

Summary of Discussion
Science Advisory Board Meeting

May 9-10, 2006

Participants

Science Advisory Board Members Arnold Naimark, Chair Linda Lusby (Co-Chair) Mark Goldberg Renaldo Battista Renée Lyons Arminée Kazanjian Keith Bailey Kathryn O'Hara Jacques Simard Stanley Vollant Mamoru Watanabe Rémi Quirion Stephen Bornstein Louise Lemieux-Charles Andreas Laupacis Chris Loomis	<i>Ex-Officio</i> Member Hélène Gosselin Pierre-Gerlier Forest Neil Yeates Karen Dodds Bernard Dickens Frank Plummer David Butler-Jones Susan Fletcher
Alternates Katherine Stewart Mark Bisby	Invited Guests Senator Keon Francis Rolleston Hélène Goulet Marc Fortin Leonard Ritter Ken Campbell Gary Whitfield Crystal Quarrington Colleen Hyslop Valerie Whelan Janet Beauvais Samuel Ben Rejeb Suzanne Chalifour Peter Fischer Jeffrey Farber Robert Clarke Claude Rocan Frank Fedyk Mary Carman Bruce Bergen Deborah Gallant-Gleddie

Secretariat	Regrets
Laird Roe Catherine Rotor Manal Bahubeshi	Lorne Babiuk Howard Palley Morris Rosenberg Marcel Nouvet Ian Potter Ian Shugart Chantale Cousineau-Mahoney Alan Bernstein

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

Tuesday, May 9, 2006

1. Preliminary Matters

1.1 Arnold Naimark, Chair

- Welcomed members and thanked everyone for making themselves available for the early morning special presentation by Senator Keon on the Senate report on mental health.
- Reminded members to complete the declaration of interest forms. It was noted that members who have nothing to declare should indicate as such on the forms and return them to the Secretariat.
- Congratulated A. Laupacis on his new position as Director of the Li Ka-Shing Knowledge Institute at St. Michael's Hospital.

1.2 Hélène Gosselin, Associate Deputy Minister

- Hélène Gosselin, substituting for Morris Rosenberg, provided comments on behalf of the Deputy Minister's Office on recent developments.
- Noted the four cornerstones for advancing the patient wait times guarantee agenda. They include: research on wait times; acceleration of the adoption of information and communication technology in the health system; health human resources; and the collaboration among various levels of government.
- Summarized elements of the federal budget, released May 2, 2006, related to

- health, namely: confirmation of the commitment to the 10 year plan to strengthen health care (including reduction to wait times); changes to the equalization formula and territorial formula financing payments; a commitment to have a First Ministers' Meeting to discuss transfers, responsibilities of federal/provincial/territorial levels of government to delivery of care and fair sharing of resources; a commitment to fund aspects of the Canadian Strategy for Cancer Control (screening, prevention, research activities and better coordination between partners); and pandemic preparedness (noting the importance to collaborate both nationally and internationally).
- Noted the Minister of Health's plan to engage colleagues at the provincial and territorial level in discussions on how best to implement the plan to strengthen healthcare, improve reporting and achieve the wait-times guarantee.

In the ensuing discussion it was:

- noted that Canadian Institutes of Health Research (CIHR) received an additional \$17 million in the federal budget (in addition to funding targeted to the research agenda on pandemics).
- observed that pandemic preparedness requires a pan-governmental approach to provision of anti-viral agents and vaccines, infrastructure development, coordinated emergency management and business continuity planning. Better communication to Canadians on what is transpiring on the pandemic planning front is essential.
- indicated that the Public Health Agency of Canada (PHAC) would likely take the lead on the Canadian Cancer Control Strategy, as chronic diseases are part of the PHAC's broad mandate.
- noted that the Minister of Health is open to advice from the SAB on how to reconcile specific strategies under the broader chronic disease umbrella with the most effective approach to addressing the recommendations of the Mental Health Report released on May 9, 2006, taking into account that the SAB advises the Federal Minister of Health and its advice should focus on the role of the federal government *per se* including its collaborative roles in relation to other jurisdictions.

