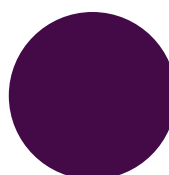
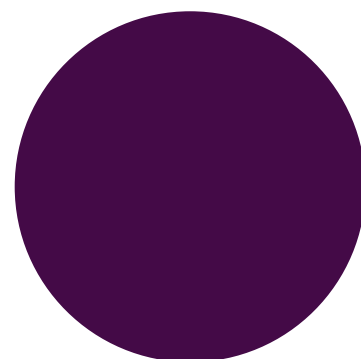
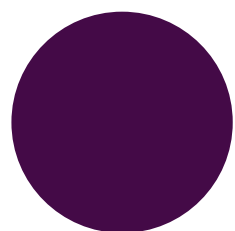


# 2021 Activity Report

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# 1. Forewords



## By Chairman Peter Brabeck-Letmathe & Vice Chairman Patrick Aebischer

In October 2021, GESDA celebrated 24 months of existence by presenting the inaugural edition of the Foundation's first two flagship products:

- **The GESDA Science Breakthrough Radar®.**
- **The Geneva Science and Diplomacy Anticipation Summit.**

The GESDA Science Breakthrough Radar® is the result of a strategic partnership with the **Fondation pour Genève**.



Its first 2021 edition already addresses 18 emerging topics and 216 potential scientific disruptions in 5, 10 and 25 years' time that are in the making in four scientific fields that are essential for solving our planet's global challenges: digital sciences, health sciences, environmental sciences and political sciences.

From this radar, built thanks to the active collaboration of 543 scientists from all over the world, the 900 participants in the Geneva Science Diplomacy Anticipation Summit organised by GESDA from 7 to 9 October extracted 16 topics that could give rise to concrete actions in the coming years to accelerate the implementation of the United Nations 2030 Agenda for Sustainable Development.

Both the Radar® and the Summit are intended to become annual events that will bring together the communities concerned by these matters, be they politicians, diplomats, citizens, researchers, entrepreneurs, philanthropists, media or members of non-governmental organisations.

Their development is the first step towards fulfilling the mission entrusted to our Foundation, e.g.:

- **to bring the global scientific community** to the table of multilateralism, of which Geneva and Switzerland are one of the world's key forums;
- **to ensure that the benefits of science** are not concentrated in a limited number of people, countries or companies but can be co-developed and enjoyed by the entire world population;
- **to offer in Geneva a space for debate and development of anticipation-driven solutions open to all**, diplomats, citizens, entrepreneurs, philanthropists and researchers.

This is the purpose underlying the proposal made on 1 November 2021 to our Founders to provide GESDA with a 10-year perspective now that interest in our Foundation's activities is proven and our anchoring in the heart of International Geneva is now a reality.

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## By Secretary General Stéphane Decoutère

From an operational point of view, partnerships and increased visibility sum up the year 2021.

First of all, this year enabled the GESDA Foundation to establish itself as a player in International Geneva and to attract in Geneva new actors interested in multilateral scientific diplomacy.

For instance, the GESDA Foundation has raised over 10 million Swiss francs in its two years of existence, a result that demonstrates the interest aroused by our activities, which are part of a major trend in international relations, namely science diplomacy. The four new financial partnerships concluded this year bear witness to this. They include:

- **Geneva partnerships** with cooperation developed from February 2021 with the Fondation pour Genève, formalized on 21 July during the Foundation Board's summer retreat. This is the second partnership with a Geneva-based Foundation. The first dates back to June 2019.
- **Swiss partnerships** through the support given to us by the Asuera Foundation of Stephan Schmidheiny's family in Horgen, in the canton of Schwyz, to develop from Geneva a coalition for the teaching of scientific diplomacy in Switzerland and around the world.
- **Global partnerships** via the collaboration finalized with the Open Society Foundations in New York in December 2021 and the installation in Geneva of the European branch of the California-based XPRIZE Foundation announced in October, as well as the work to launch a joint competition in 2022 open to all to prepare for the use of the quantum technologies that will emerge in the next 5 to 10 years.

Added to this is the **visibility** acquired through our initial instruments of anticipation and action, the GESDA Science Breakthrough Radar® and the Geneva Science and Diplomacy Anticipation Summit. The leap in terms of notoriety in Switzerland and in the world is quite notable, as you will discover in this second activity report.

This success is to the credit of the entire **GESDA family**, which has mobilized as never before to bring the Foundation to life; this includes our Founders, the Foundation Board of Directors, the Committees, the Executive Team, and all our thematic partners and financial contributors, to whom we extend our warmest thanks. This 2021 activity report is, first and foremost, a faithful reflection of their scientific, diplomatic, economic and civic commitment to anticipation and action aimed at ensuring that everyone in the world has a chance to benefit rapidly from the disruptions currently emerging from laboratories around the world.

## 2. Key facts and figures

2019-2020

Science Anticipation	Diplomacy Acceleration	Practical Translation into action & Impact Fund	Global Visibility
<p><b>68 Academic Moderators and global scientific experts</b></p> <p><b>1 Anticipatory Breakthrough Report</b>, anticipating what science will deliver to the world in 5, 10 and 25 years</p> <p><b>12 Scientific Anticipatory Briefs</b></p> <p><b>Preparatory work for the Right to Science Symposium</b> that will be held at the Brocher Foundation (postponed from December 2020 to December 2021 due to COVID-19)</p>	<p><b>17 Diplomacy Moderators</b></p> <p><b>35 international organizations met with one-to-one</b></p> <ul style="list-style-type: none"> <li>• 20 contacts appointed to closely follow our activities</li> </ul> <p><b>Extensive awareness-building through over 50 diplomatic missions in Geneva</b> via online sessions</p> <p><b>Over 80 informal contacts with other key International Geneva stakeholders</b></p> <p><b>First Science &amp; Diplomacy Plenary Meeting with participants taking part in 20 breakout sessions</b></p> <p><b>Scoring of the Scientific Anticipatory Briefs'</b> impact on people, society and the planet, and pertinence to the UN SDGs</p> <p><b>Initial list of potential solutions</b> that we will explore further</p>	<p><b>CHF 3m in private philanthropic funding raised since June 2019</b>, matching the public-sector seed funding</p> <p>Ongoing advanced contacts for <b>additional philanthropic funding</b></p> <p><b>Context analysis</b> that identified 80 potential partners</p> <p><b>Initial discussions with selected</b> potential partners following a more detailed context analysis</p> <p><b>Initial partnership with Fondation Botnar</b> on AI and health (I-DAIR)</p>	<p><b>1,000 followers</b> on our various communication channels</p> <p><b>Best Reads</b></p> <ul style="list-style-type: none"> <li>• 19 editions since August 2020 (weekly publication)</li> <li>• 230 subscribers</li> </ul> <p><b>Social media</b></p> <ul style="list-style-type: none"> <li>• Twitter, LinkedIn, Facebook: 678 posts since these accounts were opened (Sept. 2020)</li> <li>• ≈ 700 followers</li> </ul> <p><b>One content partnership with the Geneva Solutions digital news platform</b></p> <p><b>Contributions to three reports and three events related to International Geneva</b></p> <ul style="list-style-type: none"> <li>• 100<sup>th</sup> Anniversary of the League of Nations (16 September 2019)</li> <li>• Geneva Day at WEF 2020</li> <li>• IHEID/ EPFL Data Summit 2025</li> <li>• Fondation pour Genève reports on health and the internet</li> <li>• Geneva Digital Atlas</li> </ul> <p><b>One website</b></p> <ul style="list-style-type: none"> <li>• Landing page launched on 9 December 2019</li> <li>• Enhanced website online since 9 December 2020</li> </ul> <p><b>One press conference</b> 20 February 2019</p> <p><b>One progress report</b> 15 July 2020</p> <p><b>Two press releases</b></p> <ul style="list-style-type: none"> <li>• 9 December 2019</li> <li>• 17 December 2020</li> </ul>

2021

Science anticipation	Diplomacy acceleration	Practical translation into action & the Impact Fund	Global visibility
<p><b>Release of the first edition of the GESDA Science Breakthrough Radar®</b></p> <ul style="list-style-type: none"> <li>• <b>discussing 3</b> fundamental issues for the future of interest to society - debated by <b>8</b> specialists in philosophy, human sciences and the arts</li> <li>• <b>analyzing 11 million</b> social media messages to gauge the pulse of society</li> <li>• <b>scouting 4</b> scientific domains</li> <li>• <b>summarizing 24</b> emerging issues and <b>216</b> potential disruptions within the next <b>5, 10 and 25 years</b> of interest for science</li> <li>• <b>drawn up collaboratively by 543</b> scientists established in Switzerland and worldwide out of the <b>4,000</b> scientists invited to contribute</li> <li>• realized thanks to our collaboration with the publisher Frontiers</li> <li>• <b>totalling at the end of 2021 22,701 visited pages</b> <ul style="list-style-type: none"> <li>• by 5,612 users</li> <li>• from 106 countries</li> <li>• and 984 cities</li> </ul> </li> </ul>	<p><b>Organisation by GESDA of the first edition of the Geneva Science and Diplomacy Anticipation Summit</b></p> <ul style="list-style-type: none"> <li>• <b>939</b> participants registered for the Geneva Science and Diplomacy Anticipation Summit</li> <li>• <b>debating the usefulness of 16 emerging topics</b> stemming from the first edition of the GESDA Science Breakthrough Radar® addressing <b>23</b> global challenges of significance for diplomacy (<b>17</b> 2030 SDG Goals + <b>6</b> global transformations identified by the UN in <b>2020</b> when celebrating its <b>75th</b> Anniversary), completed by:</li> <li>• <b>8 working groups</b> bringing together scientists and diplomats currently assessing in depth the potential, for people, society and the planet, of 8 breakthroughs discussed during the Summit.</li> <li>• <b>and 1 working group</b> leading preliminary work to propose a Geneva Manifesto on the Right to Science in 2022/2023.</li> </ul>	<p><b>Choice of the XPRIZE Foundation to partner with the GESDA Foundation and install its European Headquarters in Geneva</b></p> <p><b>2 initiatives announced in October to start in 2022:</b></p> <ul style="list-style-type: none"> <li>• Geneva Science and Diplomacy Capacity Building Initiative including <b>16</b> partners to date</li> <li>• Joint GESDA/XPRIZE Quantum Competition</li> <li>• <b>4 new Foundations partnering with the GESDA Foundation increasing to CHF 6.4m the amount of private philanthropic funding</b> raised since June 2019, and thus supplementing the public contributions of CHF 3.6m:</li> <li>• Fondation pour Genève</li> <li>• Asuera Stiftung</li> <li>• Open Society Foundations</li> <li>• XPRIZE Foundation</li> </ul> <p><b>12 thematic partnerships</b> under development</p>	<p><b>Two press conferences on 21 July and 7 October 2021, as well as 6 press releases on 13 April 2021, 19 July 2021, 21 July 2021, 1 October 2021, 7 October 2021 and 8 October 2021</b></p> <ul style="list-style-type: none"> <li>• allowing GESDA to reach out twice in 2021 to potentially half of the world population (<b>3.5 to 4 billion people</b>) with media coverage (notably through Associated Press) and effectively to 800 millions people.</li> <li>• generating 1,200 articles mentioning Geneva, Switzerland and GESDA in the press and on social media, as well as 6,000 followers on our various channels</li> <li>• <b>supported by the GESDA Best Reads</b> <ul style="list-style-type: none"> <li>• <b>462</b> subscribers</li> <li>• <b>36</b> editions in 2021</li> </ul> </li> <li>• <b>supported by an increased presence on social media</b> <ul style="list-style-type: none"> <li>• Twitter, LinkedIn, Facebook, YouTube: <b>2,785</b> total posts since Sept. 2020 (accounts opened)</li> <li>• <b>5,481</b> followers</li> </ul> </li> <li>• <b>relying on 4 media partnerships</b> <ul style="list-style-type: none"> <li>• Geneva Solutions</li> <li>• Leman Bleu TV</li> <li>• SRG SSR, i.e. SwissInfo &amp; Geneve Vision</li> <li>• Neo.Life</li> </ul> </li> <li>• <b>relayed by talks at 28 events, completed by one additional website</b> presenting GESDA in French</li> </ul>

