

2024 Activity Report

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1 Forewords



**Peter
Brabeck-Letmathe**

By Chairman Peter Brabeck-Letmathe & Vice Chairman Patrick Aebischer

In five years, the Geneva Science and Diplomacy Anticipator (GESDA) has proven its founding intuition: the rapid pace of science and technology demands anticipation to address political, economical and societal impacts.

Today, everybody is lagging behind the pace of scientific advances. Companies struggle with the implications of technologies like AI. Citizens use tools as soon as available. Nations increasingly compete to produce, protect, and access scientific knowledge. Even scientists face challenges with hyper-specialized fields like data science. And not everyone by far benefits from scientific progress.

Bridging all these gaps requires anticipation: tracking emerging scientific breakthroughs, preparing society, develop and fund early international initiatives based on this emerging science to make sure that opportunities, benefits and access are shared as soon as possible by as many people as possible, and promote scientific anticipation as a decisive tool for the international agenda.

GESDA's work embodies this approach, aligning with its mission to transform emerging scientific and technological breakthroughs in the coming 5, 10 and 25 years into opportunities for all.

GESDA is determined to globally scale up its efforts along its core principles that have proven to be effective as seen with the launch of the Open Quantum Institute, our first concrete initiative now hosted by CERN, born at GESDA and supported by UBS.

We are extremely grateful for the trust and support that has been placed in us by our founders, the Swiss Government and the Geneva Authorities, supporters, partners, and collaborators. And we remain deeply committed to helping emerging science play a greater role in advancing all of humanity and our planet despite the current geopolitical tensions.



Patrick Aebischer

Forewords



Stéphane Decoutère

By Secretary General of the Board Stéphane Decoutère & Chief Executive Officer Sandro Giuliani

From an operational point of view, the year 2024 allowed us to make significant progress in fostering actionable anticipation to help society navigate as well as use for its benefits the acceleration of science and technology.

This Activity Report gives you an overview about the main progress made by highlighting six key results achieved by GESDA Foundation in 2024 in the fields of

- scientific anticipation,
- diplomatic preparedness at UN level,
- early action, funding and promotion of anticipation.



Sandro Giuliani

All of these key results rely on GESDA methodology and five core principles as demonstrated at best by our Quantum for All Initiative and the Open Quantum Institute as its flagship, which is hosted by CERN, born at GESDA, supported by UBS:

1. Anticipation - science-driven, opportunity-driven, actionable
2. Honest brokering as overall guiding principle
3. Public Private partnerships with global partners
4. Multi-actors anticipatory situation room methodology embedding scientists, politicians and diplomats, entrepreneurs and investors, as well as citizens from all over the world
5. Global Reach anchored in Switzerland & Geneva.

Last but not least: after two years of hard work, GESDA is ready to present the Geneva Public Portal to Anticipation that allows people to easily deep dive in the data of our Science Breakthrough Radar and shape their own vision of their future at 5, 10, 25 years. The Portal will first be presented in the Swiss Pavillion of the World Expo in Osaka from April 13 to October 13, before being permanently installed in Geneva.

1.

Gaining the involvement of 2.100 scientists from 87 countries in the work of preparing the 4th edition of the GESDA Science Breakthrough Radar®.

2.

Positioning the GESDA Foundation as a trusted contributor on anticipatory science within the framework of the United Nations' scientific agenda.

3.

Certifying first-year results from GESDA's Quantum for All initiative, carried out with the Open Quantum Institute at CERN supported by UBS and the XPRIZE-Google-GESDA Quantum Application Contest.

4.

Launching the 3-year pilot phase of the new GESDA Anticipation Gateway Initiative.

5.

Creating a Chairman's Circle of generous donors who support the Foundation's global scale-up to fulfill its mission and vision.

6.

Marking and celebrating the significant milestone of GESDA's 5th anniversary at the 2024 Geneva Science and Diplomacy Anticipation Summit.

3 GESDA Foundation: Why? What? How?

Why?

The GESDA Foundation was created out of a belief that all of humanity must benefit from the 21st century acceleration in scientific and technological discoveries.

Its co-founders also believe Geneva's multilateral framework provides a vital world forum for helping to make that happen, but that framework must be enriched by adding new tools of scientific anticipatory diplomacy.

GESDA's unique brand of anticipatory science and diplomacy is designed to facilitate 21st century solutions to vexing global challenges.

Over the past two decades, science diplomacy has gained traction worldwide as an international policy practice and a discipline of human sciences. In 2010, the United Kingdom's Royal Society and the American Association for the Advancement of Science (AAAS) published *New Frontiers in Science Diplomacy*, a 32-page booklet that defined science diplomacy and laid out a widely accepted framework for its practice around three pillars:

Science in diplomacy — using scientific evidence to inform foreign policy

Diplomacy for science — using diplomatic apparatus to support and inform international scientific collaboration

Science for diplomacy — using science as a soft power tool to improve international relations

Adapting science diplomacy to modern needs and factors remains a challenge. GESDA is navigating this challenge by balancing three core factors:

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

What?

The goal set for the Foundation in Article 3 of its statutes — as envisioned by the co-founders and approved by the Swiss Federal Supervisory Body for Foundations — is to develop **“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”**.

As a result, the Foundation works **to strengthen the anticipatory power of multilateral stakeholders in Geneva and abroad seeking to improve the world, and to adapt science diplomacy to this century's accelerating pace of breakthrough advances**.

How?

To fulfill its mission, GESDA developed an “Anticipatory Situation Room” methodology built around four complementary activities: 1) anticipating, 2) accelerating, 3) translating, and 4) integrating.



Anticipating means

1. Curating an annual inventory of scientific lab developments and what is expected over the next five, 10, and 25 years.
2. Synthesising these findings in the GESDA Science Breakthrough Radar® and presenting them in an accessible, compelling manner for all audiences. This involves working with all GESDA communities — academic, diplomatic, impact and citizens — on a precise reconciliation of deep insights and broad fields.

Accelerating means

3. Sharing the Radar's knowledge with diplomats, entrepreneurs, philanthropists and the public at the annual Geneva Science and Diplomacy Anticipation Summit.
4. Using the Radar and Summit to gather ideas by scientists and diplomats that can solve global challenges and accelerate action in key areas such as agriculture, education, environment, health and poverty.

Translating means

5. Mobilising the funding needed in Switzerland and internationally that can launch solutions in partnership with Geneva's multilateral institutions.
6. Crafting these solutions to advance the UN's 17 Sustainable Development Goals for 2030.

Integrating means

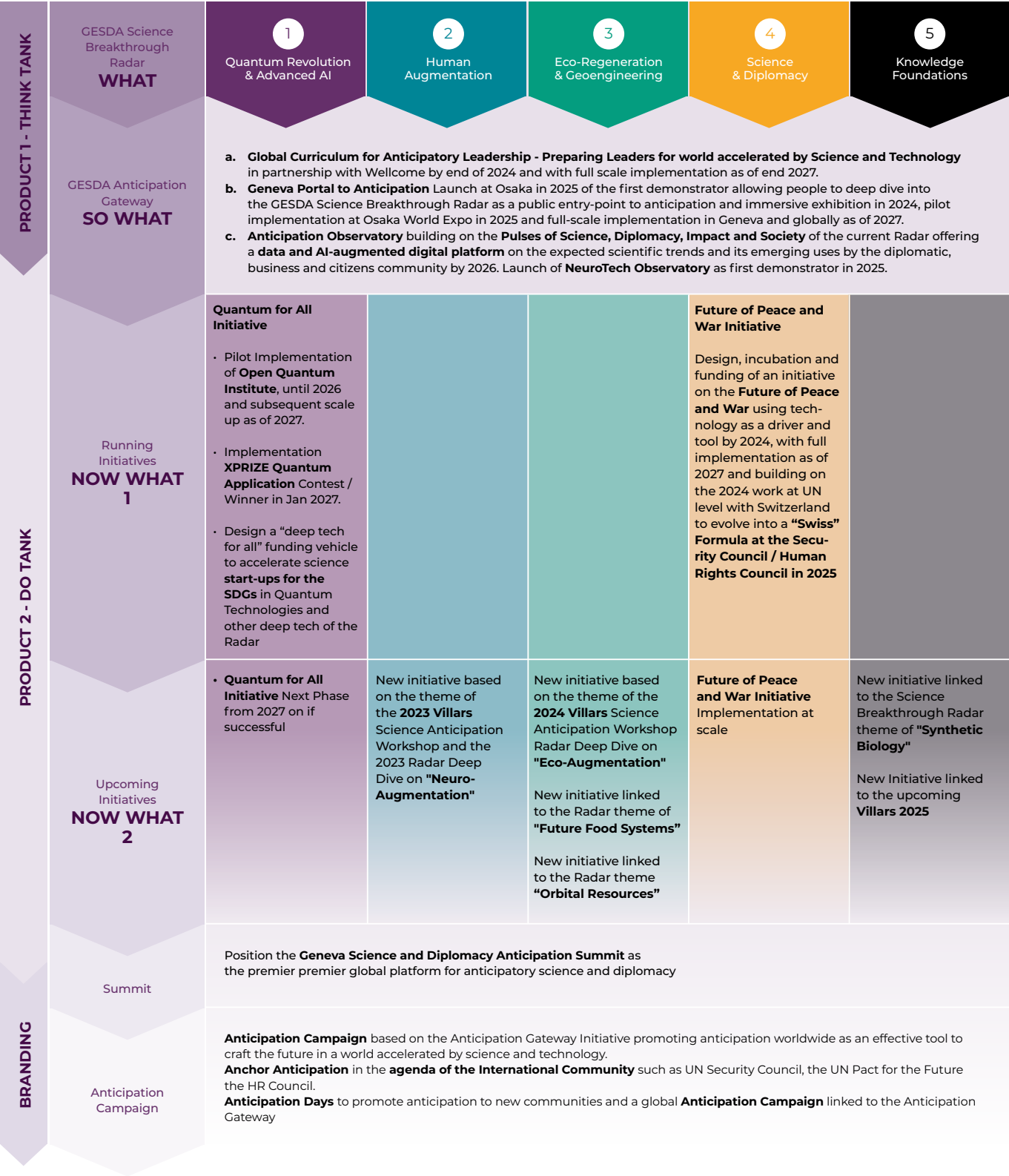
7. Integrating citizens from all over the world in this crafting process.
8. Cementing Geneva's status as a global hub for anticipatory science diplomacy.

GESDA is fundamentally global but capitalises on four well-established and distinctive characteristics of Geneva and all of Switzerland:

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

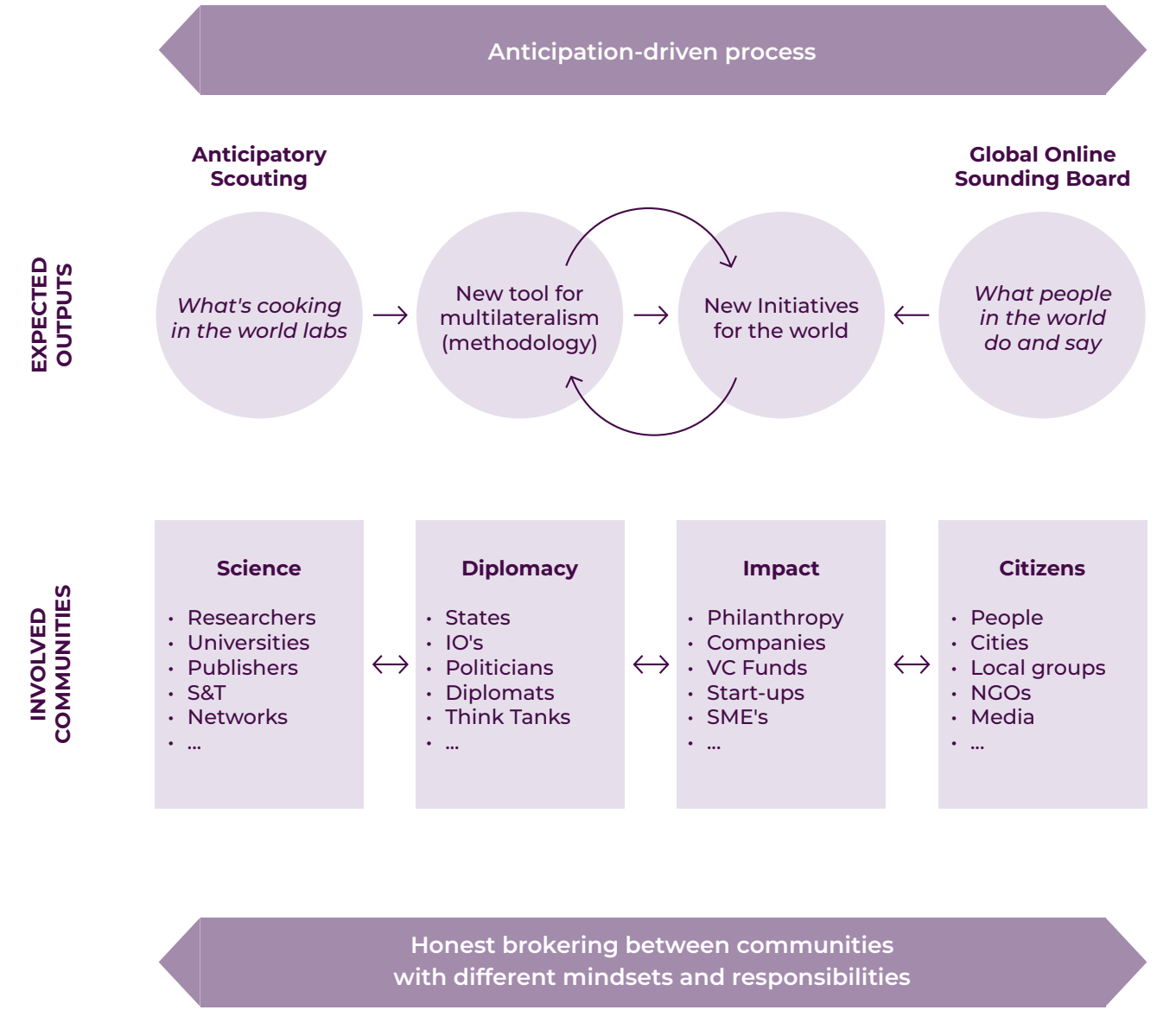
GESDA in a nutshell

Anticipatory Situation Room pipeline of activities.



