

Fonds de recherche du Québec

Nature et Technologies • *Santé* • *Société et Culture*

INGSA East African Government Science Advice Workshop

Science and Diplomacy

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Québec 



A reminder of one of my mandates as Québec's Chief Scientist

To promote & facilitate :

- **international research partnerships as well as science diplomacy to increase the global presence of Québec and its scientists**

Science & Diplomacy

- **Science is, by its very nature, a global enterprise.**
- **International collaborations are critically important in science from small to very large projects ie. the genome project; CERN and the discovery of the internet; vaccines against; large observatories...**
- **Major challenges such as climate changes, terrorism, AI, water & food safety, global health are demanding global collaborations in science and in diplomacy.**
- **Fortunately, regardless of political issues and tensions, researchers have collaborated with each other for the advancement of knowledge and innovation.**
- **We must now take it to an even higher level for the benefits of various nations & cultures (UN SDG).**

International Leadership & Science Diplomacy

The deployment of research and science diplomacy requires more porous disciplinary, academic and political boundaries. The knowledge gained through research, which aims to respond to complex questions, reasserts the relevance of science diplomacy in the resolution of international problems and its capacity to tackle major cross-border challenges.

More important to consider than ever in today's ever changing societies facing global challenges.

Science Diplomacy

- **The concept of science diplomacy conveys core values for inter-state relations, such as openness, knowledge sharing, experiential learning and evidence.**
- **Science diplomacy is essential (even more today!) to solve major societal challenges such as climate changes, pollution, water safety, deforestation, radicalisation, AI..... Also see the UN Sustainable Development Goals.**
- **According to the British Royal Society and the American Association for the Advancement of Science (2009), the concept of science diplomacy is structured in three major components :**
 - **Diplomacy for science**
 - **Science for diplomacy**
 - **Science in diplomacy**
- **These dimensions of scientific diplomacy have recently been revised (2017), in a more pragmatic way by Sir Peter Gluckman et al. They are structured around the needs, interests and challenges of states and governments.**

Diplomacy for Science

- **Government efforts to promote international scientific cooperation by developing partnership agreements, jointly supporting costly research infrastructure or pooling financial, material and human resources. Some Québec examples:**
 - **Québec's leadership in Future Earth, a Montreal-based global research platform on climate change and sustainable development. Long term commitment especially as related to the impact of climate changes in the Arctic and in West Africa (partnership in the START fellowship program);**
 - **Creation of the *Québec-Massachusetts Collaborative Research Council* by elected officials around issues related to genomics, climate change and cybersecurity. Climate change as first joint project in the Trump's era... a truly diplomatic tour-de-force!... *kind of from Diplomacy for science to Science for diplomacy!!***

Science in Diplomacy

- **Policy makers must be able to rely on scientific expertise to make optimal decisions about major societal issues.**
- **On the flip side, researchers must be made aware of the importance of sharing their findings and more effectively communicate them to elected officials and policy makers.**
- **Critical for me to implement mechanisms to ensure that science informs all international initiatives involving the government of Québec. Strategic partnership of the FRQ with the Premier's office and our ministry of international affairs (Unesco, EU, various US states, France, Cuba....)**

Science for Diplomacy (1)

- **International science initiatives can bring countries together. Scientific values of rationality, transparency and universality can support diplomatic efforts. The goal here is to support Foreign Policy actions by mobilising scientific networks.**



Science for Diplomacy (2)

Few examples :

- **International projects like the European Organization for Nuclear Research, CERN: one of the first European organizations set up after the Second World War (multiple major discoveries); the International Space Station; the Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME) that brings together scientists of Egyptian, Iranian, Israeli, Jordanian, Palestinian and other nationalities...**
- **Critical roles of the IDRC (Canada) in the development of various vaccines against multiple infectious diseases (Aids, Ebola, SARS,...). Diplomatic impact in various African countries.**
- **An agreement that we signed between the FRQ and the Palestinian Academy of Sciences & Technology during an official visit of our Premier in Israel & Palestine in May 2017. The first 30 young researchers are already in various universities in Québec for a 3-6 mo training period. Long term commitment from us... Here, science helping to establish stronger diplomatic links in a low profile way.**

Some of our recent initiatives

- **International symposia (May & October 2017) with high-level speakers to more pragmatically define the concept of scientific diplomacy**
- **Seminars to heads of Québec's delegations on science and how it can help them in their works (each year).**
- **Participation in various events led by INGSA (Founding Member)**

Organization of workshops on science advice in French-speaking Africa (Dakar 2017; Ouagadougou 2019...)



Now, two questions for You

- **How can research better contribute to the policy decisions made by states, governments and international organizations?**
- **How can we foster a more effective sharing of scientific knowledge to the populations that are affected by the greatest challenges we face?**



A hint...

- **Key is you. Key is the young generation!!!**
- **And in Québec, we are taking steps to involve them locally & globally:**
 - **Opening graduate studentship programs of the FRQ to international students. Exposing them to local science & policy working groups.**
 - **Partnerships in the START-Future Earth fellowship program on climate changes in West Africa.**
 - **Development of a fellowship program for graduate students interested by training in diplomacy, science & innovation in Quebec's delegations. First two in London & Munich.**

In closing....

- **Science Diplomacy is more essential than ever.**
- **It is most important to increase capacity locally (Québec), nationally (Canada) & globally (key role for INGSA). Africa is a priority for Québec.**
- **Essential to establish strong, long lasting truly innovative, cross-cutting programs to support the joint training of scientists, policy makers and diplomats.**
- **Develop a domestic science-advisory system that can support the diplomatic action of Québec and Canada at the international level.**
- **Consider the links between science and economy (business) as a diplomatic strategy. Scientific diplomacy can be complementary or even strengthen economic diplomacy**
- **And personally, I am committed to help**

Thank you!

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