### 3. GESDA Foundation: Why? What? How?

The Geneva Science and Diplomacy Anticipator (GESDA) was created in 2019 to serve as an anticipatory science and diplomacy tool for greater impact and multilateral effectiveness. GESDA is an independent, private and not-for-profit foundation governed by Swiss law. The Anticipator is established in Geneva in the premises on the Campus Biotech and operates worldwide on the principle of a public-private partnership. The GESDA Foundation serves as an honest broker for science-backed information, remaining neutral and objective as it gathers ideas through broad consultations. It has achieved two major accomplishments so far: the GESDA Science Breakthrough Radar® and the Geneva Science and Diplomacy Anticipation Summit.

#### Why?

The creation of the GESDA Foundation was based on the premise that the acceleration of science and technology seen in the 21st century calls for acceleration of their use for the greatest benefit of humanity and, consequently, for the multilateral framework of which Geneva is an important world forum to be adapted through scientific anticipatory diplomacy.

Pro memoria: the first two decades of the 21st century saw science diplomacy gain traction on the global agenda both as an international policy practice and as a discipline of human science. A 2010 report by the Royal Society and the American Association for the Advancement of Science (AAAS), entitled *New Frontiers in Science Diplomacy*, gave science diplomacy its first formal definition and established a widely accepted three-pillar taxonomy:

1. **Science for diplomacy**, or using science as a soft power tool to improve international relations;
2. **Science in diplomacy**, or using scientific evidence to inform foreign policy;
3. **Diplomacy for science**, or using the diplomatic apparatus to support and promote international scientific collaboration.

Science diplomacy is now facing a new challenge as science diplomacy efforts need to adapt to both the speed of scientific progress and the shifts in international relations. Working at the crossroads of scientific advancement and diplomacy, GESDA is helping to tackle this issue while balancing the following three factors:

1. **The unprecedented pace** of scientific and technological progress;
2. **The urgency** with which global challenges must be addressed;
3. **The complexity** of global geopolitics.

#### What?

Consequently, the goal set for the Foundation in its Byelaws (Article 3) by its co-founders and approved by the Swiss Federal Supervisory Body for Foundations is as follows (verbatim): ***“an instrument of anticipation and action, giving priority to public-private partnerships on an international scale and to projects capable of providing solutions to current and future technological challenges, turning them into opportunities and broadening the circle of beneficiaries of scientific and technological advances”***. In this context, the vocations of our Foundation are to strengthen the anticipatory power of multilateral stakeholders working for world progress from Geneva or from other locations, and to adapt science diplomacy in general to the accelerating pace of technological development in the 21st century.



## How?

To fulfil its mission, the GESDA Foundation uses the future to build the present and has developed a **method** called "**Anticipatory Situation Room Process**" built on a threefold set of complementary activities: anticipating, accelerating and translating.

### *Anticipating means*

1. Drawing up a yearly and rolling inventory of what is "cooking" and will come out of the scientific laboratories in the next 5, 10 or 25 years in the formal, natural or human sciences. This is done by conducting a global scouting exercise based on the excellence and international networks built up by the Swiss and Global researchers mobilized by GESDA, updated annually and by highlighting their potential impact on people, society and the planet.
2. Synthesizing this global scouting of emerging scientific disruptions in a Science Breakthrough Radar® and doing it in a way that is accessible and attractive to all audiences working with GESDA (academic community, diplomatic community, impact community, citizens community) while remaining precise and reconciling the width of the fields considered with the depth of the observations made.

### *Accelerating means*

3. Sharing this knowledge of emerging science with diplomats, philanthropists, entrepreneurs and the general public at an early and accelerated stage through our Yearly Anticipation Summit.
4. Pinpointing, based on both the yearly Radar® and the yearly Summit, ideas for solutions identified jointly with the scientific and diplomatic communities that are capable of accelerating the response to the global, current or emerging challenges of humanity (health, agriculture, poverty, education, environment, etc.).

### *Translating means*

5. Mobilizing the Swiss and international funding needed to implement these avant-garde solutions in collaboration with the multilateral institutions of which Geneva is the operational hub, notably with the aim of contributing to the accelerated implementation of the UN 2030 Agenda (17 Sustainable Development Goals - SDGs).
6. Contributing to making International Geneva the global centre for anticipation of tomorrow's multilateral science diplomacy.

While acting independently, GESDA complements Switzerland's diplomatic action in favour of multilateralism, in its capacity as host state to the UN and numerous international organisations, be this its digital foreign policy strategy, led since 2021 by Ambassador Benedikt Wechsler, or the appointment in Geneva of an ambassador in charge of scientific diplomacy in multilateralism, Ambassador Alexandre Fasel.

This complementarity between the instruments of official diplomacy and a broader diplomacy encompassing scientists, the private sector, philanthropy and citizens is the specific feature of the Swiss model, which promotes a scientific diplomacy based on anticipation, collaboration and a public-private partnership of international scope. **Whilst fundamentally global, GESDA capitalizes on four distinctive assets of Geneva and Switzerland:**

- A long tradition of disruptive research in science and technology;
- Switzerland's renowned neutrality-driven diplomacy, shaped by a vibrant direct democracy;
- The presence of innovative global companies in Geneva and elsewhere in Switzerland;
- Citizens interested and involved in world affairs.

## 4. 2021 highlights

### 4.1. Main milestones



#### 1<sup>st</sup> quarter

- **29 January:** Board of Directors meeting. The blueprint of the GESDA Science Breakthrough Radar® was approved, as well as the principle of organizing the Geneva Science and Diplomacy Anticipation Summit.
- **19 February:** Internal release of the full report summarizing the results of the first Science and Diplomacy Plenary held on 18 December 2020 with GESDA Academic and Diplomacy fora.
- **March** – First series of workshops scoping emerging topics for the Radar® (100 scientists participated).
- **17 March** – The Committee of the Board of Directors validates the concept of the Summit by selecting 16 initial topics for discussion based on the first Science and Diplomacy meeting of the 18 December 2020, eight of which were prioritized for deeper exploration.

#### 2<sup>d</sup> quarter

- **April** – Survey sent-out to close to 4,000 scientists of 80 countries: identification of additional science breakthroughs and assessment of their anticipation potential (time to maturity, transformational effect, awareness and impact on people, society and planet).
- **13 April** – Press release announcing the Geneva Science and Diplomacy Anticipation Summit.
- **16 April** – The Swiss approach to Science and Diplomacy featured at the European German-speaking Foreign Ministers' meeting in Lugano attended by GESDA's Chairman and Secretary General.
- **22 April** - Meeting with the Head of the Department for culture and digital transition of the City of Geneva.
- **28 April** – Memorandum of understanding signed with the XPRIZE Foundation by the Chairman of GESDA and the Founder and CEO of XPRIZE, as well as moderator for the GESDA Diplomacy Forum, Anousheh Ansari.
- **May** – Second series of workshops validating the scientific breakthroughs in 5, 10, 25 years.
- **10 May** – A GESDA session is organized as part of the EPFL Applied Machine Learning Days Event.
- **17 May** - Participation in the prospective Canton of Geneva project "Geneva 2050".
- **1 June** – A Swiss Representative for Science Diplomacy in Geneva, Ambassador Alexandre Fasel, takes office.
- **16 June** – The Committee of the Board of Directors reviews the preparatory work on the Radar® and Summit.
- **16 June** – Second Science and Diplomacy Plenary. Presentation of the draft version of the Radar®.
- **25 June** – GESDA contributes to and endorses the Toledo Declaration, a new European Initiative for Technology Diplomacy and Artificial Intelligence in Conflict Prevention and Mediation.

#### 3<sup>rd</sup> quarter

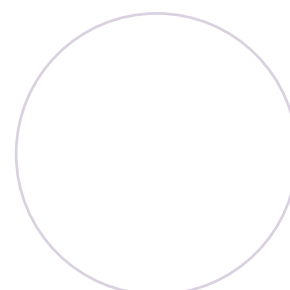
- **July** – Third series of Radar® workshops with a focus on delivering the philosophical compass. Contributions by eight philosophy, social, human sciences and arts scholars.
- **19 July** – Press release announcing the names of the speakers for the first Geneva Science and Diplomacy Anticipation Summit.
- **21-23 July** – First full GESDA Family retreat in Verbier bringing together GESDA's board members, founders, key partners, and executive team. First presentation of the products in preparation. Establishment and first meeting of a high-level advisory board to the Radar®.
- **22 July** – Decision by the Board of Directors to propose the continuation of the foundation further to its start-up phase and to draw up a White Paper on the scaling up of the Foundation to be finalized by the October meeting of the Board of Directors.
- **21 July** – Signature of the partnership agreement with Fondation pour Genève aimed at making Geneva the global leader in Science Diplomacy, and subsequent press release.
- **28 July** – ASEAN Ambassadors' visit to GESDA at Campus Biotech.
- **1 to 30 September** – Consultation of the Board of Directors on the future GESDA 2022-2032 White Paper.
- **1 September** – Second meeting of the Advisory Committee for the GESDA Science Breakthrough Radar®.
- **2 September** – The Committee of the Board of Directors reviews the preparatory work on the Radar® and Summit and gives its initial guidance on the future White Paper.
- **3 September** – Participation and support at the first Applied Machine Learning Days Africa (Tunis).



- **6 September** – Partnership with Asuera Stiftung (Family of Stephan Schmidheiny in Horgen, Schwyz).
- **13 September** – South East European Institute for Sustainable Technologies features Science Diplomacy as an agent for Peace, with GESDA as a key player.
- **15 September** – Meeting with the Executive Council of the City of Geneva.
- **28 September** – The partnership with Open Society Foundations in New York is finalized.