GESDA communities of practice

GESDA developed its anticipation-driven methodology to include the voices of stakeholders from four communities — Academic, Diplomacy, Impact, Citizens — who have differing mindsets and responsibilities.



4.1. Major milestones

1st quarter

10 – 17 January	Congreso Futuro Chile with participation of Maricela Munoz
17. January	WEF 2024 - Quantum Session at House of Switzerland with Federal Councillor Cassis (with FC Ignazio Cassis, CE Nathalie Fontanet, Peter Brabeck-Letmathe, Fabiola Gianotti, Mathias Troyer, Anousheh Ansari)
2. February	UN High Representative for Disarmament Board meeting in Geneva (with Izumi Nakamitsu, Carolyne-Mélanie Regimbal, Stéphane Decoutère, Maricela Munoz, Jean-Marie Guéhenno)
2. February	UN Secretary General's Senior Management Team in New York – Presentation of GESDA Breakthrough Radar by Michael Hengartner
15-16 February	Sabancı University Istanbul – The GESDA experience by S. Decoutère & Follow up of the Geneva Science and Diplomacy Anticipation Summit organized by GESDA.
19. February	1st Chairman's Committee Meeting
23. February	UK Day in Geneva organized by the Permanent Representative of the UK to the UN (with Maricela Munoz and Martin Müller)
5. March	Transitional OQI Advisory Committee co-chaired by Sandro Giuliani and Joachim Mnich
5. March	Launch of OQI 3-year translation phase at CERN combined with launch of GESDA/X-PRIZE/Google Contest on Quantum for SDGs
19. March	Swiss Anticipation Day in Bern in partnership with SSR-SRG
19. March	Visit of AFM (Association familiale Mulliez – Auchan, Decathlon, etc.) – next gen leaders
25. - 27. March	Villars Conference on Eco-Augmentation – Shaping future Ecosystems

2^d quarter

10. April	Partnership Meeting with the Leadership of the STS Forum (with Peter Brabeck, Stéphane Decoutère and Sandro Giuliani)
12. April	Participation in the meeting of the UN SG Network on Science advice (with Sandro Giuliani)
30. April – 2. May	Kigali INGSA Forum - International Network for Government Science Advice (with Mamokgethi Phakeng and Marga Gual Soler)
2. May	Swiss Anticipation Day in Basel on longevity – In partnership with Roche (with Peter Brabeck-Letmathe, Michael Hengartner, Severin Schwan)
17. May	UN Security Council New York & Geneva / Presentation of GESDA Anticipation Activities (with Henrietta Fore)
27 May	High Level Steering Meeting on OQI with Fabiola Gianotti, Alexandre Fasel, Chrisitan Blum and Peter Brabeck-Letmathe
	1st OQI Advisory Committee co-chaired by Sandro Giuliani and Joachim Mnich
27. May	Presentation of GESDA to the Director General of the Food and Agriculture Organization of the UN Nations by Peter Brabeck-Letmathe)
10. - 14. June	Geneva Science Diplomacy Week (3rd edition)
9. -10. June	Deep Dive Meeting on the Global Curriculum on Science and Diplomacy chaired by Enrico Letta
11. June	Board of Directors Spring Meeting
17. June	Diplomatic Symposium of OQI to finalize Quantum Intelligence Report 2.0
19. June	Swiss Ambassadors' meeting – Presentation of GESDAs approach on Anticipatory Science Diplomacy by Enrico Letta
24.-26. June	Webfare: From Data Warfare to Data Well-Being – Part of the Program of Anticipating the Future of Humanities – of The New Institute Hamburg (with Martin Mueller and Sophie Gilbert)

3^d quarter

12. August	Locarno Film Festival Diplomatic Day – With Michael Moller, Giuliano Da Empoli and the Swiss and Italian Ministers for Foreign Affairs
23. August	2nd Chairmans Committee Meeting
25. - 26. August	UN Security Council in Geneva (with Alexandre Fasel Henrietta Fore, Michael Hengartner)
3. September	Presentation to the Human Rights Council at the invitation of its President (by Stéphane Decoutère)
12. September	Participation in the Retreat of UN SG Network on Science advice (by Sandro Giuliani)

4th quarter

3. – 6. October	Kyoto STS Forum (Peter Brabeck-Letmathe)
8. - 9. October	Board of Directors Fall Meeting
9. - 11. October	Geneva Science and Diplomacy Anticipation Summit 2024
10. October	2nd OQI Advisory Committee co-chaired by Sandro Giuliani and Joachim Mnich
11 October	2nd Meeting of GESDA Impact Forum chaired by Patrick Aebischer
21. October	UN Security Council New York / Approval of Presidential Statement by the Swiss Government on anticipation (CF Ignazio Cassis, Jocelyne Bloch, Grégoire Courtine, Robin Geiss, Amin Awad)
13. November	Visit of Sabanci University Leadership to prepare an Anticipatory Leadership Week in 2025 in Istanbul
13. November	Participation of Enrico Letta in High Level Meeting in Pretoria to prepare an Anticipatory Leadership Week in 2025 at the sidelines of the G20 Meeting
22. November	2024 Innovations Dialogue organized by United Nations Institute for Disarmament Research and GESDA under the theme "Quantum Technologies and their Implications for International Peace and Security"
6. December	3rd Chairman's Committee Meeting + Board of Directors Year End Meeting

4.2. Key results

1.

Gaining the involvement of 2.100 scientists from 87 countries in the work of preparing the 4th edition of the GESDA Science Breakthrough Radar®.

The 2024 Radar provides an overview of science trends and breakthrough predictions at 5, 10 and 25 years in 42 science and technology emerging topics, a synthesis of the related fundamental debates and actions in society, the trends in private investments and an exploration of opportunities for concerted action through initial contributions on the implications for international affairs, global challenges, and the SDGs. In particular, the deep dive on Eco-Augmentation – GESDA’s term for examining how humans could enhance nature’s ecosystems – offers opportunities for launching new initiatives.
2.

Positioning the GESDA Foundation as a trusted contributor on anticipatory science within the framework of the United Nations’ scientific agenda.

At the Summit of the Future in Sept. 2024, world leaders adopted the Pact for the Future and its annexes: the Global Digital Compact and Declaration on Future Generations. Emerging technologies and science anticipation now have a prominent place in the international agenda.
3.

Certifying first-year results from GESDA’s Quantum for All initiative, carried out with the Open Quantum Institute at CERN supported by UBS and the XPRIZE-Google-GESDA Quantum Application Contest.

Over the past year, rapid advancements in quantum computing brought it closer to being able to support real world applications that focus on responsible development and benefit all of humanity. GESDA played a crucial role in setting the stage for the development of real-world use cases through the CERN-hosted and UBS-supported OQI and the launch of the XPRIZE Quantum Application Contest.



4.

Launching the 3-year pilot phase of the new GESDA Anticipation Gateway Initiative.

The GESDA Anticipation Gateway marks the start in scaling-up the GESDA Foundation's work worldwide by streamlining its activities to democratize access to knowledge about emerging science and its early uses. It comprises the Wellcome supported Global Curriculum for Anticipatory Leadership (GCAL) preparing future decision makers for a world accelerated by science and technology, a Public Portal to Anticipation offering citizens an accessible entry point into emerging science and technology as well as an Anticipation Observatory as an AI augmented intelligence tool for decision makers.
5.

Creating a Chairman’s Circle of generous donors who support the Foundation’s global scale-up to fulfill its mission and vision.

As GESDA passed its five-year mark, the Rupert Family became the first to join the Chairman’s Circle of donors. By matching the total contribution from the Swiss Confederation for the period of 2022-2027, the family’s support marks a critical turning point in increasing GESDA’s impact, presence and visibility around the world.
6.

Marking and celebrating the significant milestone of GESDA’s 5th anniversary at the 2024 Geneva Science and Diplomacy Anticipation Summit.

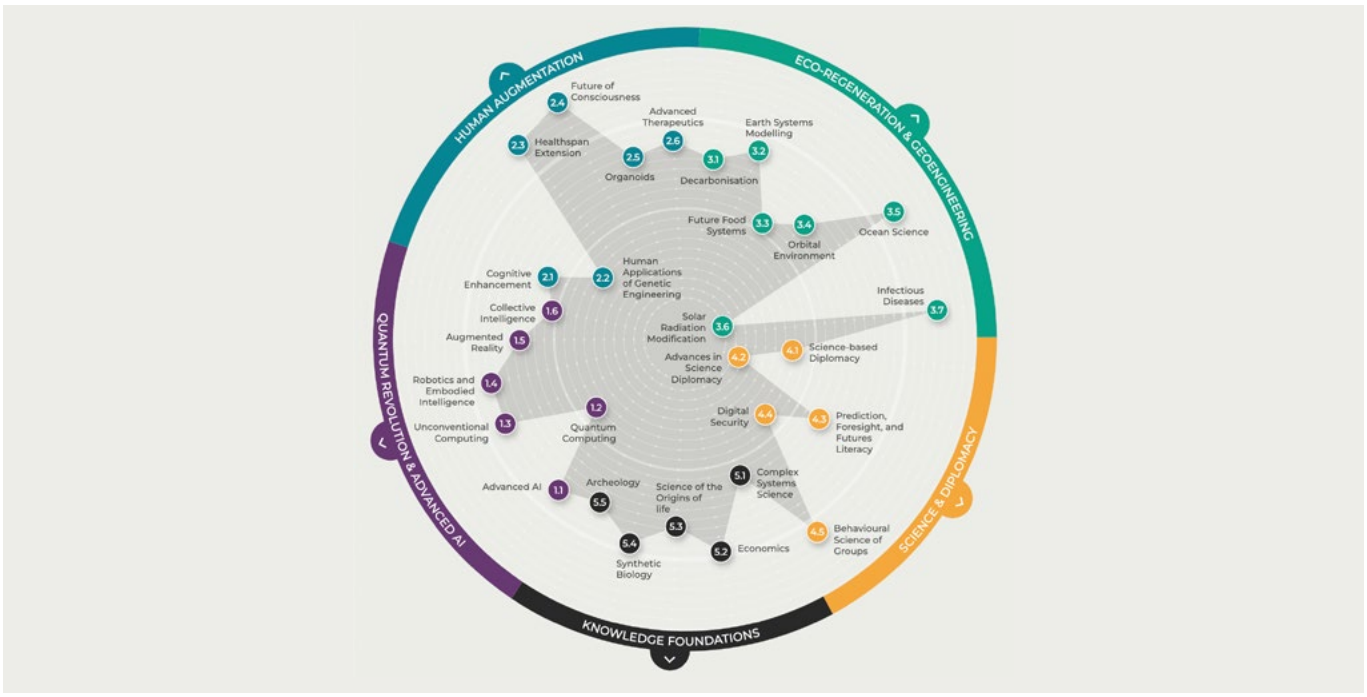
The 2024 GESDA Summit, which drew more than 1.000 participants for 18 sessions, provided insights and guidance on the acceleration of science and its applications, and how they could help solve some of humanity’s most pressing global challenges.



Key Result 1

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The 2024 Radar provides an overview of science trends and breakthrough predictions at 5,10 and 25 years in 42 science and technology emerging topics, a synthesis of the related fundamental debates and actions in society, the trends in private investments and an exploration of opportunities for concerted action through initial contributions on the implications for international affairs, global challenges, and the SDGs. In particular, the deep dive on Eco-Augmentation – GESDA’s term for examining how humans could enhance nature’s ecosystems – offers opportunities for launching new initiatives.