1.3 Pierre-Gerlier Forest, Chief Scientist

- He introduced the new Acting Director of the Policy, Planning and Partnerships Division of the Office of the Chief Scientist (OCS), Mr. Laird Roe. Noted his past work in fields relevant to the SAB and his present role to strengthen science policy linkages between OCS and others in Health Canada as well as other science based departments and the science and technology community.
- He reminded the SAB that the Chair of the Health Canada Science Forum is H el ene Goulet, Associate Deputy Minister, Health Protection and Food Branch and the SAB representative on the committee is Kathryn O'Hara. He shared the theme of this year's Forum, "Keeping Our I's on the Future" (Sub-themes include: Information; Integration; Innovation; and International) and welcomed

- the SAB's input.
- He updated the Board on two science management policies:
 - Adjunct Professor Policy - defines criteria for applicants within Health Canada and their managers to ensure the Department is aware of and benefits from such academic appointments; and
 - Scientific Publication Policy - transformation of the criteria for the promotion of scientists that goes beyond taking into account the number of publications.
 - He informed the Board of:
 - the success of the two-day nanotechnology workshop hosted by Health Canada and the continuing collaboration of the OCS, Canadian Institutes of Health Research (CIHR), the National Research Council (NRC) as well as other departments to build opportunities for partnership and the provision of strategic input regarding regulatory science issues.
 - the White Paper on horizontal management that the OCS is developing, which outlines the management, resources and supporting infrastructure needed to strengthen the management of common science issues across the Department, and that he expects to have a draft to share with the Board in the Fall.
 - the steps OCS is taking to bring together key national stakeholders to tackle the scientific integrity and research misconduct issue.
 - the new Public Affairs, Consultations and Regions Branch at Health Canada and noted that the position of Assistant Deputy Minister should be staffed within the coming weeks.
 - the upcoming release of the Council of Science and Technology Advisors (CSTA) Facing Opportunities and Challenges Underlying Science (FOCUS) Report and noted that the report strongly recommends more centralization of science and research management
 - the development by the Departments of Finance and Industry of a Federal Science & Technology (S&T) Strategy and by the Minister of Industry of a specific plan of support for university research.
 - the change of the name "Canadian Academies of Science" to "Council of Canadian Academies" (CCA) and that the topics selected by the federal government to refer to the CCA are: nanotechnology; groundwater; and air quality effects on climate change.
 - the appointment, upon formalization, of the PHAC's Director General of the National Microbiology Laboratory and Centre for Infectious Disease Prevention and Control (currently Frank Plummer), as an *ex-officio* member of the SAB.

In the ensuing discussion the SAB:

- enquired about the status of Health Canada's visioning exercise. The Chief Scientist indicated that a formal presentation on the exercise will be provided to the SAB at its next meeting.

1.4 *Statements from Members*

Statements by members on developments that relate to the mandate and ongoing work of the SAB included:

- an expression of concern about recent cut-backs to funding for Government of Canada climate change programs. The SAB noted that active work in the area of climate change is critical given the potential impact on health and asked to be briefed on how the government will attend to this issue.
- the desirability of consulting with Environment Canada's Chief Scientist (and Advisory Body) on Environment Canada's science plan.
- description of an instance in which administrative barriers were encountered in undertaking collaborative work between Health Canada scientists and university scientists of a kind that the SAB believes should be facilitated and promoted. The Chief Scientist noted that Health Canada strongly supports collaboration and integration and when it becomes apparent that there are artificial barriers to these activities, every effort is made by Health Canada to minimize or eliminate them and that he has taken steps along these lines in the specific case cited.

2. **Public Health**

2.1 *Mental Health - Report from the Senate's Standing Committee on Social Affairs, Science and Technology*

Senator Wilbert Keon, Deputy-Chair of the Senate's Standing Committee on Social Affairs, Science and Technology, provided an overview of the Mental Health Report that was to be released on May 9, 2006.