#### 4<sup>th</sup> quarter

- **1 October** – Press release announcing the partnership with the XPRIZE Foundation.
- **5-6 October** – Preliminary presentations of the Radar® to the guests from Fondation pour Genève, the Swiss and Geneva authorities at the origin of GESDA, the President of Swiss Academies, Marcel Tanner, and the chief strategist of the UN Program for Development, J. D'Cruz.
- **7-9 October** – The Geneva Science and Diplomacy Anticipation Summit welcomes 939 registered participants.
- **7 October** – The GESDA Radar® and its Pulse of Society are made public by a Press Conference; a press release is subsequently published.
- **8 October** – The 2022 programme of the Geneva Science and Diplomacy Capacity Building Initiative initiated by GESDA with 16 partners is announced at the Summit by GESDA Secretary General, the Rector of the University of Geneva and the President of ETH Zurich.
- **8 October** – First public Summit event – Conference by Enrico Letta, former Prime Minister of Italy and Moderator of the GESDA Diplomacy Forum, in partnership with the Graduate Institute and with the support of Fondation pour Genève.
- **9 October** – Second public Summit event – Stage reading of the theatre play 'The Frozen Sea' at Théâtre Saint-Gervais during the Fête du Théâtre.
- **9 October** – The Board of Directors approves the GESDA 2022-2032 White Paper, tasks the GESDA Chairman with transmitting it to the Founders and sets the concrete guidelines for 2022.
- **20 October** – Meeting with the legislative Finance Commission of the City of Geneva.
- **29 October** – Official transmission of the renewal demand to the Founders along with the GESDA 2022-2032 White Paper.
- **1 November** – Official start of the renewal process at Founders' level.
- **4 November** – The Swiss Minister of Foreign Affairs, Federal Councillor Cassis, features the Swiss approach of Science and Diplomacy, with GESDA as the key supporting instrument for implementing it, at 2021 Dies Academicus of University Lucerne.
- **4 November** – Presentation of GESDA to the Swiss Parliamentary Commission for Foreign Affairs of the Council of States.
- **5 November** – Participation in the prospective Canton of Geneva project "Geneva 2050".
- **15-16 November** – Retreat in Zurich of the Executive Team: meeting with our main operational partners from Zurich and the German-speaking part of Switzerland and start of preparations for the key 2022 activities.
- **30 November** – Meeting of the Advisory Committee for the Radar® (2022 second edition).
- **2 December** – Presentation of the Radar® to the members of the EU Foresight Initiative
- **3 December** – Presentation of the Radar® in the third public event of the Swiss Digital Initiative.
- **6 December** – Senegal event / ICT4Peace



## 4.2. Key results

### Key result 1.

#### First edition of the GESDA Science Breakthrough Radar®

The first edition of the GESDA Science Breakthrough Radar® was launched on 7 October 2021. This comprehensive instrument of anticipation is designed to be a new tool for multilateralism, informed discussion, and an enabler for concerted action.

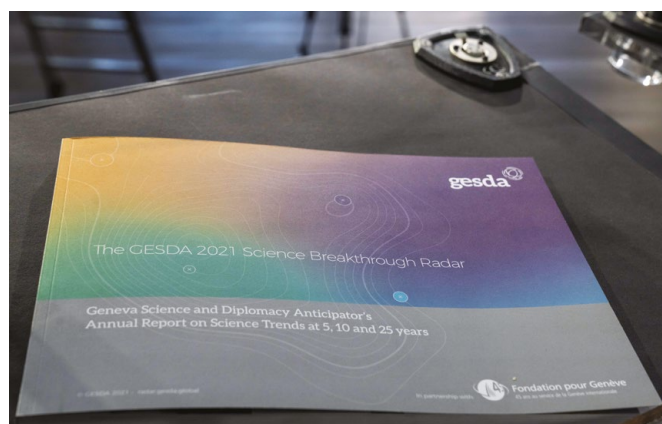
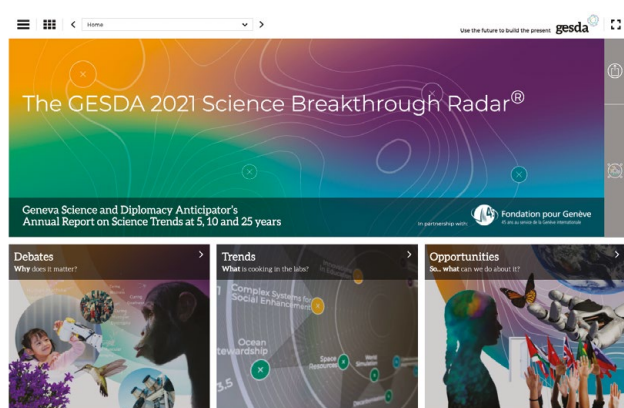
It provides a neutral overview at 5, 10, 25 years of the latest science trends, initially focusing on four scientific frontier issues:



This knowledge is shared by GESDA as an honest broker between world scientists, as well as among diplomats, philanthropists, entrepreneurs, and the general public, with the aim of leveraging the potential of future scientific discoveries for the benefit of all.

The GESDA Science Breakthrough Radar® is unique in that it offers a single point of entry for these stakeholders to catch up with the unprecedented pace of science and technology. It is a carefully vetted overview of what 543 Swiss and global researchers expect will be the most significant science breakthroughs in 5, 10, and 25 years.

Its interactive digital interface enables the viewer to easily visualize the importance of anticipation in those domains. It also makes it possible to dive deeply into specific topics and sort out the facts based on comprehensive references to key publications and media articles.



The GESDA Science Breakthrough Radar® aims to provoke eye-opening reflections on the impacts of future scientific discoveries for people, society and the planet. For this purpose, it includes initial contributions on the implications for international affairs, global challenges, and the SDGs, as well as a synthesis of what society thinks about the fields of research examined. Eight philosophers and ethicists assess how these science breakthroughs will and are already reshaping the way we see ourselves, relate to each other and care for our environment.

The GESDA Science Breakthrough Radar® served as the basis for selecting the 16 topics explored at the Geneva Science and Diplomacy Anticipation Summit on 7-9 October 2021.

It will be updated yearly and continuously enriched through extended interactions worldwide.

### *The First Edition at a Glance*

ONE VISION USE THE FUTURE TO BUILD THE PRESENT					
2021 GESDA SCIENCE BREAKTHROUGH RADAR®	GESDA 3 fundamental questions & related 4 initial scientific frontier issues of interest for society - why and how they matter today				
	Questions		Scientific Frontier Issues		
	<p>1. <b>Who are we as humans?</b> What does it mean to be a human in an era of robots, gene editing and augmented reality?</p> <p>2. <b>How can we all live together?</b> What technology can be deployed to help reduce inequality, improve well-being and foster inclusive development?</p> <p>3. <b>How can we ensure the well-being of humankind and the sustainable future of our planet?</b> How can we sustain almost eight billion people with the necessary food and energy while regenerating our planet?</p>		<p>1. <b>Advanced Artificial Intelligence &amp; Quantum Revolution</b></p> <p>2. <b>Augmented Human</b></p> <p>3. <b>Eco-regeneration &amp; Geoengineering</b></p> <p>4. <b>Science &amp; Diplomacy</b></p>		
	24 scientific emerging topics & 216 breakthroughs at 5, 10, 25 years of interest for science within GESDA's four initial scientific frontier issues				
	General Subjects	Advanced AI & Quantum Revolution	Human Augmentation	Eco-regeneration & Geoengineering	Science & Diplomacy
	<ul style="list-style-type: none"><li>o Origins of Life</li><li>o The Ethics of Anticipation</li></ul>	<ul style="list-style-type: none"><li>o Advanced AI</li><li>o Quantum Technologies</li><li>o Biological Computing</li><li>o Brain-inspired Computing</li></ul>	<ul style="list-style-type: none"><li>o Cognitive Enhancement</li><li>o Human Applications of Genetic Engineering</li><li>o Radical Health Extension</li><li>o Consciousness Augmentation</li></ul>	<ul style="list-style-type: none"><li>o Decarbonization</li><li>o World Simulation</li><li>o Future Food Systems</li><li>o Space Resources</li><li>o Ocean Stewardship</li><li>o Global Resources &amp; Planetary Health</li><li>o Geoengineering</li></ul>	<ul style="list-style-type: none"><li>o Complex Systems for Social Enhancements</li><li>o Advances in Science Diplomacy</li><li>o Science-Based Diplomacy</li><li>o Innovations in Education</li><li>o Sustainable Economy</li><li>o Digitalization of Conflicts</li><li>o Futures Literacy</li></ul>
A reminder of the global challenges facing diplomats these science breakthroughs may help to address.					

## Key result 2.

### First Geneva Science and Diplomacy Anticipation Summit

The first Geneva Science and Diplomacy Summit took place on 7-9 October. It brought together 937 participants (of which 38% of diplomats, 22% of researchers, 17% of representatives of the civil society and 23% of representatives of the impact community), 108 speakers and moderators from 33 countries, resonating International Geneva's specific expertise as the engine room of the UN system and its long tradition of disruptive research and innovation

The Summit helped shape the future of Science Diplomacy, with anticipation playing a new and central role in the debates, and scientists and international affairs leaders sharing the stage.

In effect, it was the public launch of the do tank element of GESDA, as it initiated a broad multidisciplinary consultation on what should be done to make the most of these breakthroughs and their potential to achieve the SDGs.

The delegates learned about the science breakthroughs most likely to impact people, society and the planet at 5, 10, and 25 years. The Summit enabled them to sharpen their comprehension of four scientific frontier domains: advanced artificial intelligence and quantum revolution, human augmentation, eco-regeneration and geoengineering, as well as science and diplomacy.

The debates focused on 16 of the most significant science topics with the potential to transform the world. The discussions were geared towards whether and how diplomacy should embrace these advances for the greatest benefit of humanity, and the implications of emerging science breakthroughs for international affairs and global governance. Participants were asked to contribute and propose initiatives to be further explored by GESDA.

The proceedings of the Summit will be published early 2022 and will serve to contribute to a widespread consultation of diplomats, scientists, philanthropy, business and the civil society on the proposed initiatives, that will be discussed at the second edition of the Summit in the second semester 2022.