Focused on action, the latest Radar emphasizes exploring opportunities for concerted action, with initial contributions on the implications for international affairs, global challenges, and the UN's 17 Sustainable Development Goals for 2030 (SDGs). Along with eco-augmentation, it particularly highlights trends like AI futures, the impact of AI on peace and war, anticipating the future of research, and the geopolitical impact of advanced AI. It not only updates the previous year's predictions but also deepens the analysis and focuses more on the potential impacts and necessary actions related to these scientific advancements.

The top eight anticipated scientific trends featured in special supplements to the Financial Times, NZZ and Le Temps include: Neuro-augmentation, Living longer, Unconventional computing, Redefining Archeology, Redesigning Life, Space-based R&D, Eco-augmentation and Datafication of Society.



Swiss Foreign Minister and Federal Councilor Ignazio Cassis

“What’s on GESDA’s Radar? What’s cooking in the labs? Let me highlight two rapidly advancing fields: synthetic biology and neuroscience.

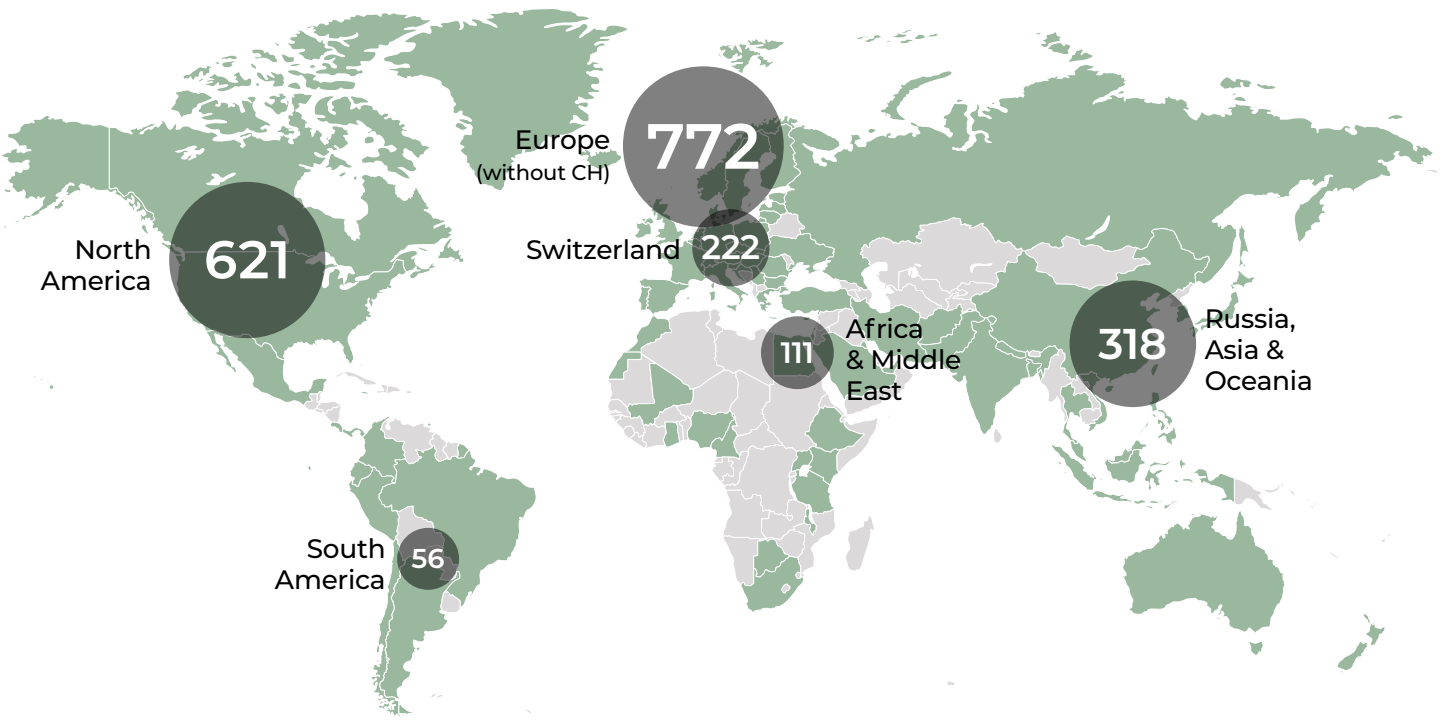
Synthetic biology: This field merges biology and engineering, allowing us to create new living organisms or modify existing ones to perform novel tasks – potentially enabling us to program living cells like computers in the future.

“Over the next five years, integrating synthetic biology with AI will speed up the development of new biological agents. On the upside, it could lead to the rapid development of vaccines and treatments, helping us live healthier, longer lives. On the downside, some agents could be misused as biological weapons.

“Neurotechnology: This field involves technologies that interact with the nervous system to monitor or influence brain activity. GESDA foresees that next-gen implants will stimulate multiple brain regions, with AI and brain-computer interfaces becoming a reality soon. The bright side: Neurotechnology could help paraplegics walk again. The dark side: It might also be used to enhance soldiers' abilities, improving precision, resilience, and reducing sleep needs – raising ethical concerns we must address.”

— From a speech by Swiss Foreign Minister and Federal Councilor Ignazio Cassis to the GESDA Summit on Oct. 11, 2024

Geographical spread of 2.100 contributors to the Pulse of Science since 2021



The GESDA Pulse of Science

Scientific Platform	Highlights for 2024	Breakthrough Briefs Top anticipated scientific trends in bold	Invited Contributions
<div>1</div> <div>Quantum Revolution & Advanced AI</div>	<ul style="list-style-type: none">GESDA Geopolitical Lens: Anticipating the Geopolitical Impact of Advanced AI; AI Futures: Peace and War	<div>1.1 Advanced AI</div> <div>1.2 Quantum Computing</div> <div>1.3 Unconventional Computing</div> <div>1.4 Robotics and Embodied Intelligence</div> <div>1.5 Augmented Reality</div> <div>1.6 Collective Intelligence</div>	<ul style="list-style-type: none">Artificial CognitionSuperconductivity
<div>2</div> <div>Human Augmentation</div>		<div>2.1 Cognitive Enhancement</div> <div>2.2 Human Applications of Genetic Engineering</div> <div>2.3 Healthspan Extension</div> <div>2.4 Future of Consciousness</div> <div>2.5 Organoids</div> <div>2.6 Advanced Therapeutics</div>	<ul style="list-style-type: none">Growing Embryo ModelsSpace Technology and Global Health
<div>3</div> <div>Eco-Regeneration & Geoengineering</div>	<ul style="list-style-type: none">The 2024 Villars Anticipation Workshop: Shaping Ecosystems: Anticipating an Age of Eco-augmentationThe GESDA Philosophical Lens: Shaping the future of social-ecological systems	<div>3.1 Decarbonisation</div> <div>3.2 Earth Systems Modelling</div> <div>3.3 Future Food Systems</div> <div>3.4 Orbital Environment</div> <div>3.5 Ocean Science</div> <div>3.6 Solar Radiation Modification</div> <div>3.7 Infectious Diseases</div>	<ul style="list-style-type: none">Fungal Pandemics
<div>4</div> <div>Science & Diplomacy</div>		<div>4.1 Science-based Diplomacy</div> <div>4.2 Advances in Science Diplomacy</div> <div>4.3 Prediction, Foresight and Futures Literacy</div> <div>4.4 Digital Security</div> <div>4.5 Behavioural Science of Groups</div>	<ul style="list-style-type: none">The Future of MultilateralismThe Future of Trade
<div>5</div> <div>Knowledge Foundations</div>	<ul style="list-style-type: none">GESDA Science Lens: Anticipating the Future of Research	<div>5.1 Complex Systems Science</div> <div>5.2 Economics</div> <div>5.3 Science of the Origins of Life</div> <div>5.4 Synthetic Biology</div> <div>5.5 Archaeology</div>	<ul style="list-style-type: none">The Future of FusionFuture of Social Science and the HumanitiesMathematics for Humanity

Academic Anticipation Committee Chairs

Platform 1 Quantum Revolution & Advanced AI	Platform 2 Human Augmentation	Platform 3 Eco-Regeneration & Geoengineering	Platform 4 Science & Diplomacy	Platform 5 Knowledge Foundations
<p>Emmanuel Abbé, Chair of Mathematical Data Science / Full Professor</p> <p>Rüdiger Urbanke, Professor of Communication Theory, EPFL</p> <p>Sabrina Maniscalco, Professor of Quantum Information and Logic, University of Helsinki; Adjunct Professor, Aalto University, Finland</p> <p>Johannes Schemmel, Head of the ASIC Laboratory and the Electronic Vision(s) Group, Heidelberg University</p> <p>Lena Smirnova, Assistant Professor, Johns Hopkins University, President International MPS Society</p> <p>Ángel Goñi Moreno, Head of Biocomputation Lab, Technical University Madrid Charles</p> <p>Roques-Carmes, Visiting Scientist, Research Laboratory of Electronics at the Massachusetts Institute of Technology</p> <p>Aude Billard, Professor and Head of the LASA laboratory at the School of Engineering, EPFL</p> <p>Alex Ilic, Executive Director and co-founder of the ETH AI Center</p> <p>Geoff Mulgan, Professor of Collective Intelligence, Public Policy and Social Innovation, UCL, London</p>	<p>Jaimie Henderson, Director, Stereotactic and Functional Neurosurgery, Stanford University School of Medicine; Co-Director, Stanford Neural Prosthetics Translational Laboratory (NPtL), Stanford University</p> <p>Robin Lovell-Badge, Principal Group Leader, Stem Cell Biology and Developmental Genetics Laboratory, Francis Crick Institute</p> <p>Brian Kennedy, Distinguished Professor, Department of Biochemistry and Physiology, Yong Loo Lin School of Medicine National University of Singapore</p> <p>Vera Gorbunova, Doris Johns Cherry Professor, University of Rochester; Co-director, Rochester Aging Research Center</p> <p>Itzhak Fried, Professor of Neurosurgery and Psychiatry and Biobehavioral Sciences in the David Geffen School of Medicine and Brain Research Institute, UCLA, Los Angeles; Professor of Neurosurgery at the Faculty of Medicine, Tel-Aviv University</p> <p>Alysson Muotri, Professor, Departments of Pediatrics and Cellular & Molecular Medicine, University of California, San Diego</p> <p>Michael Lobritz, VP and Global Head, Infectious Diseases Therapeutic Area, Roche, Basel, Switzerland</p> <p>Claire Roddie, Associate Professor in Haemato-oncology, UCL, London</p>	<p>Matthew Green, Associate Professor in Chemical Engineering, Director of the Center for Negative Carbon Emissions, Arizona State University</p> <p>Gavin Schmidt, Director, Goddard Institute for Space Studies, NASA</p> <p>Nam-Hai Chua, Andrew W. Mellon Professor Emeritus and Head of Plant Molecular Biology, the Rockefeller University, New York</p> <p>Lindy Elkins-Tanton, Foundation and Regents Professor in the School of Earth and Space Exploration, Arizona State University; Principal Investigator of the Psyche mission, NASA</p> <p>Sabine Gollner, Senior scientist, Royal Netherlands Institute for Sea Research (NIOZ)</p> <p>Govindasamy Bala, Professor at the Center for Atmospheric and Oceanic Sciences, Indian Institute of Science</p> <p>Wanda Markotter, Director of the Centre for Viral Zoonoses, University of Pretoria, South Africa</p>	<p>Didier Wernli, Associate Professor at the Global Studies Institute and the Department of Computer Science, University of Geneva</p> <p>Pierre-Bruno Ruffini, Professor of Economics at the University of Le Havre, Normandy, France</p> <p>Sirkka Heinonen, Professor Emerita, Finland Futures Research Centre, University of Turku</p> <p>Linus Gasser, Lead Engineer, Center for Digital Trust (C4DT), Swiss Federal Institute of Technology in Lausanne (EPFL)</p> <p>Mina Cikara, Professor of Psychology, Director of the Intergroup Neuroscience Lab, Harvard University</p>	<p>Dirk Helbing, Professor of Computational Social Science, ETH Zürich, Switzerland</p> <p>Jean-Pierre Danthine, Honorary Director of Enterprise for Society (E4S), Honorary Professor at the Swiss Federal Institute for Technology in Lausanne (EPFL)</p> <p>Betül Kaçar, Assistant Professor, University of Wisconsin-Madison</p> <p>Ramanarayanan Krishnamurthy, Professor of Chemistry at Scripps Research, California</p> <p>Patrick Cai, Professor and Chair of Synthetic Genomics, University of Manchester, UK; Visiting Professor, Massachusetts Institute of Technology, The University of Hong Kong and Chinese Academy of Sciences</p> <p>Sylvian Fachard, Full Professor, Institute of Archaeology and Classical Studies, University of Lausanne, Switzerland</p> <p>Anna Sapfo Malaspinas, Leader of the Population Genomics Group at the Department of Computational Biology, University of Lausanne</p>

Key Result 2

Positioning the GESDA Foundation as a trusted contributor on anticipatory science within the framework of the United Nations’ scientific agenda.