- He noted that the report took three years to complete and is the first of its kind. The first phase of the report, overview of findings, was released 18 months ago. The second was on international perspectives and involved in-depth review of the situation in Australia, New Zealand, United Kingdom, and the United States.
- The report focuses on the three pillars of a recovery focused mental health system (choice of care-givers/facilities; a community-centered approach; and integration of community resources) and recommends the adoption of a National Strategy on Mental Health whose aim is to change the perception of mental illness so that it is viewed in the same operational frame of mind as any other illness. Key elements of the Strategy are:
 - investment of \$5.3 billion over 10 years to create a mental health transition fund and housing fund;
 - development of an integrated mental health system;
 - launching of an anti-stigma campaign - focus on recovery where recovery means that individuals can function in society and society will accept them;
 - creation of a knowledge exchange centre;
 - establishment of a commission to:

- provide leadership in development of a national strategy;
- act as a catalyst in the reform of mental health programs;
- be a source of information for government and stakeholders;
- increase mental health literacy among Canadians;
- decrease stigmatization through public education;
- be actively involved in strategic planning;
- collaborate with mental health stakeholders;
- build links between mental health and addictions stakeholders;
- advocate research where needed;
- publish reports on progress;
- recommended on: legal issues (privacy and legal age of consent); children and youth; seniors; workplace and employment; addictions; self-help/peer support; research; ethics/privacy; tele/mental health; 7 areas where government is responsible for delivering health services; the Royal Canadian Mounted Police (RCMP) and prisons and 5 other areas (including Aboriginal people); and prevention programs.

In the ensuing discussion, the SAB:

- congratulated the individuals and organizations involved in developing the report and the substantial achievement it represents;
- observed that the report does not deal comprehensively with the definitional problems associated with determining boundaries of mental health and that gender differences are not fully addressed;
- suggested that the implementation of the recommendations of the report will need to be integrated with related concurrent developments and initiatives (e.g. early childhood development and implications of mal-development for mental health in later years); and
- indicated that the success of the proposed commission will be heavily dependent on attracting high quality leadership and staff resources.

2.2 *Mental Health – Current Federal Initiatives*

Claude Rocan, Director General, Centre for Health Promotion, Health Promotion and Chronic Disease Prevention Branch, PHAC and Frank Fedyk, Director General, Intergovernmental Affairs Directorate, and A/Director General, Policy Planning and Priorities Directorate, (HPB), Health Canada, made a presentation to the Board on Mental Health, Mental Illness and Addiction. The presentation included an overview of the status of the mental health file including the prevalence and costs of mental disorders/illness, the federal/provincial/territorial and stakeholder roles in mental health, and the work of the Senate Committee. The goal of this presentation was to obtain advice that would help inform the government of Canada's approach to mental health and mental illness, including response to the release of the Senate Committee's Report.

Claude Rocan defined:

- Mental Health: as the capacity of each individual to feel, think and act in ways

- that enhance his/her ability to enjoy life.
- Mental Illness: as a biological condition of the brain that cause alterations in thinking, mood and behavior that are associated with significant distress and impaired functioning.

In the ensuing discussion, the SAB:

- stressed the importance of clarity of role definition and federal leadership.
- called for further research on vulnerable groups including immigrants and the socially deprived.
- reiterated that, given the importance of the commission, the need to ensure that appropriate individuals are recruited to serve as commissioners and to staff the commission. Both the commission and its staff should include personnel with scientific expertise and links to the broader scientific community.
- suggested that the commission would benefit from collaboration with: the Health Council of Canada (HCC) to facilitate integration of mental health into the broader health enterprise; the long-standing mental health commission in Quebec; CIHR; and with countries where analogous bodies have already been established.