**"Personally, I haven't seen any better proposal yet on how to use science diplomacy to make governance of world affairs fit for the reality we are going to face."**

Ignazio Cassis,  
Swiss Minister of Foreign Affairs

**« The First Geneva Science and Diplomacy Anticipation Summit showed the importance, for international governance and conflict prevention, of anticipating scientific developments and broadening the scope of dialogue between science and diplomacy. Geneva will continue to act as a pioneer to promote the application of new technologies to serve the goal of peace. »**

(1 November 2021, speech at the opening ceremony of the Geneva Peace Week 2021)

Ignazio Cassis,  
Swiss Minister of  
Foreign Affairs



**“GESDA is very important because it’s exactly the initiative which is building important bridges between science and anticipation of technological progress and global governance, global multilateral cooperation. In order to move forward in our multilateral cooperation, we have to anticipate the future, and exactly science can help us with anticipating the future.”**

Tatiana Valovaya,  
Director-General of the UN  
Office of Geneva

**“The most interesting and exciting element of the GESDA initiative is recognizing the notion that we need a way to translate between the advances in science and technology and decisions that are made in diplomacy, in development, in government policy and elsewhere. Because that translation has been ineffective for a long time. It’s particularly critical now because I think we are all recognizing that the pace of change in many of the sectors that GESDA is looking at – neuroscience, quantum, etc., is increasing exponentially.”**

Joseph D’Cruz, Special Advisor, Strategic  
Planning & Innovation, Executive Office of the  
Administrator, United Nations Development  
Program

**“I would like to really stress our congratulations to the government of Switzerland and its partners on this very strategic initiative, in that bringing the worlds of science and diplomacy together, its pioneering work, which we believe leverages Geneva’s attributes, as one of the seeds of our multilateral organization, the United Nations. [...] The relationship between science and diplomacy needs to be highlighted as an important one, and I think the GESDA initiative is more than timely.”**

Naledi Pandor,  
Minister of International Relations  
and Cooperation, South African  
Government, South Africa

**“GESDA is an exciting and innovative initiative. Its location in Geneva is key, as Geneva is already a successful venue for international diplomacy. At the same time, Geneva and the Léman region as a whole are a cutting-edge research and innovation cluster with global appeal. This combination is unique. As a truly multilateral and interdisciplinary platform, GESDA can play an important role in anticipating future trends and developments, while strengthening global governance in questions related to digitalization, climate change, artificial intelligence and much more. I wish GESDA every success in its ambitious and important endeavor to anticipate the need of global governance on a multilateral level concerning future scientific revolutions!”**

Martina Hirayama,  
Swiss Secretary of State for Research,  
Education and Innovation

**“In a world with increasing complexities of challenges, we need a different kind of cooperation between science and frontline workers on challenges – be them in conflict, climate change, pandemics, or the combination of all of it. I think these challenges take an enormous toll on societies, and if we don’t mobilize science in order to find evidence-based political solutions to those problems, mankind will be in a very difficult situation.”**

Peter Maurer,  
President of International  
Committee of the Red  
Cross

**“The GESDA Summit was the beginning of the conversation between scientists and policy makers. A lot of governments have a knowledge gap. People in charge of policy-making don’t even understand which technologies are going to impact their country and their society, how fast these are being developed, who are the players. They need that trustworthy source of information, a safe place to have a conversation and not feel vulnerable by not knowing. GESDA can create that safe space.”**

Anousheh Ansari,  
CEO of the XPRIZE Foundation



ONE VISION USE THE FUTURE TO BUILD THE PRESENT					
FIRST GENEVA SCIENCE & DIPLOMACY ANTICIPATION SUMMIT	<b>Four Scientific Frontier Issues</b>  <b>16 topics of discussion from three angles</b>	<b>Advanced AI &amp; Quantum Revolution</b>	<b>Human Augmentation</b>	<b>Eco-regeneration &amp; Geoengineering</b>	<b>Science &amp; Diplomacy</b>
	<b>What?</b>  <i>(session with a focus on <b>anticipating</b> what is cooking in the labs at 5-10-25 years)</i>		<b>Engineering</b> Pathways for Radical Health Extension  <b>Negotiating</b> the Boundaries of our Genetic Future  <b>Learning</b> from the COVID-19 to Prepare the Response to the Next Systemic Crisis	<b>Utilizing</b> Space Resources for collective prosperity  <b>Advancing</b> Science for Ocean Stewardship	<b>Reviving</b> the Human Right to Science (linked to the forthcoming Brocher Symposium, December 2021 in Geneva)  <b>Designing</b> an economic Compass for Sustainable and Resilient Societies
	<b>So What?</b>  <i>(session with a focus on <b>accelerating</b> the discussion about the potential impact of science Breakthroughs for Diplomacy)</i>	<b>Opening</b> Quantum for the Benefit of Humanity  <b>Co-developing</b> Accessible Advanced AI	<b>Establishing</b> Neurorights	<b>Accelerating</b> the Active Decarbonization of the Planet	<b>Revitalizing</b> Multilateralism through Anticipatory Science and Diplomacy  <b>Building</b> Digital Models to Navigate the 21st Century's Complex Ecological and Social Systems
	<b>Now What?</b>  <i>(session with focus on the tools we need to develop in order to <b>translate</b> into solutions this knowledge on those frontier issues)</i>				<b>Enriching</b> Science with Citizen Voices and Values  <b>Making</b> Sense of Science Anticipation for Concrete Impact  <b>Catalyzing Inclusive Growth</b> through Anticipatory Science







### Key result 3.

#### Mobilization and involvement of the International Geneva ecosystem in GESDA's work

In 2021, GESDA continued its outreach towards international organisations. Through GESDA's activities, international organisations based in Geneva and worldwide were involved in cutting-edge scientific work that could accelerate the realization of their objectives.

From June onwards, GESDA also worked closely with the two newly appointed Swiss Special Representatives, Ambassadors Alexandre Fasel for Science Diplomacy and Benedikt Wechsler for Digital Diplomacy.

Those most closely involved in GESDA's activities in 2021 notably included:



**Tatiana Valovaya,**  
Director-General of the  
UN in Geneva



**Ambassador Jürg Lauber,**  
Swiss Mission to the  
International Organizations in  
Geneva



**Martin Chungong,**  
Inter-Parliamentary Union



**Daren Tang,**  
World Intellectual Property  
Organization (WIPO)



**Michelle Bachelet,**  
High Commissioner for Human  
Rights



**Sergio Mujica,**  
International Organization for  
Standardization (ISO)



**Guy Ryder,**  
International Labour  
Organisation (ILO)



**Peter Maurer,**  
International Committee of the  
Red Cross (ICRC)



**Alexandre Fasel**  
Ambassador, Special  
Representative for Science  
Diplomacy in Geneva

GESDA also began to heavily reinforce its collaboration in recent initiatives and with its partners with the aim of strengthening Geneva and Switzerland's position among the international competition.



GESDA Foundation shares the general view on the need of a global learning platform for bottom-up science diplomacy, as underlined during our Summit in the opening panel by South African Minister of Foreign Affairs, Naledi Pandor, and Maria-Francesca Spatolisano, Achim Steiner, Alondra Nelson, Sir Peter Gluckman, State Secretary Martina Hirayama, and Ambassador Alexandre Fasel.

The determination of GESDA and its partners to increase and consolidate their collaboration resulted in the Geneva Science and Diplomacy Capacity Building Initiative, promoted by the GESDA Foundation and supported financially by the Asuera Stiftung.

As a first step in this direction, we have been starting for two years to put together a broad coalition of Geneva, Swiss and Global partners in order to launch new capacity building programmes to train anticipatory science diplomacy leaders. To date, the initiative brings together 16 partners, with more expected to join in the coming years, helping to both strengthen and increase the visibility of Switzerland's cutting-edge expertise in science and diplomacy:

Geneva	Switzerland	World
<ul style="list-style-type: none"> <li>• GESDA Foundation</li> <li>• University of Geneva</li> <li>• The Graduate Institute of International and Development studies</li> <li>• CERN</li> <li>• Geneva Science-Policy Interface (GSPI)</li> <li>• Geneva Centre for Security Policy (GCSP)</li> <li>• Inter-Parliamentary Union (IPU)</li> <li>• United Nations Institute for Training and Research (UNITAR)</li> <li>• SDG Lab</li> <li>• DiploFoundation</li> </ul>	<ul style="list-style-type: none"> <li>• ETH Zurich</li> <li>• University of Zurich</li> <li>• University of St. Gallen</li> <li>• Asuera Stiftung</li> </ul>	<ul style="list-style-type: none"> <li>• International Network for Government Science Advice (INGSA)</li> <li>• Foreign Ministries Science and Technology Advice Network (FMSTAN)</li> </ul>



The joint activities of the Coalition announced on 8 October 2021 at the Geneva Science and Diplomacy Anticipation Summit will start in May 2022 and include:

- **Utilization of the GESDA Science Breakthrough Radar®** as a scientific framework and case study directory for executive training for diplomats and students.
- **Launch of a new Lab for Science in Diplomacy by the University of Geneva and ETH Zurich in collaboration with GESDA** using negotiation engineering and digital diplomacy as innovative tools to grow international relationships.
- **Organisation of a Science and Diplomacy Week in Geneva in May 2022 in partnership with UNITAR**, offering immersion training to future leaders worldwide and with events open to the general public.
- **Online training courses on science and diplomacy for diplomats**, organized by the **DiploFoundation** with contributions by the Geneva Science-Policy Interface and GESDA.
- **A new Executive MBA (emba X), organized by ETHZ and the University of St. Gallen (HSG)**, that uses the GESDA Science Breakthrough Radar® as a framework in its future-oriented fireside chat series.



*From left to right:*

*Marga Gual Soler*

*Joël Mesot President, ETH Zurich; Co-Chair, GESDA Academic Forum*

*Micheline Calmy-Rey, Former President, Swiss Confederation;*

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

*Nikhil Seth, United Nations Assistant Secretary-General, Executive Director, UNITAR*

*Stéphane Decoutère, Secretary General, GESDA*

## Key result 4.

### Attraction to Geneva of new players interested in multilateralism

GESDA is committed to increasing its international reach and is dedicated to attracting new players interested in multilateralism to Geneva.

The key to GESDA's work and vision are the Board of Directors, the Academic Forum and the Diplomacy Forum.

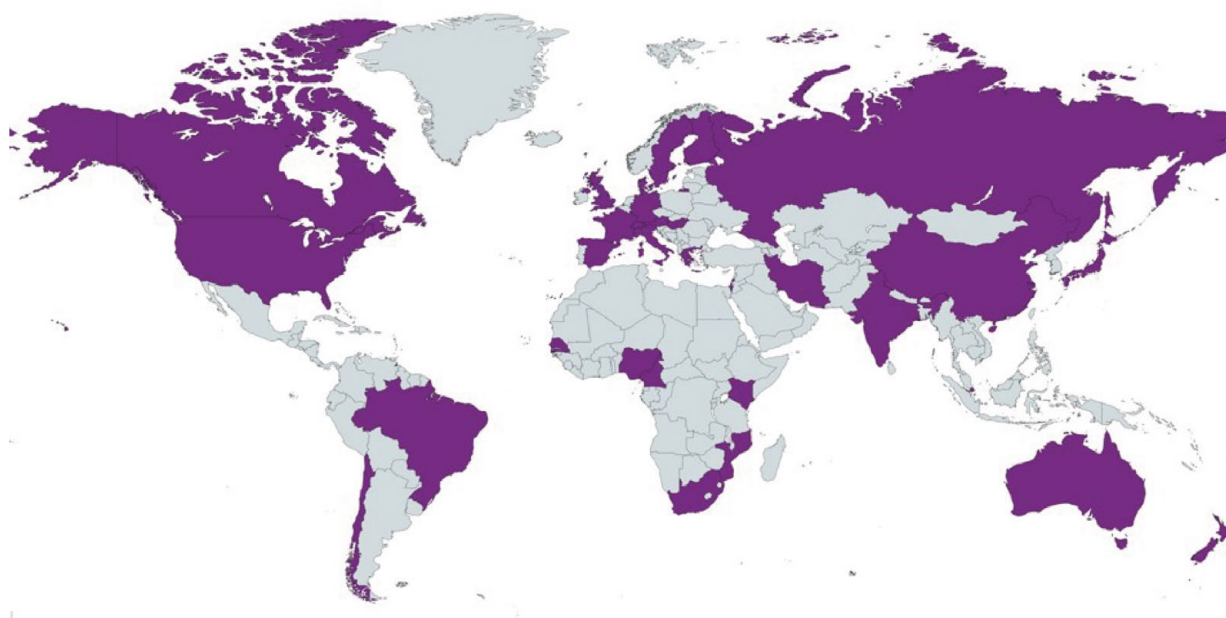


GESDA GLOBAL COMMUNITY AS OF END 2020  
BoD (stars), Academic Forum (dots), Diplomacy Forum (diamonds)

The inclusiveness of the Scientific Anticipation scouting, and mapping is of foremost importance for GESDA. 2021 served to expand the geographical reach up to 543 scientists of the 4,000 we had invited to join. It was undertaken in collaboration with the Swiss-based online publisher Frontiers, with the specific aim of increasing the involvement of scientists based in developing countries. The same level of commitment from GESDA was shown at the Geneva Science and Diplomacy Anticipation Summit, where more than 33 countries were represented. GESDA is fully mobilized to further build on this effort in 2022.