At the Summit of the Future in Sept. 2024, world leaders adopted the Pact for the Future and its annexes: the Global Digital Compact and Declaration on Future Generations. Emerging technologies and science anticipation now have a prominent place in the international agenda.

GESDA actively contributed to these developments, while continuing to strengthen its collaboration with International Geneva, through its participation in the UN Secretary-General’s Scientific Advisory Board and its support from Switzerland’s two-year elected seat on the UN Security Council.



Annual Retreat of the Scientific Advisory Board on 12 September 2024 (UN Photo/Mark Garten)

Engagement with the UN Secretary-General’s Scientific Advisory Board

Throughout 2024, GESDA supported the Scientific Advisory Board with briefings and participation in retreats and workshops. Michael Hengartner, GESDA Board Member and Chair of the Academic Forum, held a briefing on the GESDA Science Breakthrough Radar® for UN Secretary-General António Guterres and his senior managers in February. As a network member of the Scientific Advisory Board, GESDA’s CEO participated in a September retreat in New York, where he joined Guterres in working to define the Scientific Advisory Board’s agenda for 2025. The agenda is anchored around three pillars: Science Advice, Science Communication and Science Connection. GESDA actively promoted the Scientific Advisory Board’s statement, “Trust in Science,” which was crafted at the retreat involving GESDA’s CEO and featured at the 2024 GESDA Summit. GESDA will take a leading role in the Trust in Science subgroup during 2025 and actively contribute to scientific briefs and horizon-scanning activities.



Swiss Foreign Minister and Federal Councilor Ignazio Cassis



Tatiana Valovaya, Director-General, United Nations at Geneva

Agenda-setting through the UN Security Council

GESDA supported Switzerland throughout 2024 by helping it to focus global attention on the need for science anticipation and to elevate the issue on the agenda of the 15-nation council’s member nations. This was accomplished in May by positioning it at an Arria-formula meeting that enabled council members to have a frank and private exchange of views; hosting council diplomats at Campus Biotech in August; and helping frame the substance and format of a formal council session, which was entitled “Anticipating the Impact of Scientific Developments on International Peace and Security” and chaired by Swiss Foreign Minister and Federal Councilor Ignazio Cassis in October.

The joint Swiss Foreign Ministry (FDFA) and GESDA effort culminated in the council adopting its first-ever Presidential Statement (PRST) on science diplomacy. The council unanimously adopted the PRST. By stressing the impact of scientific developments on international peace and security and the importance of anticipation, the PRST opens the door to GESDA’s continued engagement with the council, a key legacy of Switzerland’s membership.

Full participation in the UN system in Geneva

Rapid scientific and technological developments will continue having a profound impact on the way we live as individuals and as a global community. With this in mind, GESDA aimed to expand the capacity for action and understanding among other members of Geneva’s international community and beyond Switzerland’s borders. The Foundation worked to accomplish this at different levels:

- GESDA partnered with several International Organizations to infuse anticipatory thinking and raise awareness about the opportunities and risks of emerging technologies. In November, GESDA and the UN Institute for Disarmament Research (UNIDIR) co-organized the 2024 Innovations Dialogue at Campus Biotech in Geneva with an emphasis on quantum technologies and international peace and security. GESDA sought to raise knowledge among diplomats, policymakers, citizens and other interested parties about the anticipated benefits of quantum technologies, curate debates with experts worldwide, and foster a spirit of cross-sector collaboration. Livestreaming the event globally, GESDA contributed to positioning International Geneva as a hub for anticipatory governance of disruptive technologies.



In partnership with UNIDIR, GESDA organized the “2024 Innovations Dialogue: Quantum technologies and their implications for international peace and security”

- GESDA organized two flagship events tailored to the diplomatic community in Geneva. The Quantum Diplomacy Symposium convened diplomats and others for in-person and online events to learn how quantum computing could transform society by advancing scientific discoveries that benefit all of humanity. It also focused on the anticipatory measures needed to avoid widening global digital divides. The Future of Space Stewardship examined the state of play in space governance on a host of issues ranging from security to commercialization to managing the global commons. The topic was of particular interest to representatives of underrepresented regions that tend to be less engaged in the multilateral and formal frameworks for discussion.



GESDA hosted the first-ever Quantum Diplomacy Symposium on June 17, 2024

- GESDA engaged with NGOs in Geneva on a range of topics, particularly artificial intelligence, peace and security, human rights and the Summit of the Future. GESDA presented tailored presentations based on the Radar’s contents to diverse audiences and supported discussions and learning opportunities with the Diplo Foundation, Kofi Annan Foundation, Geneva Center for Security Policy, Geneva Academy, Geneva Water Hub, and QUNO Foundation, among others.
- At numerous global events and fora, GESDA meaningfully participated by raising the profile of science diplomacy and futures literacy. Among the events where GESDA took part were the STS in Japan; Congreso Futuro in Chile; Encuentro Hispano-Suizo sobre Innovación in Spain; Bled Strategic Forum in Slovenia; and Interamerican Development Bank Innovation Lab in Argentina.

Key Result 3

Certifying first-year results from GESDA’s Quantum for All initiative, carried out with the Open Quantum Institute at CERN supported by UBS and the XPRIZE-Google-GESDA Quantum Application Contest.

Over the past year, rapid advancements in quantum computing brought it closer to being able to support real world applications that focus on responsible development and benefit all of humanity. GESDA played a crucial role in setting the stage for the development of real-world use cases through the CERN-hosted and UBS-supported OQI and the launch of the Quantum Applications Prize (in collaboration with XPRIZE and Google Quantum AI)

The **Progress Report** (published in October) on the initiative highlights that two use cases in water management in food production from the incubation phase were on track for first implementation on simulators by the end of 2024. Ten additional use cases generated through a call for proposals in late spring were being nurtured and further calibrated.

The report highlighted advancements in three core objectives: accelerating applications for humanity, providing access for all, and activating multilateral governance for the UN’s 17 Sustainable Development Goals for 2030 (SDGs). Furthermore, the OQI has significantly expanded its network by signing 18 agreements with key institutions globally, fostering collaboration and knowledge sharing in the quantum computing field. Recognizing the importance of education and workforce development, OQI launched a new educational consortium to build capacity in quantum technologies. These efforts aim to democratize access to quantum computing resources and expertise, ensuring broader participation in this rapidly evolving field.

Looking ahead to 2025, the International Year of Quantum, the OQI plans to launch new initiatives such as global hackathon to stimulate innovation and quantum diplomacy games to foster international dialogue and cooperation. These initiatives underscore the OQI’s commitment to not only advancing quantum computing technology but also ensuring its responsible and equitable development for the benefit of society.



The Quantum Diplomacy Game is a unique and interactive role-play



Progress Report - Quantum for All initiative



Intelligence Report on Quantum Diplomacy for the SDGs

Quantum for real world impact, a collaboration between GESDA, XPRIZE and Google Quantum AI

The Quantum Applications XPRIZE was launched with the support of GESDA and Google Quantum AI simultaneously in March 2024 at the inauguration of OQI in Geneva and the American Physics Society Meeting in Minneapolis. It is a 3-year, \$5M global competition designed to generate quantum computing (QC) algorithms that can be put into practice to help solve real-world challenges. 330 teams from 50+ countries were taking part in the competition end of 2024. Finalists will be announced in December 2025 and winner will be designated in March 2026.

Intelligence Report on Quantum Diplomacy for the SDGs

Since 2021, GESDA has been curating a diplomatic dialogue on quantum computing, with permanent representations in Geneva and inputs from UN international organisations, the private sector and academia. Product of these discussions and of the GESDA’s 2024 Quantum Diplomacy Symposium, the Intelligence Report fosters a common understanding of multilateral governance themes most relevant to quantum computing. It provides the basis to prepare for the large-scale availability of this technology by developing an anticipatory approach that is accompanied by action-oriented engagement.



The House of Switzerland featured a Quantum for All event at the World Economic Forum’s Annual Meeting 2024 in Davos

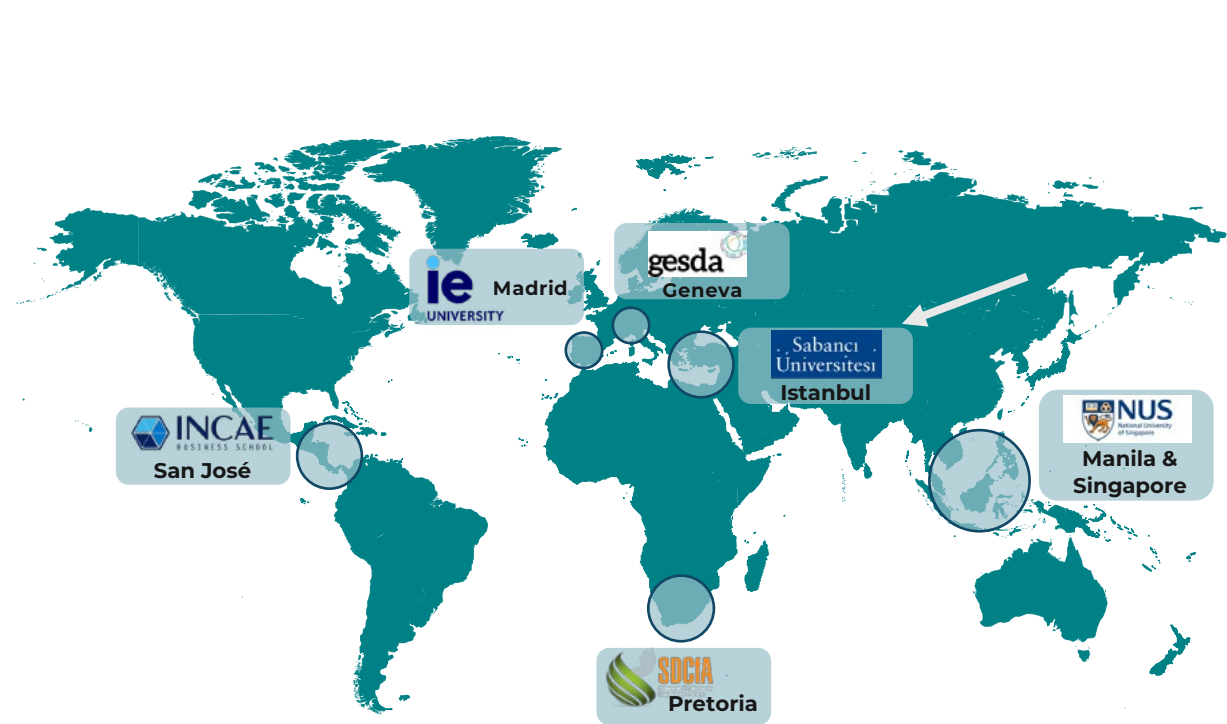
Key Result 4

Launching the 3-year pilot phase of the new GESDA Anticipation Gateway Initiative

The GESDA Anticipation Gateway marks the start in scaling-up the GESDA Foundation's work worldwide by streamlining its activities to democratize access to knowledge about emerging science and its early uses. It comprises the Wellcome supported Global Curriculum for Anticipatory Leadership (GCAL) preparing future decision makers for a world accelerated by science and technology, a Public Portal to Anticipation offering citizens an accessible entry point into emerging science and technology as well as an Anticipation Observatory as an AI augmented intelligence tool for decision makers.

As it aims to equip leaders with the skills and knowledge to navigate the rapid changes driven by science and technology, GCAL will be developed in 2025 with a pilot curriculum that utilizes various training formats and partnerships with academic institutions, international organizations, and industry. In 2025, GCAL will conduct five regional leadership programs in Costa Rica, South Africa, Turkey, Singapore and Spain as well as develop open-access digital training tools, including mobile applications. Specialized programs for high-level audiences at global forums are also planned.