Wednesday, May 10, 2006

3. Emerging Technologies

3.1 Agriculture and Health

This section of the meeting was organized as an opportunity to engage Agriculture and Agri-Food Canada (AAFC) in discussions related to scientific aspects of interface between agriculture and health.

- **Science and Innovation** - Marc Fortin, Assistant Deputy Minister, Research, AAFC, identified the consultations held with stakeholders with respect to AAFC's science review, direction, research priorities and the role of the government in meeting the changing needs of the sector. In describing the results of the exercise, he identified the strategic directions for AAFC for science and innovation, including its vision, core strategies, national priorities and principles for developing partnerships and investment strategies.
- **Science, Research and Innovation at the Food and Agriculture Interface** - Janet Beauvais, Director General, Food Directorate, HPFB, Health Canada provided an overview of Health Canada's science and research activities related to agriculture, food safety and human health, including information on Health Canada's Food Directorate, its stakeholders, programs, the research environment, collaborations, and research activities. She noted that, along with AAFC, Health Canada is continuing to improve its research collaborations and information sharing.
- **Joint Risk Reduction Initiatives for Agricultural Crops** - Suzanne Chalifour, Section Head, Sustainable Pest Management Section, Pest Management Regulatory Affairs (PMRA), Health Canada, and Ken Campbell, A/ Executive Director, Pest Management Centre, AAFC. They reviewed the joint risk reduction initiatives currently in place with AAFC and Health Canada, Health Canada's support to risk reduction and the enhancement to environmental sustainability in agriculture.

Health Canada identified the need for continued vigilance and research into the understanding of pathogens, and a strong desire to explore opportunities presented by innovative products such as nutraceuticals and functional foods for both producers and consumers. It was also noted that it is perceived that Canada is falling behind in the innovation landscape internationally due to the fact that regulatory frameworks are not responsive to emerging products.

In the ensuing discussion, the SAB:

- Suggested possible issues with respect to the approach identified by AAFC. Examples cited included the occupational health and safety of people producing products that make others healthier and the fact that much of the bio-mass Canada

- produces is controlled by another ministry.
- Reiterated the importance of the recruitment of the right scientific expertise to meet contemporary and future challenges and opportunities and of interdisciplinary and interdepartmental collaboration while also noting examples of areas where such collaboration would be fruitful including:
 - bio-fuels - possible negative impact on the soil capacity and capacity of crop land to continue producing (AAFC, Health Canada, Department of Fisheries and Oceans (DFO), Natural Resources Canada (NRCAN), Industry Canada (IC), Forestry, Environment Canada (EC), Canadian Biotechnology Advisory Committee (CBAC);
 - safety of imported food including food allergens (AAFC, Health Canada, CIHR). (It was noted that the United States has created a Department of Food Defense.);
 - food production systems - impacts on human health and environment (AAFC, Health Canada, EC, IC);
 - climate change - impact that plants have on climate change and the effects they have on greenhouse gas emissions (AAFC, Health Canada, EC, Forestry, IC);
 - functional foods and nutraceuticals (AAFC, Health Canada, CIHR); and
 - molecular farming (AAFC, Health Canada, IC, EC).
 - encouraged continuing interaction between AAFC's and Health Canada's science advisory bodies.
 - suggested the formation a sub-committee made up of 2-4 representatives from each body to develop recommendations on priority subjects for collaborative work both with respect to fields of research and science management strategies. (L. Lusby, S. Bornstein and A. Kazanjian volunteered as representatives from Health Canada's SAB.)

Based on the positive response to the latter suggestion it was agreed that the chairs of the two boards will facilitate its implementation.

3.2 Federal Science and Technology

Mary Carman, Assistant Deputy Minister of Science and Innovation at Industry Canada, presented an overview of the Department of Industry's role in science and innovation, and the perspectives on the new Government with respect to general priorities.

Ms. Carman gave a brief overview of initiatives currently underway, such as the development of S&T Results Indicators, the Canada-China Complementarity Study, and the development of a new federal S&T strategy. She also highlighted the role of the ADM Committee on S&T, which she co-chairs with Wendy Watson-Wright, ADM Science, Fisheries and Oceans Canada, in developing proposals and advice to government on key cross-cutting policy issues.