The H-Index, which is acknowledged by the scientific community to be an accurate indicator for measuring the quality and quantity of scientific output, was used as a guideline to ensure fair geographical representativeness in the GESDA Science Breakthrough Radar®. The following table compares the number of scientists' inputs from these countries in the GESDA Science Breakthrough Radar® with their ranking in the H-Index.

## Origin of the speakers and moderators of the Summit



### Scientists involved according to Country H-Index - 1 to 25

Rank	Country	Continent	H index	# contr. radar	Rank GESDA
1	United States	North America	2577	131	1
2	United Kingdom	Europe	1618	36	3
3	Germany	Europe	1429	32	4
4	Canada	North America	1299	24	6
5	France	Europe	1286	25	5
6	Italy	Europe	1135	10	12
7	Netherlands	Europe	1133	17	7
8	Japan	Russia, Asia & Oceania	1118	8	17
19	Australia	Russia, Asia & Oceania	1115	17	7
10	Switzerland	Europe	1085	79	2
11	China	Russia, Asia & Oceania	1010	12	10
12	Spain	Europe	1010	12	10
13	Sweden	Europe	974	10	12
14	Belgium	Europe	886	3	26
15	Denmark	Europe	843	1	34
16	Israel	Africa & Middle East	786	2	26
17	South Korea	Russia, Asia & Oceania	762	4	22
18	Austria	Europe	740	9	16
19	Finland	Europe	711	1	34
20	Norway	Europe	699	7	15
21	India	Russia, Asia & Oceania	691	13	9
22	Russian Federation	Russia, Asia & Oceania	652	4	22
23	Brazil	South America	649	7	18
24	Singapore	Russia, Asia & Oceania	646	10	12
25	Hong Kong	Russia, Asia & Oceania	639	1	34

Source: <https://www.scimagojr.com/countryrank.php>



## Contributors to the Science Breakthrough Radar through survey, workshops and interviews



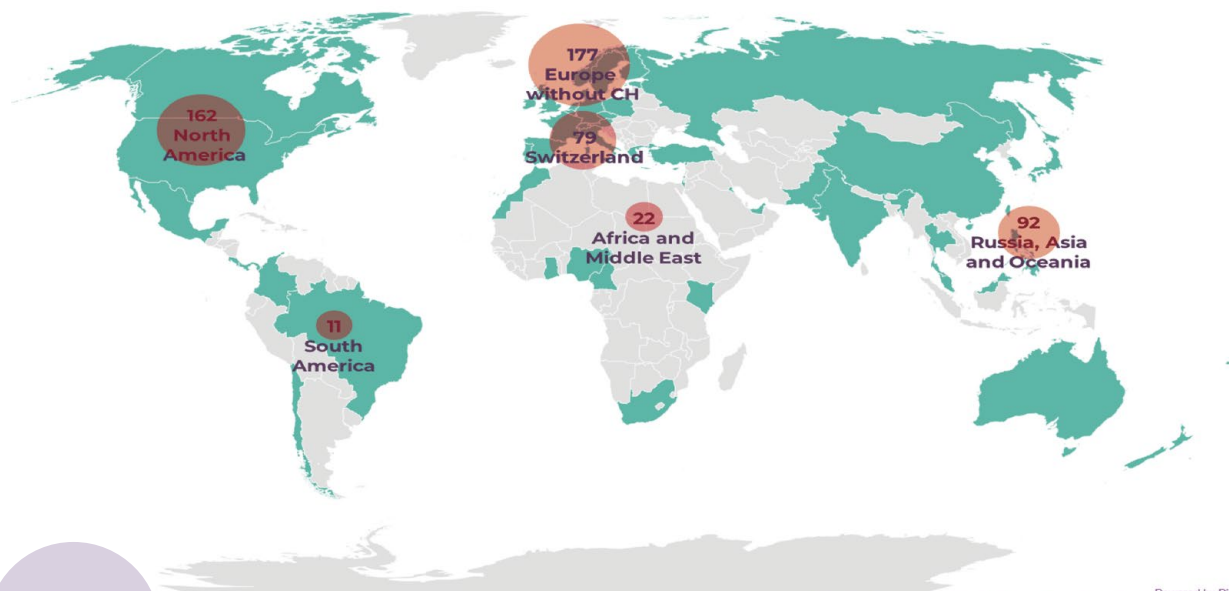
EUROPE			
Switzerland	79	Estonia	2
United Kingdom	36	Finland	1
Germany	32	Czechia	1
France	25	Greece	1
Netherlands	17	Cyprus	1
Spain	12	Denmark	1
Italy	10		
Sweden	10		
Austria	9		
Norway	7		
Portugal	4		
Belgium	3		
Poland	3		
Ireland	2		
Total		256	

NORTH AMERICA	
United States	131
Canada	24
Mexico	6
Costa Rica	1
Total	162
SOUTH AMERICA	
Brazil	7
Chile	2
Colombia	1
Panama	1
Total	11

AFRICA & MIDDLE EAST	
South Africa	10
Israel	2
Kenya	2
Turkey	2
Nigeria	1
United Arab Emirates	1
Ghana	1
Morocco	1
Cameroon	1
Kuwait	1
Total	22

RUSSIA, ASIA & OCEANIA	
Australia	17
India	13
China	12
Singapore	10
Japan	8
New Zealand	6
Malaysia	5
South Korea	4
Russia	4
Pakistan	4
Philippines	4
Fiji	1
Hong Kong	1
Taiwan	1
Tahiti	1
Thailand	1
Total	92

Country of host institution of the scientists that contributed via surveys, workshops and interviews (543)



As GESDA's activities and partnerships with like-minded organisations grow stronger, it is only natural that some of these partners will seek closer proximity to us, including by physically locating to a site closer to ours at Campus Biotech Geneva.

A first example of this is the partnership between GESDA and the XPRIZE Foundation, which led to the registration in Geneva of XPRIZE European operations by its Founder, Anousheh Ansari, a member since 2020 of the GESDA Diplomacy Forum.



*Peter Brabeck-Letmathe, Chairman, Geneva Science and Diplomacy Anticipator, Switzerland  
Anousheh Ansari, CEO, XPRIZE Foundation, USA/ Iran*

## LE TEMPS

La fondation XPrize, qui récompense l'innovation scientifique, établit son siège européen à Genève

### SCIENCES

## La fondation XPrize, qui récompense l'innovation scientifique, établit son siège européen à Genève

La fondation américaine va s'installer en Europe dans le cadre d'un partenariat avec le Geneva Science and Diplomacy Anticipator (Gesda) instrument de la diplomatie scientifique suisse au sein de la Genève internationale

*"XPRIZE was looking at new areas where complex situations must be solved - climate and energy, AI and deep-tech, food, wastewater, health etc. – and at new ways to increase the engagement from teams, universities, and partners around the world. Then I heard about GESDA and I saw the alignment between XPRIZE and GESDA's foundations are in their philosophy and way to work, but also in the way they see the future, not as dystopian, but as a future of possibilities and hope. This was key to the decision to expand XPRIZE's footprint for the first time outside of the US by establishing in Geneva."*

**Anousheh Ansari,**  
CEO, XPRIZE Foundation,  
USA/Iran

The new partnership, which has included XPRIZE setting up its European headquarters in Geneva with the support of GESDA, will also materialize into global competition on quantum computing, with the aim of democratizing access to these future technologies.

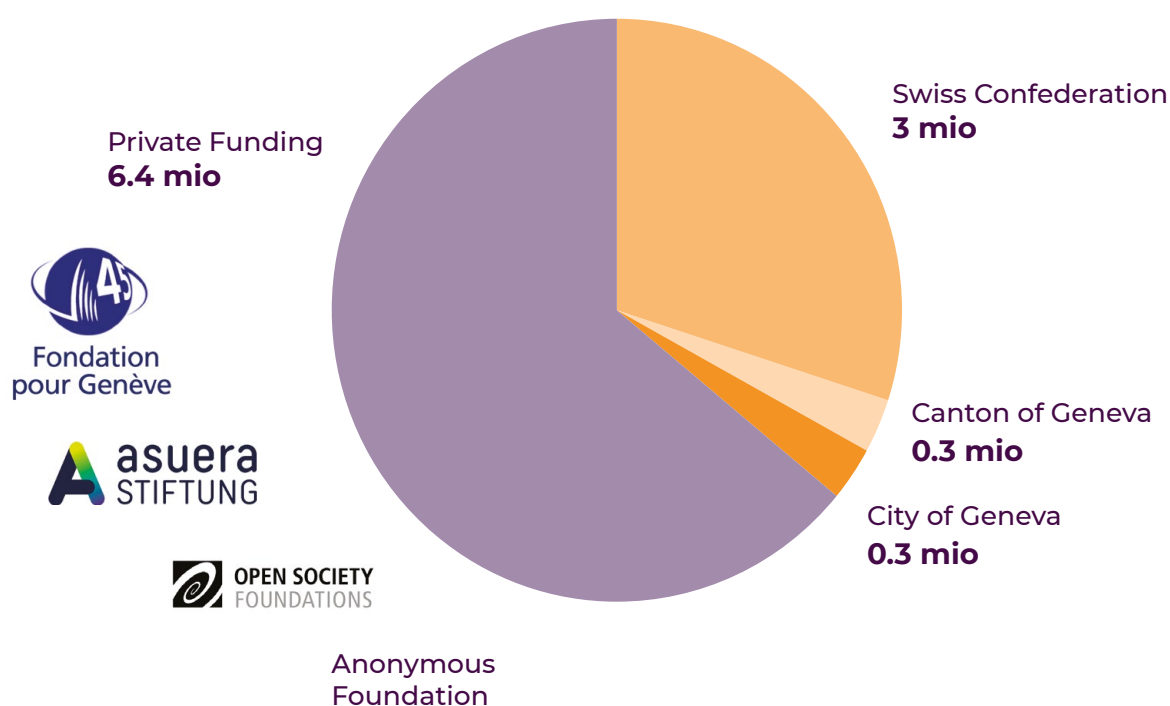
## Key result 5.

### Mobilization of new funding for International Geneva

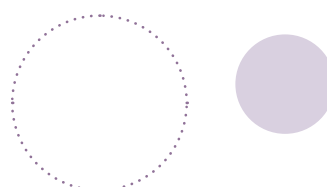
In 2021, GESDA was able to raise significant new funding, therefore contributing to the leveraging of new sources of financing for International Geneva.

To date, CHF 6.4 million in private-sector funds have been raised by GESDA, complementing the public contributions of CHF 3.6 million provided for the 3-year start-up phase (September 2019 – September 2021).