Anticipatory Leadership Weeks hosted around the world in 2025

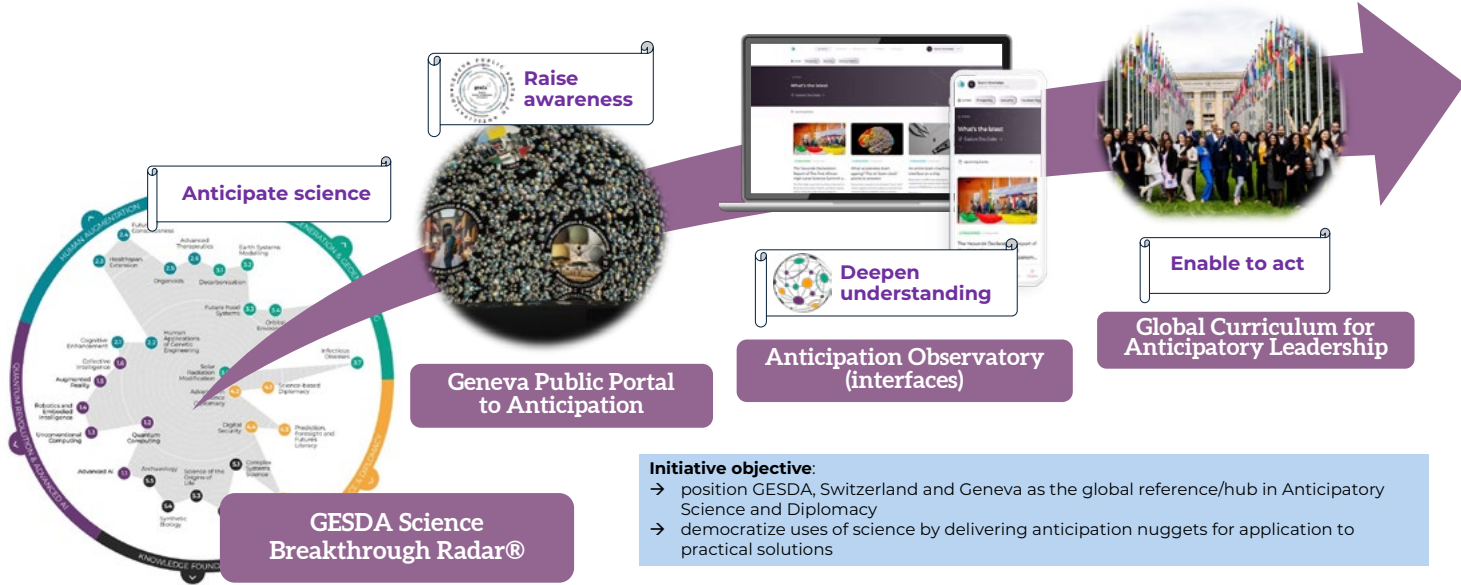


The Geneva Public Portal to Anticipation is an interactive installation designed to engage the public with emerging science. Using the GESDA Science Breakthrough Radar® and generative AI, visitors can explore potential future scenarios and co-create personalized narratives around scientific advancements. This portal will debut at the Swiss Pavilion at the World Expo 2025 in Osaka before a planned full-scale rollout in Geneva and globally through mobile "Anticipation Satellites" and an online platform. This project is a collaboration with Presence Suisse and EPFL's Laboratory for Experimental Museology, researching new ways to visualize complex scientific information for public consumption.

The Anticipation Observatory is an intelligence tool leveraging the Science Breakthrough Radar® and cutting edge AI to track 40 emerging scientific fields and its early uses in diplomacy, business, and society over the next 5, 10, and 25 years. It aims to provide decision-makers with actionable insights while combating misinformation. A prototype focusing on neurotechnology is planned for early 2025 and focusing on the three UN pillars of prosperity, peace, and human rights.

These three initiatives - the GCAL, the Public Portal, and the Anticipation Observatory - together form a comprehensive approach to democratizing access to knowledge about emerging science and its early uses.

GESDA Anticipation Gateway –
A think tank-do tank journey discovering science breakthroughs and their uses



Initiative objective:
→ position GESDA, Switzerland and Geneva as the global reference/hub in Anticipatory Science and Diplomacy
→ democratize uses of science by delivering anticipation nuggets for application to practical solutions

Key Result 5

Creating a Chairman’s Circle of generous donors who support the Foundation’s global scale-up to fulfill its mission and vision.

As GESDA passed its five-year mark, the Rupert Family became the first to join the Chairman’s Circle of donors. By matching the total contribution from the Swiss Confederation for the period of 2022-2027, the family’s support marks a critical turning point in increasing GESDA’s impact, presence and visibility around the world.



Anton Rupert, GESDA Board Member

Support from the Rupert Family to accelerate global uptake of scientific anticipation

The simultaneous launch of the GESDA Anticipation Gateway’s three components was made possible by the partnership with the Rupert Family, which is based in South Africa and is the owner of Compagnie Financière Richemont, a Swiss-based global watch and jewelry company headquartered in Bellevue in the Canton of Geneva.

“My father Johann, myself and our whole family value the efforts of the Swiss government to make the benefits of science available to as many people as possible as quickly as possible.

“We are happy to commit to the GESDA Foundation in the same way that we commit to our projects in South Africa and around the world. We are very excited to work with and see the results of the fantastic work the Foundation is doing to better the lives of people across the world”.

— Anton Rupert, representing the Rupert family

Overview on GESDA funding and its development

The contribution by the Rupert Family brings the total funds raised by GESDA Foundation so far for this period to a ratio of 27% public funding and 73% private funding, which currently also includes the contributions of two Geneva foundations, three Swiss supporters, and four international donors.

From 2019 to 2024, GESDA raised 72 million Swiss francs in public and private funding. As much as 86%, or 62 million Swiss francs, have been raised since 2022, including 5 million Swiss francs from Google for the Quantum Contest that will be distributed through XPRIZE.

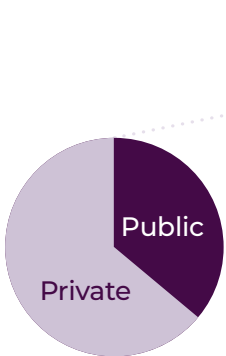
Second meeting of the GESDA Impact Forum

Members of the GESDA Impact Forum met for a second time on 11 October 2024 to define the roadmap for its activities for 2025 and beyond. It agreed that its main priorities will be: Solidifying funding for GESDA for the short-term period until 2027 and for the longer-term period from 2027 onwards, generating project-based funding for new initiatives, starting with Neurotechnology and Eco-Augmentation, collaborating with the private sector as a key vector for impact.

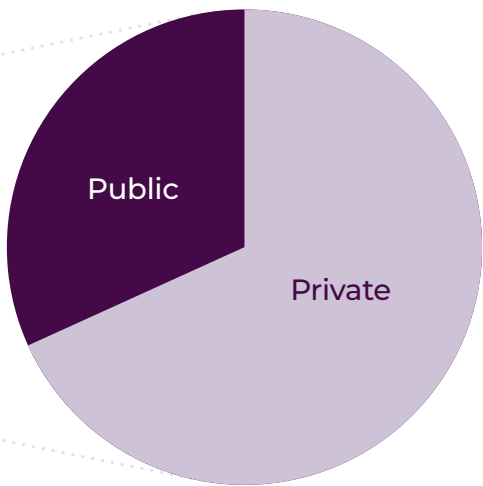
Overview on GESDA’s funding and development

From 15 mio and above* *Member of the Chairman's circle of Donors	1. Swiss Confederation* 2. Rupert Family*
From 10 million to 14,99 million	
From 5 million to 9,99 million	1. Anonymous Foundation Geneva 2. UBS Zurich 3. Wellcome London
From 1 million to 4,99 million	1. Google Seattle (for the X-Prize - GESDA Contest for Quantum Applications) 2. OSF New-York 3. Canton of Geneva 4. Fondation pour Geneve
From 50k to 0,99 million	1. City of Geneva 2. Asuera Foundation Horgen 3. Compagnia San Paolo Torino 4. Economy of Trust Foundation by Sicpa Lausanne 5. Fondation Hippomène Geneva 6. King Baudoin Foundation Brussels 7. Defitech Foundation Lausanne

2019-2022
Total CHF 10m



2022-2027
Total CHF 62m



Key Result 6
Marking and celebrating the significant milestone of GESDA's 5th anniversary at the 2024 Geneva Science and Diplomacy Anticipation Summit

The 2024 GESDA Summit, which drew more than 1.000 participants for 18 sessions, provided insights and guidance on the acceleration of science and its applications, and how they could help solve some of humanity's most pressing global challenges.



Fernando Espinosa, Ambassador and Deputy Permanent Representative of Mexico to the United Nations Office at Geneva

The huge amount of public interest, including more than 25'000 views of the recorded sessions, attested to the public's high demand for such an anticipation platform. High-level diplomats also praised the 2024 GESDA Summit and the unveiling of the new GESDA Anticipation Gateway.

“What we have been discussing for the past three days at this summit, and over the last three or four years at the summits, is how science and technology have actually overwhelmed politics and diplomacy and society. We are somehow behind most of the time. So now we have a game changer.”

— Fernando Espinosa, Ambassador and Deputy Permanent Representative of Mexico to the United Nations Office at Geneva

With 32 sessions and workshops spread across three days, the Summit provided insights and guidance on using the acceleration of science and its applications to help solve some of humanities biggest global challenges.

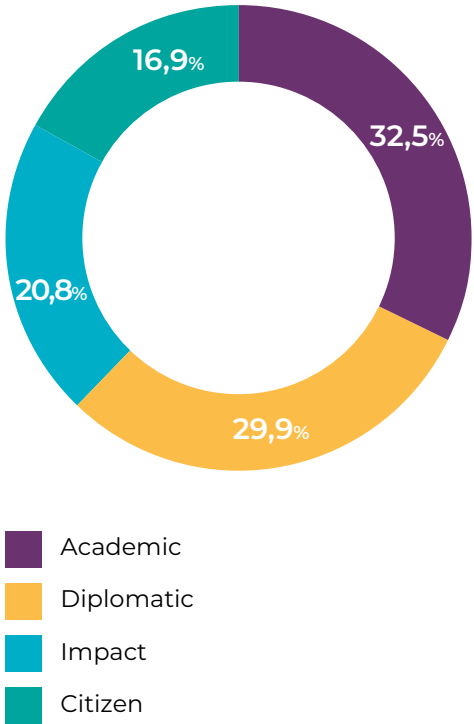


Three major Announcements	<p>Launch of GESDA's Anticipation Gateway initiative which seeks to democratize access to knowledge and uses of emerging science for current authorities, future leaders, as well as citizens around the world via its three component parts:</p> <ol style="list-style-type: none">1. The Global Curriculum for Anticipatory Leadership (GCAL), supported by Wellcome, will prepare leaders globally for transformations driven by science and technology. The GCAL will offer five regional leadership programs with local host institutions in Istanbul (Sabancı University), Madrid (IE University), Pretoria (Science Diplomacy Capital for Africa), San José (INCAE Business School) and Singapore (National University of Singapore).2. The Geneva Public Portal to Anticipation, an interactive installation to democratize access to emerging science and technology. It invites citizens to project themselves into the future through an immersion into art, science, and diplomacy. The Portal will debut as a key attraction in the Swiss Pavilion at the World Expo 2025 in Osaka, Japan in April 2025.3. The Anticipation Observatory, which aggregates validated data to track emerging scientific trends and assess their potential impacts on diplomacy, business, and society. It filters scientific advancements through the lens of prosperity and development, peace and security, and human rights, countering misinformation and fake news.
Political engagement	<ul style="list-style-type: none">• Geneva Political Talks on Science and Diplomacy hosted by the Swiss Minister of Foreign Affairs, Federal Councillor Ignazio Cassis, with Ministers and delegates from El Salvador, India, Latvia, Poland, and the United Arab Emirates; the heads of four International Organizations; and high level representation from the city and canton of Geneva.• Ministerial Working Dinner at the Residence of the Swiss Permanent Representative to the UN Office at Geneva.
Star speakers	<ul style="list-style-type: none">• 77 speakers from Europe, Asia, the Americas, and Africa, with equal representation of male and female speakers.• Representation from OpenAI, Microsoft, United Nations, CERN, international governments, leading universities around the world, the European Space Agency, and many more.
Scientific insights	<ul style="list-style-type: none">• Launch of GESDA 2024 Science Breakthrough Radar® with contributions from over 1.500 scientists.• Seven anticipatory briefings on topics from the 2024 radar including quantum computing, synthetic biology and the future of archaeology.• Launch of the Intelligence Report on Quantum Diplomacy for the SDGs.
Community engagement	<ul style="list-style-type: none">• 14 invitation-only workshops and community gatherings to advance GESDA workstreams.• Exclusive breakfast for the diplomatic community on space diplomacy with key international stakeholders.• Four community dinners including one affiliate dinner hosted by Quantonation
Media and digital engagement	<ul style="list-style-type: none">• 122 articles with a reach of 287 million people.• Sponsored coverage in Financial Times, NZZ, and Le Temps.• 66.000 LinkedIn views; 24.000 YouTube views.• 10 Leman Bleu video interviews with Summit speakers.
Innovative Programming	<ul style="list-style-type: none">• 11 panels, seven anticipatory briefings, 14 workshops and four community dinners.• Interactive demonstrations of the Geneva Public Portal to Anticipation in CERN's iconic Globe.• Dynamic sessions covering topics from the future of space diplomacy to the restoration of coral reefs and innovative solutions to food security.

