

*The role of National Academies of
Sciences in Science Advice*

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OUTLINE

- 1) A brief history of National Academies of Sciences and of the Royal Society of Canada (RSC)
- 2) The RSC and science advice
- 3) Role of international associations in science advice
- 4) Conclusion (?)/ Questions...





Marquis de Lorne

In the late 1870s, the Governor General of Canada, the Marquess of Lorne, determined that Canada required a cultural institution to assist with Canada's development.

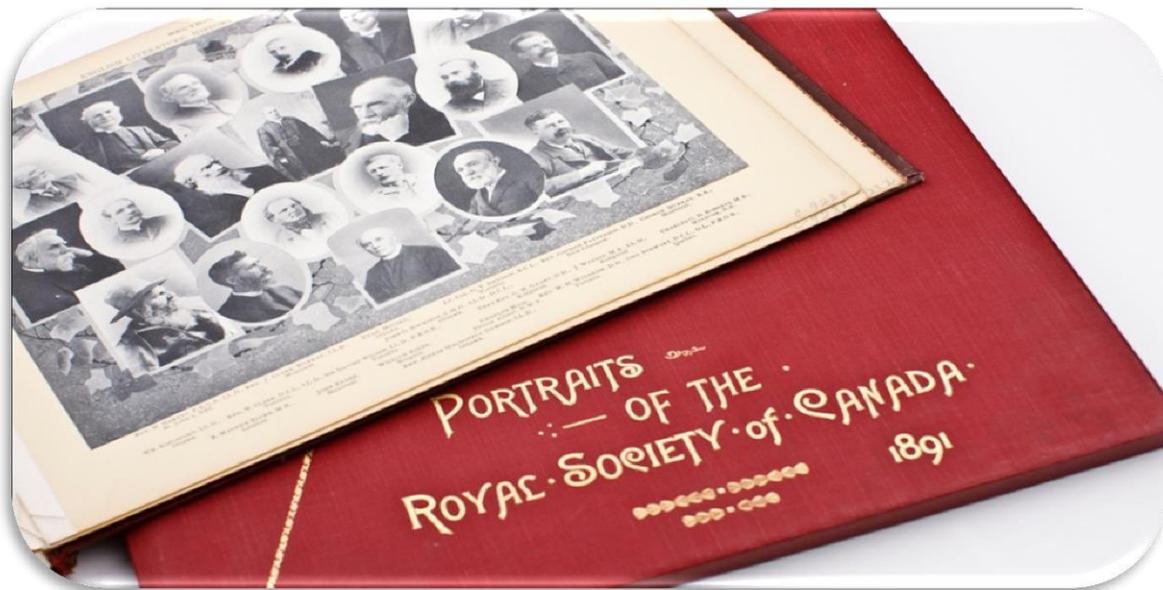


In 1883, the Royal Society of Canada (RSC) was granted its Royal Charter.



RSC • SRC

1891



RSC Class of 1891



1950

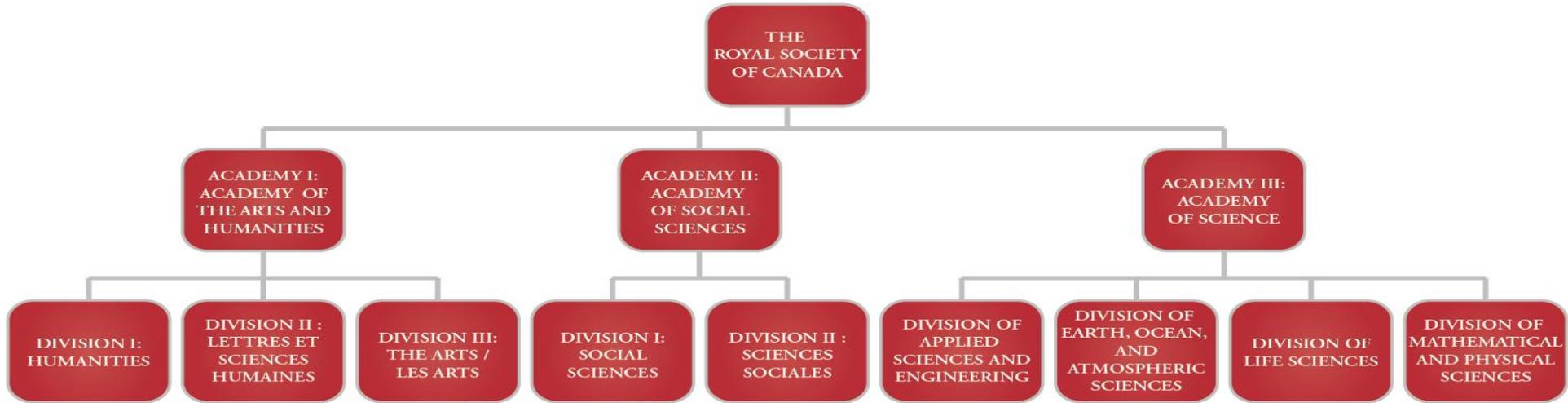


1950 RSC AGM, McGill University



The Academies and Divisions of the RSC

Les Académies et divisions de la SRC



RSC
The Royal Society of Canada
The Academies of Arts,
Humanities and Sciences
of Canada