Reflecting GESDA's international ambitions and reach, its private-sector financial partners are not only from Geneva (two partners), one is based in German-speaking Switzerland and the other is an international foundation.



Based on these achievements, on 30 November, the Foundation began to determine the structure for the future GESDA Fund for Multilateral Impact, which will use the four thematic platforms of the Radar® and the Summit as basis for the financial packages to be raised in Switzerland and worldwide. The GESDA Fund for Impact will be formally created as soon as the renewal process for the Foundation is completed.



## Key result 6.

### Visibility of Geneva in the media and social media

In 2021, awareness of GESDA's mission and activities significantly increased in the media and social media, both nationally and internationally. Geneva's image was strongly and positively impacted by the knock-on effect, the media emphasizing the innovative nature of the GESDA anticipative approach, and the beacon role played by Switzerland through its Science and Diplomacy vision.

The coverage was mostly prompted by two press conferences and six press releases on GESDA's key products (the GESDA Science Breakthrough Radar® and the Geneva Science and Diplomacy Anticipation Summit), the partnership with Fondation pour Genève and GESDA's initiatives (the announcement of joint Quantum for all competition to be launched with XPRIZE in 2022 and the Science and Diplomacy Capacity Building Initiative). Overall, the 2021 press campaign generated close to 1,200 articles in national and international press.

#### International press

- The Washington Post, Bloomberg, Associated Press, Newsweek, Axios, Westlaw Today
- La Repubblica, Revista Metrófono
- Swissinfo
- Austria Presse Agentur
- El Comercio (Ecuador)
- The Science Times (Korea)

#### Swiss press

- Le Temps, Léman Bleu TV, Heidi.news, La Liberté, Geneva Solutions, The Geneva Observer, Genève Vision, ATS, SDA, 24 Heures, Tribune de Genève, RTS radio and TV
- SonntagsBlick, Blick, Tagesschau SRF
- Telegiornale RSI

### *Press Review - Swiss and international press coverage of the 2021 GESDA Summit and the Science Breakthrough Radar®*

The strong interest shown by journalists, including at the press conference, translated into very positive and global news coverage: more than 500 articles, video broadcasts and podcasts on GESDA appeared in the two weeks leading up to and including the Summit, reaching an estimated 800 million people – one-in-10 worldwide – according to [Adwired](#) of Zurich, the agency mandated to conduct that press screening. Most of the stories were published in English or in three of Switzerland's national languages: French, German and Italian. Stories were also published in Arabic, Armenian, Chinese, Japanese, Portuguese, Russian, Spanish, and Vietnamese. They appeared in 33 countries, but were concentrated in two nations: 54 percent in the USA, 21 percent in Switzerland. The rest were mainly in Britain, Canada, India, Germany, Singapore, Austria, Italy, Hong Kong, Swaziland, and France, but the remaining countries also spanned Africa, Asia, Europe, and the Americas.

Reporters closely followed the three days of intense discussions among leading experts in the fields targeted by GESDA. The news coverage brought the concept of science diplomacy, and GESDA's brand of anticipatory science diplomacy, to the forefront, with most news articles corroborating the need for more anticipation of the many complex breakthroughs occurring at a dizzying pace. The reports also reflected a fascination with the prospect of GESDA, as a new foundation and think tank, strengthening Geneva as a preeminent hub of multilateralism. Some raised the question of whether its mandate would be renewed and whether it would have sufficient public and private funding to scale up sufficiently to accomplish its lofty goals.

"GESDA, the quantum leap needed for international Geneva," proclaimed an editorial in *Le Temps* of Geneva, which called the new foundation "undoubtedly the best thing that has happened to international Geneva in years" and urged the Swiss and Geneva governments to renew GESDA's mandate beyond its three-year start-up phase, which will come to an end in 2022. "Ultimately its purpose is not simply for Geneva but for all of humanity," [wrote](#) Stéphane Bussard, who also authored other articles strongly supportive of GESDA's ambition of accelerating concrete action. "It has been a long time since international Geneva has seen such an ambitious initiative," he observed in [one](#) article. "The most crucial and difficult phase will be to translate the innovations identified by the Radar® into concrete and useful solutions to face the big challenges ahead."

Swiss Foreign Minister Ignazio Cassis, along with Brabeck-Lemathe, identified the themes that many Swiss and international reporters had pinpointed. Cassis and Brabeck-Lemathe warned that dangerous geopolitical fault lines could emerge if powerful new uses for science and technology were to be concentrated in the hands of a few wealthy countries or multinational businesses. In a pre-recorded video message played at the [news conference](#) and later for participants at the start of the Summit, Ignazio Cassis spoke of "a growing feeling that a new Cold War is about to be fought over science and technology, and the power they confer on the states that master them." Brabeck-Lemathe cautioned against "neocolonialism," saying that GESDA's mission was to help spread the benefits of science and technology equitably around the globe. The "highlights" of the international coverage were articles by outlets such as The Associated Press, Newsweek and Bloomberg that collectively reach billions of readers, [Adwired](#) reported. The AP article was [headlined](#): "Swiss-Backed Project Aims to Avert New 'Cold War' in Science." Newsweek carried a similar [headline](#): "Biden Administration Shows Interest in Swiss Project Aimed at Preventing 'New Cold War.'" Stories by the Swiss News Agency Keystone-SDA/ATS were widely carried by news outlets with [headlines](#) such as: "GESDA: Switzerland wants to avoid a cold war over science."

Other prominent, globally distributed articles about GESDA's partnership with XPRIZE and planned quantum competition were published by [Axios](#) and [CQ Roll Call](#), which was published on Westlaw Today

and by Reuters. At almost 800 words, the CQ Roll Call piece was relatively long in length; it extensively quoted Brabeck-Letmathe and Amir Banifatemi, Executive Director of XPRIZE Europe, and took care to explain GESDA's mission. "While it may be decades before quantum technologies become real world applications, GESDA officials said there is a need to prepare for the future disruption it might cause," the article said. "This is part of the Swiss foundation's mission to anticipate scientific breakthroughs and combine science with diplomacy to get better results."

Of the 509 news articles about the Summit – most of them published by USA and Swiss-based wire services – 455 had a positive tone, 46 were neutral and eight were controversial in nature, raising questions such as GESDA's long-term sustainability and relevance. Sixty percent were about GESDA averting a new Cold War over science; 22 percent focused on the Summit itself; and 8 percent dealt mainly with the Radar®. The other 10 percent were written about Nobel Prize-winning Swiss astrophysicist Didier Queloz's observations, Brabeck-Letmathe's interviews, advances in neurotechnology, science diplomacy, and the GESDA-XPRIZE collaboration.

The Keystone-SDA/ATS interview with Queloz, in French, emphasized his call for scientists, diplomats, citizens, and business people to work more closely together because "science has lost contact with society," and cited as an example the two-fifths of the Swiss population that prefer not to get vaccinated against COVID-19. Brabeck-Letmathe's question-and-answer [piece](#) in Blick, Switzerland's dominant German-language tabloid, offered concrete, easy-to-understand examples of why GESDA's anticipatory science diplomacy could be a powerful long-range tool. "The Internet was invented in Geneva and is now the basis of business for the three largest corporations in the world," he told the tabloid. "Only today do politicians realize that they should have regulated the whole thing so that nobody could become so dominant. With GESDA, you could have seen it coming."

An [article](#) by Swissinfo's Dorian Burkhalter concluded that "civil society and private actors remained under-represented at the Summit. This was recognized by Aebischer during a session in which he said GESDA hoped to involve more private companies next year. This is particularly relevant for discussions about AI research in which private firms, not states, have the lead. In the meantime, the Radar® offers the option to anyone to submit contributions, which will inform GESDA's work in the future". And an [analysis](#) published a week before the Summit by the English-language Geneva Observer website raised a number of critical points. It quoted unidentified sources attacking Brabeck-Letmathe and Aebischer as "outsiders" with "no knowledge of International Geneva. A perception that over many months slowed down the onboarding of certain local stakeholders, a matter now resolved by a hefty amount of fence-mending and ...traditional diplomacy." Brabeck-Letmathe, however, was quoted as saying he was not surprised at a certain lack of understanding because the Summit marked the first time GESDA had "really gone public."

By contrast, most stories offered compelling evidence that GESDA is welcome news for multilateralism, and that it could make a positive difference on the world stage if its mandate is extended beyond next year. A quote in the Geneva Observer article underlines this: Professor Paul Arthur Berkman, Associated Fellow of the United Nations Institute for Training and Research (UNITAR) and 2021 Fulbright Arctic Chair awarded by the United States Department of State with the Norwegian Ministry of Foreign Affairs, believes that Switzerland should be lauded for such efforts. "Science diplomacy is a language of hope," he says. "There's far too much doom and gloom in the world that is polarised and paralysed largely because of short-term thinking. The challenge we have right now is to recognise that short-term thinking is related to self-interests. The primary responsibility of science diplomats is to build common interests, which means operating short-to-long term across a continuum of urgencies."

"While conceived in 2019, GESDA started to look prescient during the COVID-19 pandemic that caught many governments off guard, drew an uncertain or unclear response by health policy makers like



the Geneva-based World Health Organization, and has exposed gaping inequality between the rich countries that have wide access to vaccines — and poor countries that don't," wrote AP's Jamey Keaten, who quoted Opening Plenary panellist Alondra Nelson, Deputy Director for science and society of the White House Office of Science and Technology Policy, telling the Summit that GESDA and its anticipatory approach offer "a fantastic possibility" for innovation and partnership.

In another [article](#) by Swissinfo, the reporters expressed being pleasantly surprised by the Summit. "As I walked through the door of the Biotech Campus in Geneva, I still had in mind Greta Thunberg's recent speech in Milan, in which she criticized the 'blah blah blah' of world leaders who, faced with the climate crisis, discuss and promise lots and lots, but never act. The suspicion that I was facing three days of 'blah blah blah' was strong," journalist Zeno Zoccatelli wrote. "And I wasn't the only one, it seems. Invited to speak at the summit's opening conference, South Africa's Minister of International Relations and Cooperation Naledi Pandor concluded a long series of speeches by saying: 'But now these words must become deeds.' Will it happen? It is still too early to say, but I certainly came out of the summit less pessimistic than I was going in. One of the reasons is the GESDA Science Breakthrough Radar®, created by the Foundation with the collaboration of hundreds of scientists around the world."

Dorian Burkhalter wrote that the idea behind GESDA's mission of using the future to build the present may not be entirely new, since science fiction has long encouraged people to consider a variety of futures. Yet GESDA brings something valuable, according to him, when raising the question of whether international organisations and global governance systems can address the world's most pressing challenges a quarter-century from now: "The creation of a platform specifically designed to address this question is a welcome addition to Geneva's rich ecosystem."



**Newsweek**  
Tue, Jan 11, 2022

**WORLD**  
**Biden Administration Shows Interest in Swiss Project Aimed at Preventing 'New Cold War'**  
BY MARY ELLEN CAGNASSOLA ON 10/9/21 AT 2:37 PM EDT

**T**he Biden administration is showing interest in a new Swiss think tank that hopes to address concerns about a "new Cold War" over science and technology, a project that would look out for future advances and development in the interest of a more inclusive global stage.

