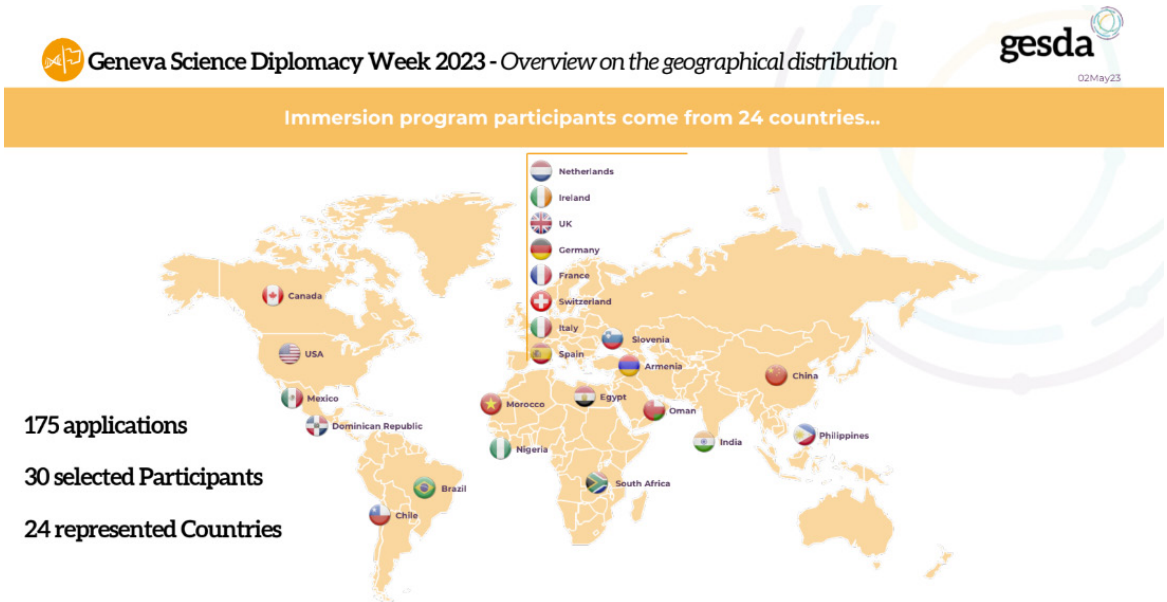
Shaping the Future of Multilateralism through Science Diplomacy: Insights from the GESDA Science Diplomacy Immersion Program

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Introduction

Science diplomacy is an interdisciplinary field that combines scientific knowledge, international relations, policy, and diplomacy to address global challenges, foster international cooperation and build diplomatic relationships between countries. It recognises that challenges such as climate change, global health, environmental protection, natural hazards, sustainable development, and management of natural resources transcend geographical and political boundaries and require scientific expertise. By leveraging scientific collaborations, science diplomacy facilitates joint projects, diplomatic and policy dialogue, data sharing,



Map showing an overview of the geographical distribution of participants

knowledge and resource exchange between countries. Despite scientific communities often being overlooked as stakeholders in the international multilateral system, organisations like the Geneva Science and Diplomacy Anticipator (GESDA) Foundation serve as international science diplomacy hubs, training science diplomats and bridging the gap between the scientific and diplomatic communities.

GESDA, established by the Swiss and Geneva governments in 2019, is an independent foundation focused on anticipating and accelerating scientific and technological breakthroughs over the next 5, 10 and 25 years. GESDA fosters dialogue between science, politics and diplomacy, positioning the scientific community as a stakeholder in multilateralism. GESDA is playing a significant role in advancing science diplomacy through its immersion training program for future science diplomats. The Geneva Science Diplomacy Week is an exclusive program that brings together scientists, diplomats, and policymakers from various countries to explore the intersection of science, diplomacy, and emerging trends in science and technology. The 2023 cohort of the program included 30 participants from diverse scientific backgrounds, policymakers, and diplomats from 24 countries who engaged in a 5-day immersion program held in Geneva from 8 to 12 May 2023. This event celebrated the global talent and diversity of individuals committed to forging connections between science, policy, diplomacy, and society.

