Office and build on the excellent work of the former Chief Scientists. This includes ongoing efforts to develop stronger linkages within the Department and externally.

The SAB noted that the Chief Scientist plays a critically important role in a Department that ostensibly at least regards science as one of the strategic pillars of its activities. The Chief Scientist also plays a crucial role as a liaison between the SAB and the various branches and agencies in Health Canada. While the SAB is not presently in a position to provide an authoritative opinion on whether the Chief Scientist should have line responsibilities for specific aspects of the research enterprise, it was generally agreed that the Chief Scientist should have sufficient authority to perform the coordinating functions of that office effectively.

3.2 SAB Meetings

The A/Chief Scientist, Wendy Sexsmith, identified that she shared the same objectives in ensuring an effective, independent advisory body. She acknowledged the significant contributions the Board has made to the improvement of the effectiveness of the Board in terms of improving its cohesiveness, focus and efforts to be strategically relevant to the needs of the Minister and departmental priorities.

With this in mind, Ms. Sexsmith discussed different approaches for collaboratively improving the SAB's ability to contribute to the quality, integrity and objectivity of the science and science advice the Department considers in decision-making. In particular, she noted that for the presentations being made to the SAB, by various branches and units in Health Canada, to be of sufficient quality and relevance to the SAB's mandate, more lead time is required by the SAB Secretariat than the current quarterly meeting schedule allows. In addition adequate time is needed to:

- produce meeting summaries;
- prepare responses to previous meeting queries;
- correspond and engage with the Minister, the Deputy Minister and the Departmental Executive Committee (DEC)-Science committee on SAB related issues; and
- organize and develop agendas.

After considerable discussion, the SAB tentatively agreed as follows:

- there will continue to be four meetings per year with the following program template **to begin in the fall of 2007**:
 - o third week in September: full scale 2 day meeting (8 am day 1 to 3 pm day 2);
 - o late October early November: special ½ day meeting of SAB members attending the Science Forum;
 - o third week in March: full scale 2 day meeting (8 am day 1 to 3 pm day 2); and
 - o third week in June: one day review and planning meeting (2 pm day 1 to 2pm day 2).

- in order to provide for a transition to the new program template, the March 2007 meeting will be a transitional one day review and planning meeting (2 pm day 1 to 2pm day 2) and there will be no in-person meeting in June 2007 – although it may be desirable to reserve some time in June 2007 for a teleconference.

The SAB also observed that:

- The structuring of meetings and of presentations should focus on the SAB's primary mandate (providing advice on the quality and relevance of science performed and used by Health Canada) especially in relation to the Health Canada's regulatory framework and processes of risk assessment;
- the Acting Chief Scientist's intention to facilitate the provision of a substantive response from the Minister to the SAB's advice was a most welcome initiative; and
- it is crucial to the independence of the SAB that its advice continue to be routed directly to the Minister.

3.3 Future Meetings

The March 28-29, 2007, meeting of the SAB will be the last meeting of the 2006-2007 meeting year. In addition, the Board has determined that the March meeting will include further discussions on:

- the national S&T Strategy;
- an Health Canada S&T Strategy ;
- SAB meeting schedules and content; and
- review of revised SAB Terms of Reference.

The meeting will commence at two o'clock on March 28, 2007, and conclude at two o'clock on March 29, 2007.

The first meeting for the 2007-2008 SAB meeting year will be in September, 2007. The Secretariat will canvass members for preferred dates. Suggested agenda items include:

follow-up discussion with the PHAC concerning its Science Framework and Plan; a presentation from the Canadian Agency for Drugs and Technologies in Health (CADTH); and a report on the joint AAFC-Health Canada SABs on the detection and tracing of animal derived pathogens in food.

3.4 SAB Secretariat

Laird Roe, A/Director, Policy, Planning and Partnerships Directorate, OCS, updated the Board on the work of the SAB Secretariat. It included:

- a brief analysis on the number of 'hits' that the Health Canada SAB website received between January and November of 2006 – there were 7,965;

- SAB Extranet:
 - o development of a training manual for the SAB; and
 - o continued diligence of the Secretariat to ensure groupings be added.
- an analysis of the October/November 2006 meeting evaluations which depicted that the most notable challenge to the Board was the clarity of how the SAB's advice is used by the Department and the limited time for discussions around issues at SAB meetings;
- the requirement of the Secretariat to finalize all secret security clearances;
- reminder to members to update Declaration of Interest and Conflict of Interest forms; and
- the nomination request for the upcoming vacancy on the Board – L. Lusby's term will expire in May 2007.

The Secretariat will arrange for usernames and passwords, for the SAB Extranet, to be resent to SAB members so that they can have access to all of the documents from SAB meetings without having to maintain repositories of their own.

3.5 SAB Membership

The SAB, in considering the gaps in its range of expertise, identified the following areas that should be taken into consideration whilst developing the final slate of nominees for Board membership:

- environment;
- industry; and
- biotechnology.

3.6 Matters for Information

Updates for information were received on the following issues:

- Genetic Testing;
- Post Doctoral Fellowship;
- Cancer Strategy;
- Canadian Environmental Protection Act;
- Oral Health;
- Nanotechnology;
- Longitudinal Cohort Study;
- Research Integrity;
- Visioning Exercise; and
- Knowledge Translation.

3.7 General

The SAB's mandate includes providing advice on knowledge translation and communication. In this connection, it was noted that some of the components on Health Canada's websites, which seek to inform the public, combine objective information with elements that are "promotional" in nature. In the SAB's view, it is important to clearly separate these two aspects of communication.

3.8 Requests for specific information

The SAB asked that it be provided with the following items of information:

- an up-to-date organizational chart of the Office of the Chief Scientist; and
- a list of advisory bodies for both PHAC and Health Canada.