Iganzio Cassis, Switzerland's foreign minister, presented the project in a video message for the inaugural "summit" on Thursday and Friday of the Geneva Science and Diplomacy Anticipator, or GESDA. Backed by the Swiss government, GESDA aims to join government policy and science in the international city.

GESDA would serve as an "honest broker" to spread advances in science to countries across the economic spectrum, bringing together hundreds of global scientists and policymakers.



**ma rts** INFO SPORT CULTURE PLAY RTS RADIO TV PROGRAMME TV MÉTÉO PLUS

NOTRE MONDE **GENÈVE VISION** REPORTAGES

PODCASTS À ÉCOUTER AUSSI

**Diplomatie scientifique: « Genève est la ville idéale »**

3 OCTOBRE 2021

C'est Patrick Aebischer qui le dit. Vice-président du GESDA (le Geneva Science and Diplomacy Anticipator) qui organise son premier sommet à Genève, le scientifique plaide pour que chercheurs, politiques et diplomates travaillent ensemble à définir les enjeux de demain. Et qu'ils soient prêts à y répondre.

Le sommet sera l'occasion de présenter le « radar », sorte de tableau prédictif qui devrait préciser ce qui attend le monde, ce qui se prépare dans les laboratoires et ce qui est susceptible de bouleverser nos vies.

Pour l'ancien président de l'EPFL, Genève est bien le lieu idéal pour cette réflexion qui doit aussi conduire les acteurs à mieux encadrer les développements futurs. Avec ses nombreux organismes internationaux, elle est la plus à même de réguler le monde de demain.



## NEO.LIFE

On my way to a colloquium where we will discuss, among other things, the opportunities and threats to humanity posed by artificial intelligence, robotics, and genetic engineering, I'm struck by the importance of our five senses. Nobel prizes have been awarded for discoveries related to the physiology of hearing (1961), vision (1967), olfaction (2004), and now touch. Interpreting signals is a key part of what the brain does, and many neuroscientists would say our humanity is rooted in our senses. We would do well to keep the five senses in mind as we continue our struggle to define what it means to be human in the face of extraordinary transformational technologies.

*Jane*





## EDITORIAL

**Gesda, le saut qualitatif nécessaire pour la Genève internationale**STÉPHANE BUSSARD  
@StephaneBussard

Pour le Geneva Science and Diplomacy Anticipator, le sommet qui s'ouvre ce jeudi est un moment de vérité. Si sa création par la Confédération et les pouvoirs publics genevois a pu susciter des critiques parfois acerbes, cet «anticipateur» de la science et de la diplomatie est sans doute ce qui arrive de mieux à la Genève internationale depuis des années. Face à un multilatéralisme qui est à la peine, celle-ci a besoin d'un sérieux coup de fouet pour qu'elle soit à la hauteur des défis de demain.

Les révolutions scientifiques en cours, qui vont encore s'accélérer ces prochaines années, auront un impact considérable sur la gouvernance mondiale. Chercher à les identifier le plus tôt possible, à anticiper leur impact potentiel et à les intégrer dans des solutions multilatérales aux sérieux problèmes auxquels nous allons être confrontés est non seulement innovateur, c'est aussi faire entrer la science par la grande porte de la diplomatie multilatérale. Un acte indispensable au vu de la tâche herculéenne consistant à mettre en œuvre, d'ici à 2030, les Objectifs de développement durable de l'ONU, une petite révolution copernicienne à l'échelle onusienne.

Jusqu'ici, les acteurs scientifiques n'ont pas été des interlocuteurs incontournables dans les enceintes multilatérales. Ils doivent le deve-

nir. On l'a vu avec la pandémie de Covid-19, leur rôle est fondamental. En ce sens, même si elle n'est pas la seule à le faire, la Suisse, dont la Genève internationale est un pilier important de sa politique étrangère, a raison d'embrasser la diplomatie scientifique. Il faudra toutefois qu'elle engage les moyens nécessaires à long terme pour que Gesda ait une chance de réussir.

Quant à la Genève internationale, elle semble aujourd'hui tétanisée par les problèmes budgétaires. L'ONU et les ONG traversent une passe difficile sur le plan financier. Or face au changement technologique, elle n'a pas le choix. Un saut qualitatif s'impose pour être à la hauteur d'une gouvernance en pleine redéfinition. En capitalisant sur des scientifiques, diplomates et experts du monde entier, Gesda lui offre une occasion en or de le faire.

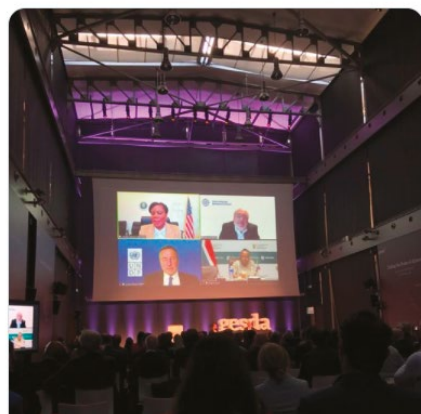
Mais il faut en être conscient: toute initiative de cette ambition comporte des risques. A commencer par des querelles politiques locales et une peur de la part des acteurs de l'écosystème genevois de jouer collectif dans l'optique de la défense du bien commun. La responsabilité du succès ou de l'échec incombera en premier lieu à Gesda, mais aussi à tous les acteurs de la Genève internationale, publics et privés. Gesda devra rester ouvert sur l'extérieur. En fin de compte, sa finalité n'est pas simplement Genève, c'est l'humanité tout entière. ●●● PAGE 3

**Toute initiative de cette ambition comporte des risques**



Mark Rayner @neutrino\_mark · Oct 7

At the inaugural #gesda summit. It's encouraging to see anticipating the impact of scientific and technological progress being taken seriously — policy should be formed in advance. Watchwords are equity, public-private partnership and the global south.



The Washington Post

Democracy Dies in Darkness

**Swiss-backed project aims to avert new 'Cold War' in science**

By Jamey Keaten | AP

Today at 4:30 a.m. EDT



GENEVA — Switzerland's foreign minister says concerns about a "new Cold War" over science and technology are a major reason behind the creation of a new think tank that looks out for future advances and development — so that the whole world can benefit, not just rich countries.

Ignazio Cassis delivered a video message for the inaugural "summit" on Thursday and Friday of the Geneva Science and Diplomacy Anticipator, or GESDA, a Swiss government-backed project that aims to bridge government policy and science in an international city known for both.

"There is a growing feeling that a new Cold War is about to be fought over science and technology, and the power they confer to the states that master them," he said. GESDA, which brings together hundreds of scientists and policymakers worldwide, would serve as an "honest broker" that helps spread the benefits of science to countries rich and poor, he said.



United Nations Envoy on Technology @UNTechEnvoy · Oct 7

At #GESDASummit, ASG Spatolisano, on behalf of the UN Sec-Gen @antonioгутерres, looked forward to @GesdaGlobal's substantive engagement with the #UnitedNations "bringing us together, in diplomacy and otherwise, to help realize a shared, benevolent future for people and planet."



SBFI SEFRI SERI @SBFI\_CH · Oct 7

Today, State Secretary Martina Hirayama joined the opening of the inaugural Summit of the Geneva Science and Diplomacy Accelerator #GESDA.



GESDA.global #ScienceDiplomacy #SciDiplo @GES... · Oct 7

"The Swiss Confederation sees itself as an enabler in the education, research and innovation sector. #GESDA is an exciting an innovative initiative." - Martina Hirayama, Secretary of State @SBFI\_CH

🔗 [summit.gesda.global/2021...](https://summit.gesda.global/2021...)

Show this thread

## Key result 7.

### Burgeoning engagement with the citizens of Geneva

Through a series of public events in 2021, GESDA initiated communication and mediation activities aiming at fostering a direct dialogue with the citizens of Geneva about science and diplomacy, as well as some of the topics closer to public daily life.

On 7 October 2021, a public conference entitled “How to Anticipate, Accompany and Share the Scientific Revolutions to Come?” was held in partnership with the Graduate Institute for International and Development Studies. Enrico Letta, former Italian Prime Minister and member of GESDA's Diplomacy Forum, discussed the geopolitical challenges facing science diplomacy and the instruments of scientific and diplomatic anticipation to be deployed in order to accompany the consequences of scientific innovations on our societies. He underlined the need to assess the costs of non-anticipation and non-collaboration in this field.

246 participants attended the event, organized with the support of Fondation pour Genève.



LE TEMPS LUNDI 11 OCTOBRE 2021

**EUROPE** Ancien premier ministre italien, Enrico Letta était à Genève pour le Sommet global du Geneva Science and Diplomacy Anticipator. Secrétaire national du Parti démocrate italien, il a réussi à faire revenir en grâce sa formation politique. Face aux populistes, il estime qu'il faut rétablir une connexion sentimentale avec les Italiens



#### «Le Gesda, une immense opportunité pour Genève»

**AVANCÉES** Enrico Letta revient pour «Le Temps» sur ce que l'on peut attendre des travaux du Geneva Science and Diplomacy Anticipator

**Vous venez de participer au Sommet global du Geneva Science and Diplomacy Anticipator (Gesda). En quoi l'anticipation des innovations à venir est-elle importante pour un politicien comme vous? L'anticipation est désormais un concept clé, à un moment où nous vivons un changement de paradigme. On a été habitué jusqu'ici à répéter les schémas du passé pour façonner le futur. Même si je pense que l'histoire reste importante, nous devons dorénavant procéder différemment. Nous devons anticiper ces progrès et être très créatifs. Gesda est en ce sens une initiative intelligente qui fait converger science et diplomatie. Pour Genève, c'est une énorme opportunité. En qualité de président de l'Apsia (Association of Professional Schools of International Affairs), j'ai pu le voir à l'échelle globale: seuls les États-Unis et Singapour avaient réellement avancé sur cette question d'anticipation. En Europe, Genève peut prendre le leadership.**

**Au vu de l'accélération fulgurante des innovations scientifiques et de la technologie, une non-anticipation de ces progrès pourrait, selon vous, avoir un coût considérable... Oui, un coût en vies humaines et en ressources financières. Avec la crise financière de 2008, nous n'avons rien anticipé. Nous avons attendu quatre ans avant que Mario Draghi, président à l'époque de la Banque centrale européenne (BCE), dise que des mesures seront prises «quoi qu'il en coûte». 2009, 2010 et 2011 furent un désastre. Des pays entiers se sont effondrés, à l'image de la Grèce. L'Italie a souffert de façon épouvantable, l'Espagne également. Les sociétés ont commencé à avoir peur et les crises sociales sont devenues ingérables. Le populisme en a profité. Le Brexit est en partie la conséquence de la non-gestion de la crise de 2008, la crise catalane et la montée du populisme en Italie également. Le coût de la non-anticipation s'avère énorme. C'est pourquoi il faut créer des mécanismes d'anticipation qui permettent aux politiques et aux scientifiques de se parler. Gesda en est un exemple. ■**

PROPOS RECUEILLIS PAR S. BU.