The Minister of Industry has overall responsibility for science in Canada. Through the Department of Industry Act (1995), the Minister is mandated to encourage and foster the

development and use of science and technology. The Minister of Industry also has a coordinating role for S&T policy and strategies across the federal government, derived from the 1996 federal S&T Strategy. Deliberations on a new federal S&T strategy are focused on “Research and Development (R&D) for Education” and “R&D for Business”. “R&D for Regulation” is being left for later consideration

In the ensuing discussion, the SAB:

- concurred in the importance of a renewed commitment to a federal S&T strategy as part of Canada’s innovation agenda but cautioned that clarity of definitions is a prerequisite to cogent policy formulation.
- noted that, in discussing outcomes of investments in R&D – especially investments in R&D related to health – social benefits (improvements in health status, capacity to adopt innovations, training of personnel required by both the public and private sector, attraction and retention of scientists) as well as direct economic benefits must be considered.
- stressed the importance of a clear understanding of the roles of various actors in the key interdependent elements of the innovation chain (i.e. the linked processes of basic and applied research, development, regulation, commercialization and technology assessment that lead to innovations with innovation being defined as the actual implementation/ introduction/application of novel products, processes, ideas).
- urged the inclusion of R&D for regulation in the overall S&T strategy as soon as possible since its omission may weaken public confidence in the process.

In camera discussion

The SAB felt that it was extremely important that the vital interests of Health Canada in all aspects of the innovation chain and hence in the evolving federal S&T strategy be represented forcefully by the Minister’s Office in discussions with officials in Industry. Accordingly, the SAB concluded, given the short time frame within which the strategy is to be defined, that the Chair convey these concerns in a special advisory memorandum to the Minister promptly and in advance of the overall report to the Minister on the proceedings of the May 9 -10 meeting of the SAB.

4. Matters from Previous Meetings

4.1 Lobbyists Registration Act

Bruce Bergen from Justice Canada and Deborah Gallant-Gleddie, Legal at Health Canada, summarized the implications of the Act for SAB members. Mr. Bergen

confirmed that volunteers are not required to register as lobbyists as they are not paid. He noted that there remain areas in which further clarification to the Act is required and if SAB members have further questions, they should consider contacting the registrar.

4.2 Updates

Updates were received on the following subjects:

- Nanotechnology: The SAB members wish to see clarification as to whether a National Nanotechnology (NT) Research Strategy will be included within the National NT Strategy. OCS has been tasked to stay on top of developments. It was pointed out that the Council of Science and Technology Advisors (CSTA) is in the process of releasing a NT strategy and that the Advisory Council on Science and Technology's (ACST) recommendation will be that Canada develop a broad national NT strategy to include answers to questions such as:
 - What does Canada want to do as a nation in NT?
 - How does it want to address health aspects of it?
 - What are the places in which Canada can most effectively participate in the NT research and technology development?
- Innovation: The update was largely an elaboration to the previous documentation and included notes on the expert panel on commercialization and CBAC's report on gene patenting. The Chair noted that he met with the Minister and the Deputy to discuss the CBAC report and expressed the desire to meet with the Minister of Industry Canada as well, as this is seen as part of innovation and economic development.
- ARAD: Additional information was requested on budget, total number of professional full time equivalents (FTE) by discipline – (including health economists, access to and use of experienced clinicians in studies of the dynamics, and impacts of innovation in the health sector.
- Council of Canadian Academies: Formerly known as the Canadian Academies of Science.
- Environment and Health: SAB noted absence of reference to the recommendation to develop a national centre/program devoted to research on the interaction of environment and health.

Other updates were received for information without discussion, namely, updates on: Collaborating Centres; International Polar Year (IPY); Pandemic Influenza; and Smart Regulations.

