ACCELERATE

Revitalizing Multilateralism through Anticipatory Science and Diplomacy

Abstract

The grand challenges facing humanity in the 21st century will be both global and technical. Climate change, unemployment, hunger, and a host of other issues will require experts of all kinds around the world to come together to solve them. Yet today, trust in science is on the decline and multilateralism in some regions appears to be in retreat. This highlights the need for a revitalization of science diplomacy and a major update to the frameworks that underpin it. This will be crucial, not only for tackling the challenges already before us, but also anticipating future technical and policy developments in time to foster multilateral solutions.

- How can we bring current and anticipated scientific breakthroughs to the forefront of policymaking to tackle emerging grand challenges, and how can we train future leaders to be bilingual in both science and diplomacy?
- In future science diplomacy, what would be the most effective roles for people on the local level or those outside of government?
- How can we reinvigorate trust in science among citizens?

Participants

Moderated by:

Marga Gual Soler, Science Diplomat; Founder, SciDipGLOBAL, Spain

With:

Micheline Calmy-Rey, Former President of the Swiss Confederation; Visiting Professor, University of Geneva; Board Member, GESDA, Switzerland

Yves Flückiger, President, swissuniversities; Rector, University of Geneva; President, Campus Biotech Geneva Foundation, Switzerland

Joël Mesot, President, ETHZ; Co-Chair, GESDA Academic Forum, Switzerland

Nikhil Seth, Executive Director, UNITAR, India

Highlights

Science diplomacy in the service of multilateral institutions represents a resurgence. Perhaps not well-known outside expert circles, it has come into greater focus in recent years as a novel way of fusing expertise about difficult technical challenges with policymaking and more citizen involvement. It is re-emerging in new and updated forms as an anticipatory tool for peace and prosperity through efforts like GESDA, yet <u>examples</u> of its use go back decades, even to the 19th century when two doctors in Geneva helped launch the Red Cross movement.

In 2011, former Swiss President Micheline Calmy-Rey noted, the Swiss government used science diplomacy to forge an agreement between Russia and Georgia that cleared the way for Russia's accession to the World Trade Organization. Calmy-Rey, who travelled to Russia and Georgia to hold direct talks with the Russian and Georgian presidents, recalled turning to negotiation engineering and technology to get past their differences. The Swiss put together a mechanism agreed to by the two countries to regulate customs administration and the supervision of commercial goods. "It was really a political problem. The point of contention had always boiled down to the different understandings the two parties have, had, and still have of what constitutes the Georgian customs area," said Calmy-Rey, a visiting professor at the University of Geneva and member of GESDA's Board of Directors. The solution relied on ingenious ways "to avoid any reference to the Georgian border", she said, along with "trade corridors defined by points of longitude and latitude instead of borders", and new electronic platforms for statistical data coordinated with Geneva-based WTO. "The method is pragmatic, and the problem made manageable," she said. "The Swiss mediation was a success, and it illustrates how the problem-solving mindset of engineering science can be applied to a complex, real-world negotiation."

Science and science policy play a "very important" A decade before that, Joël Mesot recalled, he worked role at the United Nations and other leading on a UNESCO-brokered project that had relied on international organizations, said Nikhil Seth, who took over the UN Institute for Training and Research science diplomacy to build the Synchrotron-Light for Experimental Science and Applications in the Middle (UNITAR) in 2015, and before that was a diplomat and East (SESAME), a physics, chemistry and biology lab taught economics. "But if you look at the historical in Jordan, the only nation that then had diplomatic record of how political leadership has handled the issue of science and making global policy, I would relations with all the other surrounding founding say it's a very dismal record." The agendas of major members. He said the science diplomacy needed to get the lab built resembled that used at CERN in the organizations like the Group of Seven (G7) or Group early 1950s – to get past France-Germany tensions of 20 (G20) "normally reflect the crisis of the day", and - as the first post-World War II project in which they may never come around to anticipatory science Germans could work again with other European diplomacy - but there are still opportunities for GESDA to make a mark. More could be done through nations. "It seems that we have forgotten about the World Intellectual Property Organization (WIPO) these ways of proceeding. Now, why? What has changed between this time? And I think this is the to share science knowledge, and if Switzerland sense of urgency that something is going to happen. wins election next year to a two-year seat on the So, GESDA is also about anticipating," said Mesot, 15-nation UN Security Council in New York, it will president of the Swiss Federal Institute of Technology have one to two opportunities from 2023-2024 as the in Zurich and co-chair of GESDA's Academic Forum. monthly revolving council president to set the global