SRC
La Société royale du Canada
Les Académies des arts,
des lettres et des sciences
du Canada

The College of New Scholars, Artists and Scientists





- The Fellowship of the Society, by its nature of being a career achievement, has an average age of 71
- The College seeks to reflect the evolving demographic of the next generation of academics
- The College captures people at an earlier and more active stage in their career: intersectorial, no academies.
- No “lifetime nominations”: 7 years



- The title of John Berger's 1994 history of the Royal Society of Canada hints at the limited achievements of efforts in SA over the RSC's first 100 years: "Honour and the Search for Influence."
- Unlike some other national academies around the world, the RSC has not developed a steady relationship with its Federal government.
- *The landscape is shifting*. There are increasingly more ways in which decision-makers are seeking advice.
- Examples of this at the Canadian level are the Federal Science Review, the Federal Sustainable Development Strategy and the Chief Science Advisor.
- How can these developments orient the RSC's advisory capacity?



- Efforts have been made: **Public Intervention committee** created in 2012
- A Committee of RSC Council reviews Fellows' requests for an intervention and makes recommendations to the RSC President regarding appropriate responses.
- Ex.: Construction of a dam (Site C) in BC; interventions on governmental initiatives toward silencing scientists; barring entries to refugees, etc.
- The Committee also makes recommendations on requests from international societies for intervention in cases where the human rights of an academic are being violated.



-Reports from Abroad: Highlights the results and Canadian relevance of selected reports from sister national academies such as those from the Royal Society (London) and the US National Academy Press.

-Lecture Series: The RSC sponsors sets of lectures, including various Bacon and Eggheads presentations to Parliamentarians, and cross-country lecture series associated with some of the RSC awards.

-Responses to requests for Policy Advice: The RSC is occasionally asked by governments to provide comments and advice on new policies or programs (e.g., mandate of Chief Science Advisor).

-Workshops and Conferences: The RSC has been involved in organizing / funding symposia at relevant conferences, and in organizing / delivering on Workshops in targeted areas often in partnership with other organizations. Ex: Bilateral seminar RSC- RS of Edinburgh, to discuss constitution and the issue of separation

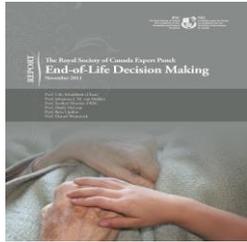


Expert Panels



Environmental and Health Impacts of Canada's Oil Sands Industry (December 2010)

Les impacts sur l'environnement et la santé de l'industrie des sables bitumineux du Canada (décembre 2010)



End-of-Life Decision Making (November 2011)

Prise de décisions en fin de vie (novembre 2011)



Sustaining Canada's Marine Biodiversity: Responding to the Challenges Posed by Climate Change, Fisheries, and Aquaculture (February 2012)

Le maintien de la biodiversité marine au Canada : relever les défis posés par les changements climatiques, les pêches et l'aquaculture (février 2012)

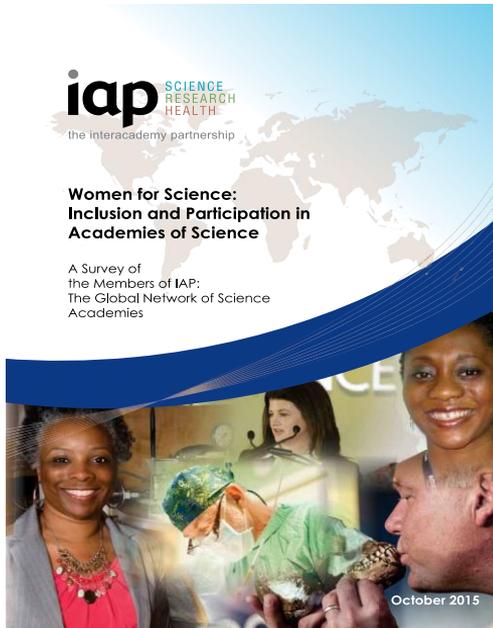


Early Childhood Development (October 2012)