The SAB requested updates on the following topics:

- Special Access Program;
- Expensive drugs for rare diseases;
- Marijuana;
- Aboriginal Health ;
- Communications Strategy (with emphasis on risk communications);
- Radon;
- Research Map of Health Canada; and

- Federal, Provincial, Territorial (F/P/T) committee on genetics (came to Board prior to June 2005).

5. SAB Operational Issues

5.1 Minister's Office

Jo Kennelly and Ken Bednarek, representing the Office of the Minister of Health paid an informal visit to the SAB on May 9. After a brief discussion with members of the Board, they requested further engagement with the Board members and returned on May 10 when they outlined the full range of mandated priorities of the Minister.

Patient Wait Times Guarantee	Cancer Strategy
Pandemic Planning	Hepatitis C
National Pharmaceutical Strategy	Public Health Agency of Canada Act
First Nations and Inuit Metis-Aboriginal Health	Establishment of Mental Health Commission
Health Research	Health Canada/PHAC relationship
Federal regional development Organization in Ontario (FedNor)	Physical Activity (F/P/T participation)

Other priorities from the Minister's platform include: the National Disability Act; development of a cardiovascular strategy; and a single payer, private/public delivery system for health care. Other personal priorities of the Minister include: enhanced tobacco control at the federal level; and Canada/US and Canada/Australia relations in several areas.

The representatives from the Minister's office specifically identified two areas in which the office would welcome guidance from the SAB. They include:

- the development of a long term strategy including investments in health research to provide a better understanding of the determinants of health and to promote innovation in health care; and
- the development and implementation of a plan which identifies a federal role in health research, including a means by which the Department of Health and the Canadian Institutes of Health Research can enhance tools for monitoring and assessing health trends and the effectiveness of government health policies.

The Board members expressed their appreciation to these individuals for taking time out of their busy schedules to elaborate on the priorities the Minister identified at the Feb/Mar. 2006 meeting of the SAB. Depending on schedules, representatives from the

Minister's office indicated their willingness to join SAB meetings on future occasions to elaborate on developments in relation to these and other issues.

5.2 *Secretariat Update*

- The Pest Management Advisory Council sent a letter to the Chair (SAB) requesting that a SAB representative join its committee. An individual has been identified and approached.
- The SAB extranet is expected to be operational by the Fall meeting.
- Guidance on the SAB Annual Report was requested. Members encouraged development of a shorter report that gives essential information and that does not merely reproduce information that is provided on the web.
- It was suggested that the Board members attempt to provide advice on topics for the ensuing two SAB meetings. This will allow adequate time for preparation of materials and to make arrangements for presentations.
- Following review of the completed evaluation forms from the Feb/Mar. meeting, the Secretariat addressed most of the concerns and is in the process of dealing with the remainder.

In the ensuing discussion:

It was suggested that a sub-committee of SAB members could assist in the development of the agenda for the next meeting with the goal of completing the main subject headings by June 30, 2006.

- The following items were suggested as possibilities for the agenda:
 - overview of science and research at Health Canada (including themes and priorities) supported by the White Paper on managing horizontal science issues in Health Canada;
 - update on Health Canada's visioning exercise;
 - implications of the federal S&T strategy for S&T in Health Canada;
 - the evolving role of external advisory bodies;
 - developments in the role definition of the PHAC in relation to other divisions within Health Canada; and
 - the evolving FPT context with respect to S&T in health.
- Guests might include:
 - the National Science Advisor;
 - others from Industry, Environment and Agriculture;
 - the Minister, Deputy Minister, others from the Minister's Office;
 - the President of the Council of Canadian Academies;
 - the Chairs of CSTA and ACST;
 - the President of the Canadian Academy of Health Sciences; and
 - a representative from CBAC.

5.3 *Form for Tracking Developments.*

Members requested that the form for tracking developments related to issues on which

the SAB has tendered advice be expanded to include such items as the status of the issue, state of completion or closure, and timing of expected updates.