*Public event co-organized with the Graduate Institute at Auditorium Ivan Pictet, in collaboration with Fondation pour Genève*



The following day, Professor Samira Kiani, a member of GESDA's Academic Forum, brought to Theatre Saint-Gervais a performance discussing whether Artificial Intelligence can create art pieces. Offered to coincide with the Fête du Théâtre and using theatre as a medium to provoke technology discussions, the performance first consisted in a dramatic reading of *The Frozen Sea*. This comedic play of San Francisco playwright Maury Zeff explores the convergence of art and AI and was previously workshopped or received readings in the Berkeley Rep Theatre Lab, the San Francisco State University's theatre department, the San Francisco Playhouse, etc. The reading was immediately followed by a panel discussion about how we can use theatre and other creative mediums to bring non-technical people into important conversations about the science and technologies that will shape our future.



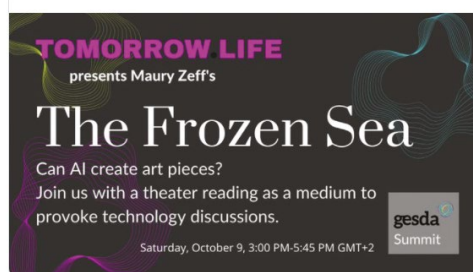
Tomorrow.life  
@tomorrowlife\_

Come join us this afternoon at Théâtre Saint-Gervais after the @GESDAglobal summit. After our experimental reading, engage with panel members @janemetcalfe @margagual @ClaudiaChwalisz and @samira\_kiani1 to discuss art facilitating science dialogue. #GESDASummit

Tomorrow.life @tomorrowlife\_ · Oct 1

Join us for the final event of @GESDAglobal #gesdasummit: Maury Zeff will direct a staged reading of his comedic work *The Frozen Sea*, followed by a panel discussion with @samira\_kiani1 Sat, Oct. 9

#diplomacy #science #art #theater #AI #ai4good #ciencias #diplomatie #sclcomms



10:48 AM · Oct 9, 2021 · Twitter for Android

On 3 December 2021, a joint event with the Swiss Digital Initiative opened a debate on Future Trends in Artificial Intelligence and its consequences for society and global governance. Rüdiger Urbanke, Professor of Communication Theory at EPFL and GESDA Scientific Moderator on Advanced Artificial Intelligence, Ulrike Till, Head of the IP and Frontier Technologies Division at WIPO, and Valentine von Toggenburg-Bulliard, Global Shaper of the World Economic Forum in Zurich, held an exchange of views with the public about the need to integrate the perspectives and voices of citizens in discussions about the deployment of advanced digital technologies and their governance.

More events of this kind and innovative communication activities to engage with civil society are planned from 2022 onwards.



GESDA, along with the Perception Change Project of Ms. Tatiana Valovaya, is also participating in the cantonal effort of foresight Geneva 2050 led by State Councilor Fontanet who opened the Geneva Science and Diplomacy Anticipation Summit on October 7.



## Key result 8.

### A project for GESDA's scale-up

GESDA's start-up phase is ending on 9 September 2022. Groundwork to prepare the next stage of its development was carried in 2021. Drawing notably on an evaluation of the Foundation by its Board of Directors, political consultations with the Founders, and in-depth exchanges with key partners, the reflection was culminated at the retreat in Verbier in July. During this meeting, the Board of Directors decided to propose a prolongation of the Foundation for a 10-year period and sketched out the policy objectives for the 2022-2032 period. These were then collated and expanded on in a White Paper sent to the Founders on 29 October 2021.

The priorities for 2022 - 2027 - 2032 are set out in the White Paper as follows.

The Foundation's priority, in the last year of the pilot phase (September 2021 - September 2022) and for the next ten years of its scale-up phase, is to consolidate the results obtained, to make GESDA a benchmark player, in Geneva, Switzerland and throughout the world, for multilateralism and science diplomacy based on anticipation and to continue to put in place the Foundation's instruments.

<b>Milestones Outcomes</b>	<b>2022</b>	<b>2027</b>	<b>2032</b>
Science anticipation as a new tool for multilateralism	<ul style="list-style-type: none"> <li>Science Breakthrough Radar® accepted as a promising instrument by the academic and diplomatic community</li> </ul>	<ul style="list-style-type: none"> <li>Yearly Science Breakthrough Radar® extended to other science fields</li> <li>Yearly Science Breakthrough Radar® enriched with a full Acceleration and Translation Observatory</li> </ul>	<ul style="list-style-type: none"> <li>Yearly Science Breakthrough Radar® serving as benchmark product for key global institutions and the Swiss offering as a host state for international organisations.</li> </ul>
GESDA "Anticipatory Situation Room" as an enabling tool to develop instruments and solutions, as well as to tackle emerging challenges to reach multilateral goals as early as possible	<ul style="list-style-type: none"> <li>Presentation at the Geneva Science and Diplomacy Anticipation Summit of a concrete idea for solutions developed and ready for next phase in each of the fields currently scouted by GESDA               <ul style="list-style-type: none"> <li>Advanced AI &amp; Quantum Revolution</li> <li>Human Augmentation</li> <li>Eco-regeneration &amp; Geoengineering</li> <li>Science &amp; Diplomacy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Initial ideas for solutions enabled by GESDA's activities are implemented by/with our partners and reviewed at every Geneva Science and Diplomacy Anticipation Summit</li> </ul>	<ul style="list-style-type: none"> <li>The Geneva Science and Diplomacy Anticipation Summit is established as the event for all diplomacy players to attend in order to discuss and develop science-driven initiatives able at tackling global challenges.</li> <li>The GESDA Handbook displaying how to develop anticipatory ideas for solutions to global challenges boosts innovation and concrete action in the multilateral field.</li> </ul>
GESDA Foundation as the catalyst in Geneva and throughout the world for the multilateral ecosystem	<ul style="list-style-type: none"> <li>One new international player established in Geneva (XPRIZE)</li> </ul>	<ul style="list-style-type: none"> <li>The yearly Geneva Summit serves as magnet for new initiatives.</li> <li>A permanent physical Anticipatory Situation Room opens in Geneva in partnership with the UN Nations Gateway and the CERN Science Gateway, as well as at the 2025 Osaka Universal Exhibition.</li> </ul>	<ul style="list-style-type: none"> <li>GESDA and Switzerland are acknowledged as a ongoing platform and value proposition to attract new players interested in multilateralism to use the Geneva ecosystem to boost their activities.</li> </ul>

## Towards the Future by Martin Vetterli and Joël Mesot, co-Chairs of the Academic Forum



The presentation of the Foundation's first tangible products at the beginning of October 2021, after 24 months of existence, showed, for the first time, what makes the GESDA Foundation so special and therefore so interesting.

- First of all, the Foundation brings Swiss and world science to the multilateral table as a single global community, a single stakeholder.



- It does this by getting scientists themselves to talk about what will come out of their laboratories in 5, 10 and 25 years' time if current trends continue. This is commonplace in the political and diplomatic world, as witnessed by the UN's 2030 Agenda published in 2017.

- This is the specific contribution of anticipatory scientific diplomacy "made by GESDA". But its method goes further.

First of all, although GESDA is an initiative taken by the diplomatic world, it reverses the usual order of work of the latter. The work does not start with the challenges or objectives listed for each international organization or its member states, but from the scientific trends already at work in the world, independently of the global challenges or the agendas of each, which the Foundation lists factually, like an honest broker.

Those participating in the Foundation's work then examine how these scientific developments can help the diplomatic world in its daily work to respond more effectively and rapidly to emerging challenges. The Summit is the vehicle for this. The aim is for participants to gain a sufficient understanding of each other to be able to take the different views of other communities into account in their own agendas and, in the best case, to develop and implement common solutions to different global challenges faced.

At its meeting on 9 October 2021, the Foundation Board decided to focus in 2022 on:

- realisation of the second editions of the Radar® and the yearly Geneva Science and Diplomacy Anticipation Summit;
- the development of interactions with citizens and civil society through our digital platform under construction (Digital Interactive Global Sounding Board);
- the launch of the exploratory initiatives announced in October 2021 (1. Quantum Competition with XPRIZE; 2. Coalition for Science Diplomacy Education; 3. Manifesto on the Right to Science) and of an additional exploratory initiative in the form of a Youth Forum supervised from Cape Town by Ms Mamokgethi Phakeng, Vice Chancellor of the University of Cape Town;
- continued efforts to focus on science communication and ensure Open Science.

This work is underway.

Many steps remain to be taken to bring it to maturity.

And that is what makes it exciting.

## Towards the Future by Michael Møller, Chair of the Diplomacy Forum



Multilateralism is in transition. We are all painfully aware that the past year and a half has put the world at large through a massive existential test. COVID-19 has revealed dramatic failures of our societies. Nevertheless, if you were born today, you would be less likely to live in poverty, less likely to be illiterate, less likely to confront intolerance and oppression, and less likely to be killed in a war than at any time in human history. These achievements have happened over the course of just a few decades. And all that progress is real. It has been broad, and it has been deep.

It is no accident that the progress we have achieved since 1945 has coincided with the establishment of a multilateral structure with the United Nations at its heart.

The international system that was built 75 years ago, and has served us extremely well. However, it is no longer able to deal effectively with the challenges confronting us. Power relations are becoming unclear resulting in the fragmentation of actions, impunity and unpredictability prevailing, and with national and isolationist agendas superseding mutual trust and international cooperation. While multipolarity may be a factor providing some equilibrium, without strong and accepted multilateral instruments it is certainly not a factor for peace. It is inherently unstable, volatile, and dangerous.

Today, we have a surplus of multilateral challenges and a deficit of multilateral solutions.

Where do we go from here?

The answer has everything to do with a re-invented multilateralism in general, and the 2030 Agenda for Sustainable Development, our collaborative and integrated global roadmap for the way forward, in particular. Because even now, I am convinced that the only credible path forward is multilateral.

In that context, the importance of science and technology in how we manage the problems of our world and in how we shape our future is becoming more evident than ever. And this is where the GESDA Foundation and the new focus on science diplomacy comes in.

GESDA seems to have caught this new geopolitical reality at the right time. The global governance transition we have been living in for some years now is beginning to crest, and has brought the world to a fork in the road. To one side, is the road to further nationalism, division, fragmentation and the increasing abandonment of a multilateral management of the affairs of our planet. To the other side lies a reinvigorated sense of solidarity that translates into a new determination to collaborate in the search for urgent solutions to the massive existential challenges humanity is faced with, that is to say a collaborative, integrated, de-siloed, networked and preventive polylateral structure that may give us a chance to secure a sustainable and liveable planet.

The GESDA model we are in the process of elaborating, the objectives that we have set, the subjects we have chosen to deal with, the extraordinary people who have chosen to associate themselves with our initiative, the growing universal interest in our activities of scientists and policymakers alike, as well as the public, tells us that GESDA is well on its way down the latter road.

We are leveraging the proven ability of scientists across the globe to work across geographical and political divides, and the growing realisation in policy-making and project implementation circles that science needs to be brought back urgently to the decision-making table.

In doing so, I am convinced that GESDA will be able to contribute in a major way to the development of powerful solutions to the major existential problems facing humanity, and in so doing, help reinstate the indispensable trust in science and in the ability of leaders, political and otherwise, to deliver the required solutions for the maintenance of our future well-being — and thus to do its bit to nudge the world down the right road.



**Geneva Science and Diplomacy Anticipator  
A Swiss Foundation located in Geneva**

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