Le développement des jeunes enfants (octobre 2012)



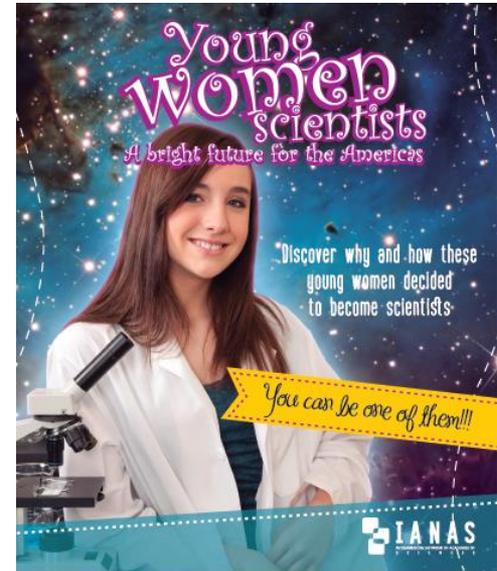
- The Royal Society of Canada serves as Canada's National Academy, and has been recognized as such in international fora around the world such as the G7, G20, IAP and IANAS where the RSC represents Canada.



SURVEY OF WOMEN IN THE ACADEMIES OF THE AMERICAS

REPORT PREPARED BY FRANCES HENRY FOR THE IANAS WOMEN FOR SCIENCE PROGRAM

MAY 2015



G7 and G20 science statements

G-Science Academies Statement 2016:

Understanding, Protecting, and Developing Global Brain Resources



G-Science Academies Statement 2016:

Strengthening Disaster Resilience is Essential to Sustainable Development



G-Science Academies Statement 2016:

Nurturing Future Scientists



G20 statement: Halle, Germany, 22 March 2017

Improving Global Health: Tools and Strategies to Combat Chronic and Communicable Diseases

G7 Academies Meeting - Rome, 23-25 March 2017

Ageing society: neurologic 'epidemic' /Cultural Heritage: Building resistance to natural disasters/New economic growth and technosciences

Canada to host the G7 meeting in 2018



INTERNATIONAL ASSOCIATIONS FOR SCIENCE ADVICE

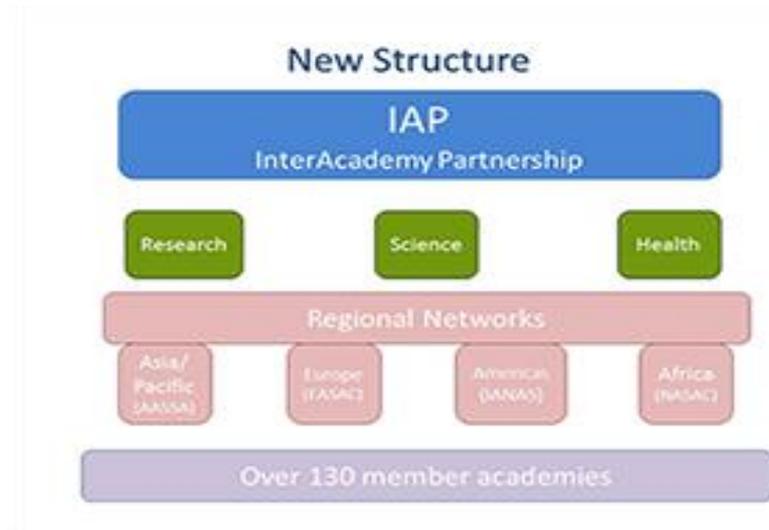
- ✓ **IAP – InterAcademy Partnership**
- ✓ **ICSU – International Council for Science**
- ✓ **INGSA – International Network for
Government Science Advice**



InterAcademy Partnership

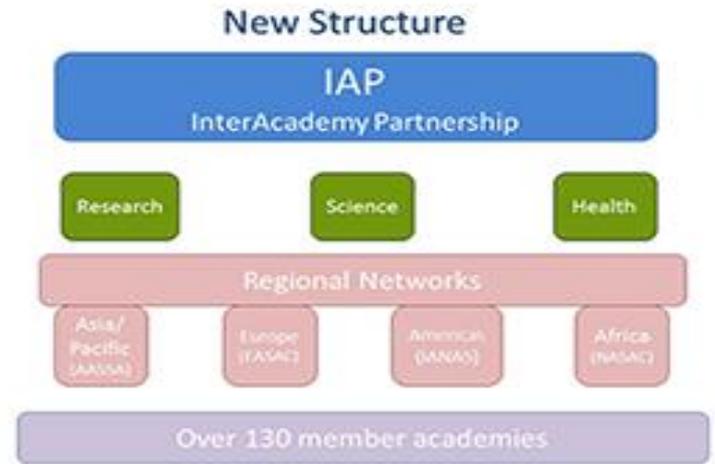
History

- ✓ The IAP (global network of science academies) was launched in 1993 as the global network of 111 science academies with a mandate **to advise citizens and public officials on the scientific aspects of critical global issues.**
- ✓ Has been working alongside two other major global networks of academies with similar mandates:
 - IAC, the InterAcademy Council
 - IAMP, the InterAcademy Medical Panel