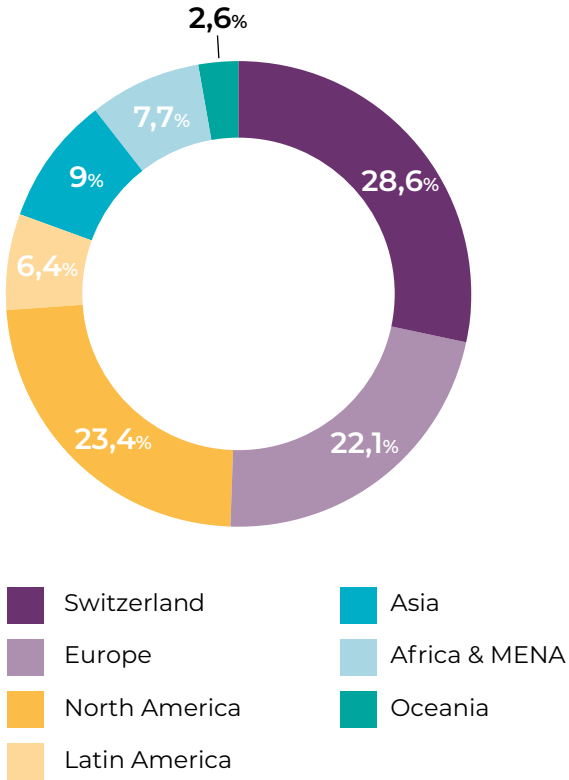


1. Baiba Braže, Minister of Foreign Affairs, Ministry of Foreign Affairs of the Republic of Latvia; in session Democratizing Science Literacy: High-Level Political Segment;
2. James Donovan, Head of Science Policy, OpenAI; in session Rethinking Intellectual Property Rights in the Age of Rapid Scientific Progress
3. Lindy Elkins-Tanton, Principal Investigator, NASA Psyche mission, Arizona State University; in session Governing Space's Next Frontier to Benefit All
4. Urs Gasser, Professor for Public Policy, Governance and Innovative Technology, Technical University of Munich; in session Nourishing Science Culture
5. Rebeca Grynspan, Secretary-General, UN Trade and Development (UNCTAD); in session GESDA Anticipation Gateway
6. Aisha Hadejia, Partner, Sahel Consulting Agriculture & Nutrition Limited; in session Climate Resilience and Food Security
7. Alok Jha, Science and Technology Editor, The Economist; in session Opening Plenary: Building Preparedness in the Age of Acceleration
8. Katherine Mathieson, Director, Royal Institution; in session Nourishing Science Culture
9. Tatiana Valovaya, Director-General, United Nations at Geneva; in session Opening Plenary: Building Preparedness in the Age of Acceleration
10. Alexandre Fasel, State Secretary, Federal Department of Foreign Affairs, Switzerland; in session Opening Plenary
11. Enrico Letta, Chair of the Diplomacy Forum (GESDA); in session Global Curriculum for Anticipatory Leadership

Speakers' Community Overview



Geographical Origin of Speakers



2024 was the second year of GESDA's scale-up phase, based on the decision by the Swiss and Geneva governments to extend the Foundation's mandate for 2022 to 2032. This 2024 Activity Report is an opportunity to look back from a high-level perspective at how GESDA began to scale-up and start realising its full potential.

Science anticipation

	2019 - 2020	2021
Objective	Objectives: <ul style="list-style-type: none">• Create the Academic Forum• Publish the 1st Anticipatory Breakthrough Report, mapping what's cooking in the labs" in four scientific platforms• Prepare Scientific Anticipatory Briefs (SABs)	Objectives: <ul style="list-style-type: none">• Mobilize scientific experts in joint task forces with experts from the diplomatic, business and citizen communities• The Anticipatory Breakthrough Report mapping is further developed and updated
Results	1 Anticipatory Breakthrough Report , from a 5, 10, and 25-year perspective	First edition of the GESDA Science Breakthrough Radar®
	4 scientific frontier issues identified: Quantum Revolution & Advanced Artificial Intelligence, Human Augmentation, Eco-regeneration & Geoengineering, and Science & Diplomacy	4 scientific platforms: Quantum Revolution & Advanced Artificial Intelligence, Human Augmentation, Eco-regeneration & Geoengineering, Science & Diplomacy
	12 Scientific Anticipatory Briefs	24 emerging topics
	Preparatory work for the Right to Science Symposium at the Brocher Foundation	3 fundamental issues for the future - debated by eight specialists in philosophy, human sciences, and the arts
	68 academic scientific experts	543 contributing scientists
	30 breakthroughs at 5, 10 and 25 years	216 breakthroughs at 5, 10 and 25 years
		11 million social media messages taking the pulse of society
		Enabled by the support of the Fondation pour Genève and collaboration with the publisher Frontiers
		Resulting in: 22.701 views on the digital platform 5.612 unique users from 106 countries
Benefits for the Founders	Mobilization and enhancement of Geneva as an operational center for multilateral cooperation through the involvement of international organizations in cutting-edge scientific work to accelerate the achievement of their objectives.	

	2022
Objective	Objectives: <ul style="list-style-type: none">• Assess the relevance of the 4 initial scientific platforms and adapting if necessary• Prepare the 2nd GESDA Science Breakthrough Radar®
Results	2nd edition of the GESDA Science Breakthrough Radar®
	Addition of Knowledge Foundations as 5th scientific platform , covering transversal areas from the perspective of their impact on individuals / society / planet. It covers topics from basic sciences, engineering sciences, social sciences, and the humanities.
	37 emerging topics
	Broaden the scope with philosophical and geopolitical lenses
	774 leading scientists
	336 breakthroughs at 5, 10 and 25 years
	Add the monitoring actions that people are taking to the pulse of society
	In close collaboration with Fondation pour Genève
	Resulting in: 47.000 new views on the digital platform 15.000 new users from 154 countries
Benefits for the Founders	Mobilization and enhancement of Geneva as an operational center for multilateral cooperation through the involvement of international organizations in cutting-edge scientific work to accelerate the achievement of their objectives.

	2023
Objective	<ul style="list-style-type: none">Consolidate and deepen content for the 3rd GESDA Science Breakthrough Radar®Collaborate with key academic institutions to further develop the RadarDesign and implement a campaign to promote the Radar from 2022 to 2023
Results	<p>Third edition of the GESDA Science Breakthrough Radar® with 42 emerging topics</p> <p>For the first time, the Radar contains six Deep Dives on:</p> <ul style="list-style-type: none">Neuro-augmentation, based on the results of the inaugural high-level Villars Anticipation WorkshopEnhanced lenses on:<ul style="list-style-type: none"><i>Philosophy</i>, addressing fundamental questions about the future of humanity, debated by scholars in philosophy, social sciences and humanities,<i>Science</i>, based on the Brocher Foundation workshop on the Right to Science<i>Geopolitics</i>, based on two workshops in Geneva and New York on the Future of Peace and War, organised with Colombia University and GCSP.The Pulse of SocietyThe incubation report of the Open Quantum Institute <p>42 emerging topics</p> <p>848 leading scientists from 73 countries</p> <p>324 breakthroughs</p> <p>Expansion of the Radar Advisory Board with Prof. Michael Schaepman, president of University of Zurich, as new member</p> <p>Promotion campaign and formalisation of Radar partners launched at the STS Forum in Kyoto led by Academic Forum Chair Michael Hengartner</p> <p>Radar presentation to 22 international organisations, academic institutions and government entities</p> <p>2023 - Resulting in: 64.000 new views on the digital platform 20.000 new users from 165 countries 26% from Switzerland –19% from the U.S.</p> <p>1.542, total number of scientists participating over three years</p>
Benefits for the Founders	The GESDA Science Breakthrough Radar® starts to serve as a benchmark product for key global institutions, further positioning International Geneva as the global hub for science anticipation and more effective multilateralism

	2024
Objective	<ul style="list-style-type: none">Renewed approach to science anticipation, including:<ul style="list-style-type: none"><i>Establishment</i> of Anticipation Committees for all GESDA's research themes of interest, led by trusted and esteemed members of the research community.<i>Renewal</i> of the anticipation potential methodology and calculation, to increase robustness and reflection of GESDA's approach to science anticipationScience Breakthrough Radar containing all four GESDA Pulses: of Science, Diplomacy, Impact and SocietyRenewed design of the online platform and book to promote the Radar and its 5 platforms.Identification and promotion of top anticipated scientific trends within the Radar.
Results	<p>Fourth edition of the GESDA Science Breakthrough Radar® with 43 emerging topics</p> <p>The Radar edition 2024 contains seven Deep Dives on:</p> <ul style="list-style-type: none">Shaping Ecosystems: Anticipating an Age of Eco-augmentation, based on the results of the second high-level Villars Anticipation WorkshopEnhanced lenses on:<ul style="list-style-type: none"><i>Geopolitics</i>: Anticipating the Geopolitical Impact of Advanced AI; AI Futures: Peace and War.<i>Philosophy</i>, Shaping the Future of Social-Ecological Systems, related to the Villars workshop on Eco-augmentation<i>Science</i>, Anticipating the Future of ResearchThe Pulses of Diplomacy, Impact and Society <p>43 emerging topics</p> <p>706 leading scientists from 87 countries</p> <p>348 anticipatory breakthroughs</p> <p>Identification of the top 8 anticipated scientific trends within the Radar</p> <p>Promotion of the GESDA Science Breakthrough Radar® with the publications in the Financial Times, NZZ, and Le Temps</p> <p>13 new Anticipation Committees established</p> <p>2024 Digital Platform - Resulting in: 44.000 new views on the digital platform 9.959 new users from 141 countries 30.5% from Switzerland – 10.6 % from the U.S.</p> <p>2.100, total number of scientists participating over four years (2021-2024)</p>
Benefits for the Founders	The GESDA Science Breakthrough Radar® is becoming recognised as a benchmark product for key global institutions, further positioning International Geneva as the global hub for science anticipation and more effective multilateralism

Diplomacy acceleration

	2019 - 2020	2021
Objective	Objectives: <ul style="list-style-type: none">Develop a tailored methodology to consider the four relevant communities with a focus on scientific anticipationBuild a community of diplomacy experts from international organizations in Geneva and globally, supporting GESDA's missionWithin the community and through the SABs, kick-start the work of identifying possible solution ideas that address the emerging topics	Objectives: <ul style="list-style-type: none">Deploy the methodology across all activities with the support of the Foundation Board to ensure global reachCreate joint task forces with experts from the communities to co-design solution ideas based on the Radar outcomes up to the development of business plansTwo of these initiatives are prioritized, receiving support and resources towards their incubation
Results	<ul style="list-style-type: none">17 diplomacy moderators with representatives of politics, diplomacy, geopolitics, transversal international organizations, chief scientists, impact and citizen communities	<ul style="list-style-type: none">Formalize the Diplomacy Forum Including societal and political implications in the GESDA methodology through, in particular, the International Network for Government Science Advice (INGSA) and the Foreign Ministries Science & Technology Advice Network (FMSTAN)Submission to the founders of a plan for scaling up GESDA, including an evaluation report of the pilot phase
	<ul style="list-style-type: none">First Science & Diplomacy Plenary with participants taking part in 20 breakout sessions effectively kick-starting efforts to identify what multilateral initiatives are needed to ensure that anticipated scientific breakthroughs are used for the greatest benefit to humanity63 participants helped prioritize initiatives that GESDA will explore and implement from 2021 onwardsScoring of the Scientific Anticipatory Briefs' impact on people, society and the planet, and pertinence to the UN SDGs	<ul style="list-style-type: none">First edition of the Geneva Science and Diplomacy Anticipation Summit939 participants registered108 speakers and moderators from 33 countries16 emerging topics from the Radar23 global challenges of significance for diplomacy and of benefit to the fulfillment of the 17 UN Sustainable Development Goals for 20308 working groups bringing together scientists and diplomats assessing in depth the potential, for people, society, and the planet, of8 breakthroughs discussed during the Summit.
	<ul style="list-style-type: none">Preparatory work for the Right to Science Symposium at the Brocher Foundation	<ul style="list-style-type: none">1 working group leading preliminary work to propose a Geneva Manifesto on the Right to Science in 2022/2023
	<ul style="list-style-type: none">35 international organizations met, and 20 contacts were appointed to closely follow our activitiesOver 80 informal contacts with other key International Geneva stakeholdersExtensive awareness building with more than 50 diplomatic missions in Geneva	<ul style="list-style-type: none">Initial public-private partnership with the United Nations and strong participation of the UN agencies in the GESDA task forcesFirst international partnership with a global foundation: Open Society Foundations (OSF)Intensifying the pace of collaboration with international organizations in Geneva and beyond, including the SDG Lab Geneva, Geneva Cities Hub and Geneva Science Policy InterfaceDigital diplomacy involvement with ambassadors and permanent missions in Geneva, the Geneva Internet Platform, CyberPeace Institute, and Swiss Digital InitiativeScience diplomacy / Anticipation with the University of Geneva, Graduate Institute Geneva, ETH Zurich, EPFL, University of Zurich and partners in collaboration with Secretary of State for Education, Research and Innovation Martina Hirayama
Benefits for the Founders	Attract new multilateral proponents to Geneva Collaborate with the Founders to raise their visibility in news and social media	