"We develop technologies in our universities that could help international organizations to move forward. We all know that multilateral organizations have troubles at the moment." Amid populism and disinformation, "the COVID-19 pandemic has been, and continues to be, a kind of a life case study for science diplomacy, revealing deep fractures in the multilateral system and the immense challenges of building effective science policy interfaces at the global level," said Marga Gual Soler, an expert in molecular biosciences who promotes science diplomacy among international organizations. The situation "highlights the need for a revitalization of science diplomacy and a major update on the frameworks that underpin it", she said.

In his dual roles overseeing Geneva's university as its rector and speaking for all Swiss universities as president of swissuniversities, Yves Flückiger urged a multidisciplinary approach to science diplomacy – and to focus on building trust through more outreach and inclusiveness. "I think right now it's impossible just to address a question with a technological solution," he said. "Building trust is not so easy. We need really to make sure that everybody understands how science works and what science can bring to the population." However, the dialogue between science communities and international organizations "has to go both ways", he said, since scientists also need to understand the political and diplomatic challenges. "And the goal of such a platform like GESDA is really to create the dialogue both ways between science and international organizations, but also that international organization are able to bring to the scientific community the challenges that they have to face," he added. "The beauty of GESDA is the fact that they are a public platform, which is open to everybody and every country."

agenda and could use that opportunity to spotlight anticipatory science diplomacy, he said, adding that GESDA also could work "to level the playing field so that the poorer countries and those who collectively make global policy are all equally informed" in the use of science diplomacy and technology. Calmy-Rey similarly urged GESDA to bring more focus on social and political sciences, and for Geneva, as a longstanding hub of international organizations, "to make a diagnosis of all the problems we can find on the international level" that could be remedied with "diplomatic science" and "diplomatic engineering".

The GESDA Science Breakthrough Radar[®], is one of the instruments already being translated as

an educational and outreach tool. Another new development is the launch of GESDA's Science and Diplomacy Capacity Building Initiative, announced Stéphane Decoutère, GESDA's secretary general, which he said reflects the GESDA's view "on the need for a global learning platform for bottom-up science diplomacy". (Please read on following page). "I believe in it," Mesot said of this flurry of GESDAinitiated science diplomacy based in Geneva. "It is just the seed. It is just the start. But I believe that we might make a change worldwide with this initiative."

Takeaway Messages

Science diplomacy is resurgent but has firm roots with examples in the Red Cross movement, Swiss government and UNESCO that used cuttingedge advances to overcome political hurdles.

Leading universities such as those in Switzerland can use their educational tools, research, and technologies to help international organizations move forward and keep their relevance.

Opportunities exist for GESDA, as a public platform, to create twoway dialogues between science communities and international organizations.

More information

Session recording on YouTube

Related interviews: Nikhil Seth & Joël Mesot, Marga Gual Soler

Tweets related to the session

Related content in the 2021 Science Breakthrough Radar®

Science-based Diplomacy and related breakthroughs



Together with the revitalization of science diplomacy, a major update on the frameworks that underpin it is needed. The focus on anticipation should be a key feature of it.

A multidisciplinary approach to science diplomacy can build trust through outreach and inclusiveness, raise science knowledge and awareness, and educate generations of potential future leaders.

Switzerland could promote anticipatory science diplomacy through a Security Council seat in 2023 and 2024.

at five, ten and 25 years: Full breakthrough brief, Computational Diplomacy, Negotiation Engineering, Predictive Peacekeeping, Trust and Co-operation Modelling

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