InterAcademy Partnership

- ✓ In March 2016, all three networks, IAP, IAC, IAMP established an Umbrella Organisation: the InterAcademy Partnership to increase the visibility and impact of the activities of academies
- ✓ Now known as the IAP for Science, IAP for Research, IAP for Health, they speak with 'one voice' to government, international organizations and other stakeholders



InterAcademy Partnership

Mandate

- ✓ The new IAP harnesses the expertise of the world's scientific, medical and engineering leaders to advance policies, promote excellence in science education, improve public health, and achieve other critical development goals.

- ✓ The four main strategic priorities of the new InterAcademy Partnership include:
 1. **Provide evidence-based advice and perspectives on global issues;**
 2. **Build a scientifically literate global citizenry;**
 3. Strengthen the global scientific enterprise; and
 4. Strengthen the global network of academies, including establishing new academies in countries where they do not currently exist.



International Council for Science

Mission

- ✓ **Strengthen international science for the benefit of society**

History

- ✓ Founded in 1931 to promote science and its application for the benefit of humanity
- ✓ Evolved from the International Association of Academies (1899-1914) and International Research Council (1919-1931)
- ✓ Dual membership organization with 122 National Members (mostly Academies) and 31 International Scientific Unions allows unique worldwide access to intellectual resources
- ✓ Has addressed critical international, interdisciplinary issues through the creation of Interdisciplinary Bodies and Joint Initiatives such as the International Polar Year, the World Climate Research Programme
- ✓ Principal scientific adviser at 1992 Rio UNCED and 2002 World Summit on Sustainable Development (WSSD)

International Council for Science

Establishes interdisciplinary bodies, sponsors research programs in key areas of global concern with a focus on:

- ✓ ***Connecting Science Globally*** by planning and coordinating international collaborative research programmes (e.g. Future Earth, World Data System, Ocean Observations)
- ✓ **Science for Policy** by promoting dialogue between the scientific community, policy makers and society to ensure that science is integrated into international policy development (e.g. Disaster Risk, Climate Research)
- ✓ ***Universality of Science*** by ensuring that science is trusted and valued by societies across the world in areas related to the conduct of science, capacity building, science education, access to data and the relationship between society (e.g. Freedom & Responsibility Committee)

INGSA

History

- ✓ 2012 [Nature Commentary](#) by Doubleday and Wilsdon on the need for better support and networks for Chief Scientific Advisers to ensure that science advice to governments is robust – this commentary was considered a “call to action”
- ✓ 2013 – First meeting in Montreal under the invitation of Prof. Remi Quirion, Quebec chief scientist
- ✓ August 2014 – international conference in Auckland– Chaired by Sir Peter Gluckman, Chief Science Advisor in New Zealand: Brought together 220 thought leaders from 40 countries, including academics, practitioners, government officials
- ✓ Led to formation of a network (now INGSA) to promote the exchange of ideas and experience in the areas of policy, capacity building and research across diverse global science advisory organizations and national systems
- ✓ INGSA operates under the auspices of ICSU



INGSA

Mission

- ✓ To provide a forum for policy makers, practitioners, national academies and academics to share experiences, build capacity and develop theoretical and practical approaches to the use of scientific evidence in informing policy at all levels of government

Primary focus is on the place of science in public policy formation (Science for Policy – not Policy for Science) and operates through:

- ✓ Exchanging lessons, evidence and new concepts through conferences, workshops and a website;
- ✓ Collaborating with other organisations where there are common or overlapping interests;
- ✓ Assisting the development of advisory systems through capacity-building workshops;
- ✓ Producing articles and discussion papers based on comparative research: the science and art of scientific advice.



Science advice???

CONCLUSION
?

Science diplomacy???

- Expert panels, Specific interventions, Workshops, G7 or G20 science statements, etc.
- How could National Academies best use their incredible human resources to provide science advice?
- How can we re-affirm this role within a world where “Science Advice” is becoming a key word for any association?
- How can we best act within the growing number of “Global/World Associations”?
- Are all these voices being drowned in global noise?