	2022
Objective	Objectives: <ul style="list-style-type: none">The methodology is evaluated, and proposals are articulated for optimization beyond the pilot phase
Results	<ul style="list-style-type: none">1st Science Diplomacy Week with an immersion program and an open forum including Geneva-based partners and global collaborationsAnnounce the creation of a Global Curriculum on Science and DiplomacyGESDA founders extend the mandate and support for GESDA Foundation to the next 10 years, on the basis of a proposal submitted at the end of 2021
	<ul style="list-style-type: none">2nd edition of the Geneva Science and Diplomacy Anticipation Summit1.267 participants (+40%)152 speakers and moderators from 46 countries21 sessions: Panels, Debates and Solution Ideas.A High-Level Political Segment with President Ignazio Cassis and ministers from Estonia, Mexico, Morocco, Singapore, and United Arab Emirates4 Solution Ideas presentedThe topics, debates and solution ideas resulted from the Radar, task forces and outcomes of the 1st edition of the summit in 2021.
	<ul style="list-style-type: none">First GESDA Symposium on reviving the Human Right to Science at the Brocher Fondation in December
	<ul style="list-style-type: none">Continue efforts to build long-lasting partnerships with Geneva-based organizations and international stakeholders:<ul style="list-style-type: none">>60 meetings involving stakeholders from the Diplomacy community, Official Delegations and International OrganisationsGESDA has met with representatives from more than 45 countries.>22 meetings and 6 diplomatic dinners of the Solution Idea Task Forces which include Diplomacy StakeholdersA full list of the meetings is provided at the end of the chapter41 Speakers and 380 participants at the Summit belong to the Diplomacy Community (+30%)Kick-start work on the Future of Peace and War with Columbia University and the GCSPMultiply activities in capacity-building and training for and with major proponents of science diplomacyProvide intelligence briefings and introduce GESDA's know-how to global stakeholders, policymakers and the diplomatic communityDevelop interaction with the science and diplomacy hubs developed in Bern and Geneva by the Swiss Special Representative for Science Diplomacy and his colleagues.
Benefits for the Founders	Attract new multilateral proponents to Geneva Collaborate with the Founders to raise their visibility in news and social media

	2023
Objective	<ul style="list-style-type: none">Completing evaluation of Open Quantum Institute (OQI)Advancement of further solution ideas, initiatives and tools (Global Curriculum for Science and Diplomacy NeuroTech Intelligence Compass, Future of Peace and War, Science Self-Regulation)Engaging more actors of International Geneva (IOs, MPs, NGOs) and politicians, diplomats and international civil servants worldwide in GESDA's activities
Results	<ul style="list-style-type: none">OQI evaluation completed and ready to launch incubation phaseGetting the financial support from Wellcome for design and incubation of the Global Curriculum for Science and Diplomacy (GCSD) securedScientific deep dive on Neuro-augmentation and continued design of a NeuroTech Intelligence Compass <p>Third edition of the Geneva Science and Diplomacy Anticipation Summit 1.366 registrations 89 speakers and moderators from 23 countries 23 sessions: Panels, debates and solution ideas A High-Level Political Segment with Swiss Foreign Minister and Federal Councilor Ignazio Cassis and ministers and top-level advisors from Hungary, Japan, Mexico, Slovenia, Switzerland, the United Arab Emirates, the United Kingdom, and the United States, along with the Director-General of the UN Office at Geneva 2 high level debates and demonstrations with the Oppenheimer Project and the NeuroRestore center 3 Solution Ideas presented</p> <ul style="list-style-type: none">The topics, debates and solution ideas resulted from the Radar, task forces and outcomes of the second edition of the summit in 2022. <p>Preparation of a Geneva Manifesto on Anticipation and the Human Right to Science planned for release in 2024 or 2025</p> <ul style="list-style-type: none">Second Geneva Science Diplomacy Week with an immersion program and an open forum including Geneva-based partners and global collaborationsAdvancement of the initiative on Anticipating the Future of Peace and War In collaboration with the Swiss FDFA, Columbia University and the GCSPAssessment of the feasibility for the creation of a Science Self-Regulation Agency <p>Staff from international organisations, NGOs, and Permanent Missions of International Geneva participated in GESDA activities:</p> <ul style="list-style-type: none">Summit: 17 speakers and moderatorsOQI: 168 contributorsGCSD: 16 expertsSDW: 45 expertsScience self-regulation: 5 contributorsNeuroTech Intelligence Compass: 11 contributors
Benefits for the Founders	<p>Advanced a solutions pipeline for the design and launch of concrete initiatives, attracting new proponents and helping position International Geneva as a hub of action-oriented science diplomacy for a more effective multilateralism</p> <p>Proponents of International Geneva are aware of the scientific advances that are likely to contribute to the accomplishment of their mission, and are actively involved in implementing solutions that are derived from science or technology.</p>

	2024
Objective	<ul style="list-style-type: none">Advance in the Partnership of GESDA with Switzerland at all UN LevelsDesign and launch of Anticipation Gateway Initiative to democratize the early understanding of emerging science and its uses across societyEngaging more actors of International Geneva (IOs, MPs, NGOs) and politicians, diplomats and international civil servants worldwide in GESDA's activities
Results	<ul style="list-style-type: none">UN Security Council: Presidential statement anchoring science anticipation in the work of the CouncilUN Secretary General: GESDA as an active network member of Scientific Advisory BoardUN General Assembly: Pact of the Future providing many anchor points to work on scientific anticipationLaunched Anticipation Gateway Initiative as a means for GESDA scale up and internationalization<ul style="list-style-type: none">Geneva Public Portal to Anticipation as a means to engage the citizens in a systematic way and to strengthen GESDAs presence in Asia (Osaka 2025)Global Curriculum for Anticipatory Leadership as means to prepare future decision makers for a world accelerated by science and technologyAnticipation Observatory as a tool to provide intelligence to GESDAs four communities <p>Fourth edition of the Geneva Science and Diplomacy Anticipation Summit 1.916 registrations 77 speakers and moderators from 30 countries 18 sessions: Panels, debates and solution ideas A High-Level Political Segment – please include here with whom (as for 2023). 14 invitation-only workshops and community gatherings to advance GESDA workstreams 1 press conference</p> <ul style="list-style-type: none">Third Geneva Science Diplomacy Week with 30 professionals from all around the world.Advancement in the Initiative of Future of Peace and War with the 2024 priorities:<ul style="list-style-type: none">Position the need to anticipate within key UN bodies;Articulate a bridge between developments in AI, Science & Tech and the future of Peace & War – both as drivers and tools of the Future of Security, Peace or War;Develop with the interested partners a concept for the long-term project;Start defining a sustainable long-term initiative. <p>Staff from international organisations, NGOs, and Permanent Missions of International Geneva participated in GESDA activities:</p> <ul style="list-style-type: none">Summit: 24 speakers and moderatorsOQI: 63 experts, 58 contributorsGCAL: 196 experts and contributorsSDW: 35 experts and contributorsAnticipation Observatory: 14 experts and contributors
Benefits for the Founders	<p>Advanced a solutions pipeline for the design and launch of concrete initiatives, attracting new proponents and helping position International Geneva as a hub of action-oriented science diplomacy for a more effective multilateralism</p> <p>Proponents of International Geneva are aware of the scientific advances that are likely to contribute to the accomplishment of their mission, and are actively involved in implementing solutions that are derived from science or technology.</p>

Translation into action and Impact Fund

	2019 - 2020	2021
Objective	Objectives: <ul style="list-style-type: none">• Prepare a context analysis exploring the landscape and identify potential partnerships toward the implementation of the initiatives• Plan the implementation of an impact fund for science and diplomacy• Launch a fundraising campaign aimed at securing funding for the Foundation's core activities and the launch of its initiatives	Objectives: <ul style="list-style-type: none">• Secure new private funding towards GESDA's financial sustainability• Build an active impact community• Kick-start activities to stimulate engagement with citizens
Results	<ul style="list-style-type: none">• Representatives of the impact and citizen communities are initially included in the Diplomacy Forum	<ul style="list-style-type: none">• Monitor science publications, news outlets and social media, and analyze millions of posts to take the pulse of society on emerging topics
	<ul style="list-style-type: none">• CHF 3 million in private philanthropic funding raised since June 2019, matching the public sector seed funding• Context analysis that identified 80 potential partners• Initial partnership with Fondation Botnar on AI and health (I-DAIR)	<ul style="list-style-type: none">• Partnership with XPRIZE Foundation, which decides to install its European Headquarters in Geneva• 2 initiatives announced in October to start in 2022:<ul style="list-style-type: none">• Geneva Science and Diplomacy Capacity Building Initiative including 16 partners to date• Joint GESDA/XPRIZE Quantum Competition• 4 new Foundations partner with GESDA Foundation, increasing to CHF 6.4 million the amount of private philanthropic funding raised since June 2019 that is in addition to the public contributions of CHF 3.6 million (Fondation pour Genève, Asuera Stiftung, Open Society Foundation, XPRIZE Foundation)• 12 thematic partnerships under development
Benefits for the Founders	Mobilization of new funding for International Geneva Stronger collaboration with the Founders	

	2022
Objective	Objectives: <ul style="list-style-type: none">• Ensure available funding for initiatives to be incubated by GESDA
Results	<ul style="list-style-type: none">• Creation of the Impact Forum and Citizens Forum is announced at the 2022 Summit• 1st UCT-GESDA Youth Anticipation initiative (Cape Town in July)• 1st Science Diplomacy Week with an immersion program and open forum among partners in Geneva and worldwide• Add monitoring to taking the pulse of society
	<ul style="list-style-type: none">• GESDA announces the incubation of the first two initiatives from a pipeline of 8 solution ideas:• Open Quantum Institute (OQI)• Global Curriculum on Science and Diplomacy• By the end of the year, GESDA had received support letters for the OQI from over 30 organizations, institutions, companies, and foundations, and from 12 nations' permanent missions in Geneva• The Global Curriculum on Science and Diplomacy gathers over 16 partners - and the number is growing
Benefits for the Founders	Mobilization of new funding for International Geneva Stronger collaboration with the Founders

	2023	2024
Objective	<ul style="list-style-type: none">• Complete incubation and feasibility study of Open Quantum Institute• Advance further initiatives• Support the setup of the Impact Forum	<ul style="list-style-type: none">• Launch pilot phase of OQI• Launch Quantum Contest• Support operationalization of Impact Forum• Prepare for incubation of further initiatives
Results	<ul style="list-style-type: none">• Incubation and feasibility study of Open Quantum Institute completed and ready to launch 3-year pilot implementation phase as of March 2024 with CERN as host and UBS as supporting partner• Design of XPRIZE-GESDA Quantum Contest finalised, with Google as title sponsor secured in early March 2024.• Second Geneva Science Diplomacy Week• Africa Youth Anticipation Initiative with three winners participating in the 2023 Summit• Collaboration with the UN High Commissioner for Human Rights to mark the 75th anniversary of the Universal Declaration of Human Rights (UDHR) establishing a human right to science• Assessment of a collaboration with the World Meteorological Organisation to develop a business model for its Global Greenhouse Gas Watch (G3W) <ul style="list-style-type: none">• Impact Forum formally launched on Oct. 13 with 10 high-level executives in the private sector and philanthropy• CHF 47.2 million* public and private funding secured in 2023 for 2023-2027<ul style="list-style-type: none">• CHF 17 million public funding for 2023-2027• CHF 30.2 million* private funding 2023-2027:<ul style="list-style-type: none">• CHF 5 million from Geneva-based funders• CHF 9.2 million from Swiss-based funders• CHF 16 million* from international funders <p>* incl. USD \$ 5 million for the XPRIZE-GESDA Quantum Contest</p>	<ul style="list-style-type: none">• Successful launch of OQI and transition from GESDA to CERN assuring an effective functioning within the new host institution• Development of an effective partnership with UBS as lead partner of the OQI• Successful launch and implementation of Quantum Contest in collaboration Xprize and Google• Design of Anticipation Gateway Initiative completed and ready for incubation phase of its three elements:<ul style="list-style-type: none">• Geneva Public Portal to Anticipation• Global Curriculum for Anticipatory Leadership• Anticipation Observatory <p>Core funding Allocated to the Radar, Summit, Fora activities, GESDA operations etc. Sources: Swiss and Geneva governments, philanthropic donations</p> <ul style="list-style-type: none">• 2019-2022: CHF 7.6m (3.6m public and 4m private)• 2023-2027: CHF 42m raised so far (17m public and 25m private) <p>Project-based funding Allocated to GESDA-generated science diplomacy initiatives: OQI, Anticipation Gateway Initiative, etc. Sources: philanthropic donations</p> <ul style="list-style-type: none">• 2019-2022: CHF 2.4m private• 2023-2027: CHF 20m private funds raised so far <p>Out of the CHF 72,1 Mio raised so far from 2019 - 2024, 27% come from the public sector and 73% from the private sector.</p>
Benefits for the Founders	Mobilization of substantial new funding sources for International Geneva, more than 80% of it from institutions not typically investing in science diplomacy and International Geneva.	