The GESDA Science Diplomacy Immersion Program

The main goal of the Science Diplomacy Week program is to empower participants with the relevant knowledge, skills, and networks to actively engage in science diplomacy beyond the program. It offers a platform for idea exchange and equips participants with diplomatic tools and best practices to effectively navigate the intersection of science and diplomacy. Throughout the week-long program, participants engage in a wide range of activities, including plenary sessions, simulation exercises, panel discussions, interactive workshops, and roundtable discussions. Additionally, the program includes on-site visits to local institutions, research centres, and diplomatic bodies in International Geneva, providing participants with a firsthand experience of the science diplomacy setting. These diverse activities foster a comprehensive learning experience and equip participants with practical insights on how to contribute to the field of science diplomacy.

The first day of the program commenced at the Palais des Nations, where participants were introduced to the GESDA Science Breakthrough Radar, a compilation of science trends and breakthrough predictions contributed by over 700 scientists. This was followed by workshops on the Science-Policy Interface (SPI), which encompassed the various stages involved in the process, including agenda setting, policy design, adoption, implementation, and evaluation. The SPI serves as a bridge between science and policy practitioners, civil society organisations, and the media. Participants also benefited from a guided tour of the Palais des Nations led by UNITAR, providing insights into the United Nations' structure and its role in multilateral diplomacy. The first day concluded with the official opening of Geneva Science Diplomacy Week at the World Meteorological Organisation (WMO). This event featured the presentation and panel discussion on the Global Greenhouse Gas Watch, emphasising the urgency of coordinated global actions in monitoring greenhouse gas fluxes and the importance of addressing both anthropogenic and natural greenhouse gas emissions.

The second day started with a role-play simulation game at the University of Geneva. Participants assumed various roles, such as diplomats, entrepreneurs, UNESCO policy advisors, and ministers of science and technology, to address real-world challenges related to the future global governance of neurotechnology. Deliberations focussed on the establishment of global standards, regulations, ethical considerations, and ensuring equitable benefits from scientific progress. After the simulation game, participants engaged in a hands-on practical session on Data Science diplomacy. They utilised network analysis techniques to uncover patterns and diplomatic positions on issues ranging from women's rights to global health or nuclear nonproliferation in the UN General Assembly resolutions. This session facilitated a deeper understanding of the intersection between data science and diplomacy.

On the third day, activities were hosted by the Geneva Centre for Security Policy (GCSP). The focus was on discussions and a simulation exercise centred around the militarisation of emerging technologies, including Lethal Autonomous Weapon Systems (LAWS), artificial intelligence (AI), and neurotechnology. Concerns were raised about the societal risks and potential malicious misuse of these technologies in the absence of proper governance frameworks and responsibilities.

In the afternoon sessions, panel discussions delved into the rapid development of disruptive emerging technologies like synthetic biology, artificial intelligence, and neuroscience. The panel also explored the potential for misuse and malicious applications of these technologies while highlighting their beneficial uses. Discussions revolved around enhancing international security while minimising negative consequences of these emerging technologies.

The third day concluded with a diplomatic negotiation engineering session led by Prof. Micheline Calmy-Rey, the former Swiss President and Minister of Foreign Affairs. Participants were introduced to the concept of negotiation engineering, which combines analytical thinking, technical problem-solving, and diplomacy. This approach involves analysing complex situations, breaking them down into manageable sub-problems; and devising effective tactics and strategies for negotiation and mediation. The session included a case study on Switzerland's involvement in facilitating the entry of the Russian Federation into the World Trade Organisation (WTO) in 2011, which posed challenges, particularly in the context of the Russia-Georgia conflict.

On the fourth day, participants had the opportunity to visit the European Organisation for Nuclear Research (CERN), an intergovernmental organisation that operates the largest particle physics laboratory in the world. Participants gained insights into the organisation's role as a bridge between science and diplomacy. They learned about CERN's groundbreaking research, international collaborations, technological advancements, and contributions to society. Later in the day, an interactive session on Technology Diplomacy organised by DiploFoundation highlighted the role of tech envoys and the necessity for countries to develop technology diplomacy strategies. The discussions emphasised the significance of global conversations on technology governance and the need for broader representation from countries in the Global South in tech diplomacy. Participants actively shared insights, engaged in brainstorming sessions and explored the skills, practices, and challenges associated with tech diplomacy.



Photo of participants at the Palais des Nations, Geneva. Photo credit: Michael Chiribau

The final day began with valuable advice and 12 key lessons shared by Ambassador Alexandre Fasel, Special Representative for Science Diplomacy (see Box). Participants then engaged in a gamified simulation focussed on the Sustainable Development Goals (SDGs) and explored how cooperation can maximise their impact. The workshop created awareness about the current and future challenges posed by individual and country actions and their global implications. It emphasises the need to strike a balance between personal goals and the broader goals of the world in order to effectively address the SDGs.



Ambassador Alexandre Fasel, Special Representative for Science Diplomacy, Federal Department of Foreign Affairs, Switzerland, sharing lessons in science diplomacy with the participants.
Photo credit: Michael Chiribau

Throughout the program, various activities promoted teamwork, critical thinking, and problem-solving skills, empowering participants to tackle complex global issues from a multilateralist perspective. The significance of science in multilateral governance was highlighted and participants were empowered to contribute to this governance framework. Throughout the week, the program offered invaluable mentorship and support from renowned educators, ambassadors, and diplomatic experts who provided guidance and mentorship to the participants.

Conclusion

In just its second edition, the GESDA Science Diplomacy Week profoundly shaped the perspectives of its participants, and now it is up to the participants to shape the world around them. This marks the beginning of the real work.

The impact of these workshops extends beyond the program's duration as participants continue to think differently, adopt multilateral perspectives, and apply new frameworks to address existing and emerging challenges. Moreover, the experience illuminated the potential of multilateralism to break silos and address asymmetries between the Global North and South. Without a diversity of science diplomats at the table, limited perspectives will continue to undermine the effective, equitable and ethical use of technology's greatest advancements.

Another key takeaway from the program was the significance of finding common ground for effective multilateralism. Despite coming from different backgrounds, participants learned how to establish a common language and adopt new frameworks of understanding. Simulations on tech governance pushed policymakers – who typically think in terms of objectives, mandates, and policy memos – to deconstruct complex concepts into technical components. Conversely, scientists gained a broader understanding of the geopolitical applications and implications of the technology they work with. Altogether, they experienced a useful shift in their thinking and approach.

Besides skill building, the program fostered a spirit of collaboration among participants. From the first day, participants naturally discovered commonalities in their work and interests, laying a foundation for future collaborations. Many participants have already devised plans to reconnect, pursue joint projects, and proliferate lessons gained from the week.

During the group debrief on the final day, participants were asked how they intended to tangibly apply the takeaways from the program once they return home. Many expressed their intention to present summaries of the week to their respective teams and organisations. Others mentioned incorporating newfound knowledge and practices into programs, policies and daily operations. There was even interest in building regional science-diplomacy hubs in their locations to introduce broader communities to the concept of science diplomacy.

Whether through soft influence and encouragement or through actively embedding science diplomacy into formal policies, curricula, cohorts and centres, participants will galvanise support for the field by disseminating insights gained throughout their respective networks and institutions. Each participant has a crucial role to play in bringing the principles and practices they learned during Science Diplomacy Week to life.

12 Lessons in Science Diplomacy from Ambassador Alexandre Fasel

- Diplomacy and multilateralism evolve. Take courage, small things matter, quantum leaps are made in incremental steps, and never lose determination.
- Don't confuse urgency with speed, politics determine urgency.
- Multilateralism is a crowded space. Know your file, you will be responsible for the daily micro-decisions on behalf of your country.
- Multilateralism is defined by an individual; multiple daily decisions and positions as a diplomat in a multilateral setting.
- The most overlooked skill is the ability to make a bridge between policy and making a project work.
- When benevolence (goodwill) is lost, only calculation remains, and then you know you are in a bad space.
- It's all about relationships, relationships between actors in international space are more important.
- Empathy: always factor in the interests of the opposing party in your thinking.
- Shared experience is the space for convergence which then leads to shared action- we all speak different languages but we must diverse concrete strategies to work together to solve common challenges.
- Cynicism is the ultimate betrayal - if you cannot be optimistic, it is time to leave the diplomatic space.
- Multilateral events are opportunities to benefit from other individuals' brilliance and intelligence.
- The reward is now, you have to take your gratification from whatever you are doing right now not until your next post.