Global visibility and integration of citizens voices

	2019 - 2020	2021
Objective	<p>Objectives:</p> <ul style="list-style-type: none">• Create an environment enabling GESDA's visibility and integration within the International Geneva landscape• Initiate activities toward reviving the Human Right to Science (HRS)• Implement communication tools and platforms• Launch the first targeted events	<p>Objectives:</p> <ul style="list-style-type: none">• Strengthen GESDA's integration and visibility on the International Geneva landscape• Clarify the concept of anticipation in science diplomacy• Strengthen the visibility of GESDA's activities through communication around the GESDA Science Breakthrough Radar®• Establish partnerships with major stakeholders (Founders, UN, States, WEF)
Results	<ul style="list-style-type: none">• 1.000 followers on communication channels• Best Reads (weekly): 19 editions since August 2020 and 230 subscribers• Launch of GESDA website• Landing page launched on 9 December 2019, enhanced website online since 9 December 2020	<ul style="list-style-type: none">• 6.000 followers on communication channels, including:<ul style="list-style-type: none">• 3.586 followers on Twitter• 1.579 followers on LinkedIn• GESDA Best Reads: 36 editions in 2021 and 462 subscribers• The digital platform of the Radar totaled 5.612 unique visitors in the first 3 months after its launch in October
	<ul style="list-style-type: none">• One content partnership with Geneva Solutions digital news platform• Contributions to three reports and three events related to International Geneva:<ul style="list-style-type: none">• 100th Anniversary of the League of Nations (16 September 2019)• Geneva Day at WEF 2020• IHEID/ EPFL Data Summit 2025• Fondation pour Genève reports on health and the internet• Geneva Digital Atlas	<ul style="list-style-type: none">• Media partnerships with the SRG SSR Swiss Broadcasting Corporation, Geneva Solutions and Léman Bleu.• Media partnership with the European Broadcasting Union (EBU) through SRG SSR• Relaying partnership with Neo.Life
	<ul style="list-style-type: none">• One press conference 20 February 2019• One progress report 15 July 2020• Two press releases 9 December 2019 & 17 December 2020	<ul style="list-style-type: none">• Two press conferences 21 July & 7 October• 6 press releases 13 April, 19 July, 21 July, 1 October, 7 October and 8 October• 1.200 articles mentioning Geneva, Switzerland and GESDA in the press and on social media
Benefits for the Founders	Echo and amplify International Geneva's position as a thought leader in anticipatory science diplomacy Contribute to the visibility of Geneva in news outlets and social media	

	2022
Objective	Objectives: <ul style="list-style-type: none">Communicate the results of the pilot phase evaluation and of future perspectives in GESDA's developmentPublish the second edition of the Radar as a new annual reference tool for communities
Results	<ul style="list-style-type: none">10.000 followers on communication channels, including:<ul style="list-style-type: none">4.500 followers on Twitter with 740 tweets published, generating 350.000 views & 14.000 clicks or retweets)4.200 followers on LinkedIn with 363 posts generating 250.000 views, 5.500 clicks and 3.000 commentsGESDA Best Reads: 31 editions in 2022 and 500 subscribersThe digital platform of the Radar reached 15.000 new users in 2022 <ul style="list-style-type: none">In 2022, GESDA has been cited and promoted by key stakeholders:<ul style="list-style-type: none">November’s “UK Parliament Note” outlines GESDA's work on science diplomacyAt the 2022 Summit, Singapore’s Ministry of Foreign Affairs issued an official press release including the transcript of Foreign Minister Dr Vivian BalakrishnanHealth Policy Watch dedicated an in-depth article on dengue viral research, highlighting GESDA alongside WHO.The increasing participation at the summit, growing number of contributing scientists to the Radar, and the active interest in the OQI and Curriculum all underline a positive trend and growing interest in GESDA and its activities <ul style="list-style-type: none">One press conference 12 October 20226 press releases 12 January, 22 April, 22 September, 12 October, 14 October, 13 November163 press articles mentioning GESDA during the Summit
Benefits for the Founders	Echo and amplify International Geneva's position as a thought leader in anticipatory science diplomacy Contribute to the visibility of Geneva in news outlets and social media

	2023	2024
Objective	<ul style="list-style-type: none">Significant increase in awareness in Switzerland and worldwide based on anticipation among the four GESDA communities.	<ul style="list-style-type: none">Significant increase in awareness in Switzerland and worldwide based on anticipation among the four GESDA communities.
Results	<ul style="list-style-type: none">12.475 followers on communication channels, including:<ul style="list-style-type: none">5.102 followers on Twitter (X) (13.4 % growth compared to 2022)7.373 followers on LinkedIn (75.5 % growth compared to 2022)Launch of GESDA NEWS: 8 highly engaging newsletter editions in 2023 with a readership of more than 2.500 subscribers reflecting an extremely high open rate above 60 %.GESDA Science Breakthrough Radar® digital platform reaches 20.246 followers in 2023 <ul style="list-style-type: none">In 2023, GESDA cited and promoted by key stakeholders:<ul style="list-style-type: none">PASQAL will support GESDA's activities related to the Open Quantum Institute. PASQAL is a quantum company co-founded by Alain Aspect, winner of the 2022 Nobel Prize in Physics.The New York University Abu Dhabi signed an MoU with GESDA during the 11th edition of the NYUAD Hackathon for Social Good in the Arab World, May 2, 2023Sarah Al Amiri, Minister of State for Public Education and Advanced Technology and Chairwoman of Emirates Schools Establishment, led a UAE delegation to the Geneva Science and Diplomacy Anticipation Summit (GESDA), which took place from 11th-13th October, Emirates News Agency (WAM) October 18.Sarah Al-Amiri cited by the Handelszeitung, Oct. 19: I am here because the Swiss Foreign Minister invited me and because the connection between science and diplomacy is something we that we in the United Arab Emirates, believe in very strongly."...The Swiss Confederation has created original and important new instruments with the creation of the Geneva Internet Platform and GESDA." <ul style="list-style-type: none">1 press conference 13 October 20238 press releases <ul style="list-style-type: none">GESDA has advanced the design of an Anticipation Gateway that can serve as a unique public entry point to its work. The first installation to demonstrate this concept will be included in the Swiss Pavilion at World Expo 2025 in Osaka, Japan.	<ul style="list-style-type: none">16.130 followers on communication channels, including:<ul style="list-style-type: none">5.429 followers on Twitter (X) (7 % growth compared to 2023)10.701 followers on LinkedIn (33 % growth compared to 2023)GESDA NEWS: 10 highly engaging newsletter editions in 2024 with a readership of more than 2.400 subscribers reflecting an extremely high open rate of 60 %.GESDA Science Breakthrough Radar® digital platform reached out to 9.959 new users from 141 countries. Since radar 2021, we have reached out to 51.233 readers from 185 countries. <ul style="list-style-type: none">In 2024 GESDA cited and promoted by key stakeholders Ignazio Cassis, Swiss minister of foreign affairs emphasized GESDA's role in fostering collaboration: "The Geneva Science and Diplomacy Anticipator (GESDA) brings people together and will be the main theme of the next decade in international Geneva."Swissinfo, The Geneva Science and Diplomacy Anticipator (GESDA), an NGO set up to spot the next generation of scientific advances, is embarking on a new stage to confront the global public with the scientific challenges of the future.Christina Kitsos, Mayor of Geneva, “Geneva is proud to be an active supporter of GESDA's activities. GESDA's great strength lies, of course, in its ability to bring together panels of experts and their respective fields, to encourage exchanges, enrich the cross-fertilisation of views and bring together scientists, diplomats and decision-makers.Alexandre Fasel, Swiss Secretary of State, recalled that GESDA began in a conversation between the Swiss federal government and the Geneva authorities about the future of international governance and international Geneva. They saw that the international community was failing to consider the acceleration of science and technology fully, and probably lacked an instrument to do so. What came next was GESDA. <ul style="list-style-type: none">1 press conference 11 October 202411 press releases <ul style="list-style-type: none">GESDA launched during the Summit 2024 the Anticipation Gateway initiative. As part of this initiative, the finally designed Geneva Public Portal to Anticipation, will be displayed from April to October 2025 in the Swiss Pavilion at World Expo 2025 in Osaka. Visitors, with the help of generative AI, will be able to create fictional futures based on their inputs and science trends from the Radar projected over the next five, 10, and 25 years.
Benefits for the Founders	Reinforce and amplify International Geneva's position and visibility as a thought leader in anticipatory science diplomacy	

Outlook of GESDA’s Meetings with Diplomacy Community Stakeholders in 2024

02/02/24	Meeting with the Director of UNICC
07/02/24	Meeting with the Permanent Mission of Brazil
16/02/24	Meeting with the UN Commissioner Maher Nassar
16/02/24	Meeting with the Permanent Mission of Chile
19/02/24	Meeting with the Ministry of Foreign Affairs UAE, Chief Scientist
21/02/24	Meeting with the Permanent Mission of Greece
22/02/24	Meeting with the Permanent Mission of the HolySee
23/02/24	Meeting with the UK Gov. Senior Scientific Advisors
27/02/24	Event with FMSTAN chaired by USA State Dpt Chief Scientist
29/02/24	Meeting with the FDFA Director for Security
07/03/24	Meeting with the Senate of Chile (President of the Futures Commission)
07/03/24	Meeting with the Permanent Mission of China
11/03/24	Meeting with the Embassy of Switzerland in Madrid
12/03/24	Meeting with UNSG HLAB on AI
14/03/24	Meeting with the Permanent Mission of India
26/03/24	Meeting with the Permanent Mission of France
26/03/24	Council of Innovation, Science and Tech Chile CTCI
27/03/24	Meeting with the Permanent Mission of Pakistan
28/03/24	Meeting with the Permanent Mission of India
28/03/24	Meeting with the Permanent Mission of Chile
08/04/24	UNSG HL SAB
09/04/24	Meeting with the Diplomatic Club - ICRC Director General
11/04/24	Meeting with UNDRR
15/04/24	Meeting with the Permanent Mission of Kenya
15/04/24	Meeting with the Diplo Foundation
16/04/24	Meeting with UNIDIR
17/04/24	Meeting with the Permanent Mission of Slovenia to UNHQ
18/04/24	Visit of FAO DG to GESDA
19/04/24	Meeting with the FDFA Office UN Division
22/04/24	Meeting with the Ministry of Foreign Affairs of Chile
24/04/24	Meeting with the Permanent Mission of Pakistan
24/04/24	Meeting with the Permanent Mission of the Holy See
30/04/24	OQI DEEG kick off meeting 2024
01/05/24	Meeting with FAO
06/05/24	Meeting with the Permanent Mission of Kenya
07/05/24	HILAB AI
08/05/24	Meeting with the Permanent Mission of Austria
16/05/24	Meeting with UNSG EXO
17/05/24	Meeting with UNSG EXO

17/05/24	Meeting with the Permanent Mission of Namibia to UNHQ
17/05/24	Meeting with the Permanent Mission of Germany to UNHQ
17/05/24	Meeting with the Permanent Mission of Slovenia to UNHQ
17/05/24	Meeting with the Permanent Mission of Ecuador to UNHQ
21/05/24	Meeting with AIAB
22/05/24	Meeting with the Office for National Security of Thailand
22/05/24	Meeting with the Permanent Mission of Pakistan
24/05/24	Meeting with UNIDIR (2024 Innovations Dialogue Partnership with GESDA)
27/05/24	Meeting with the Ministry of Foreign Affairs Mexico Envoy for Science Diplomacy
27/05/24	Meeting with the Ministry of Artificial Intelligence Slovenia
27/05/24	Meeting with FAO
28/05/24	Meeting with the Ministry of Foreign Affairs Austria
30/05/24	Meeting with UNU
31/05/24	Meeting with GRULAC Ambassadors
04/06/24	Meeting with the Permanent Mission of the Netherlands
10/06/24	Meeting with the Ministry of Foreign Affairs of Slovenia
17/06/24	GESDA Quantum Diplomacy Symposium
25/06/24	Meeting with the Permanent Mission of Turkey - Consul General
04/07/24	Meeting with the Permanent Mission of Indonesia
04/07/24	Meeting with the Permanent Mission of Thailand
04/07/24	Meeting with UNICEF
18/07/24	Meeting with the Permanent Mission of Mexico
23/07/24	Meeting with the Permanent Mission of Kenya
29/07/24	Meeting with the Permanent Mission of Pakistan
30/07/24	Meeting with the Permanent Mission of Singapore
23/08/24	BWC Youth for Biosecurity Fellows
23/08/24	Meeting with the Permanent Mission of Switzerland
26/08/24	Meeting with the Permanent Mission of Greece
27/08/24	Meeting with the Permanent Mission of Nigeria
28/08/24	Meeting with the Ministry of Foreign Affairs of the UAE
29/08/24	Meeting with UNIDIR (Innovations Dialogue partnership)
03/09/24	Meeting with the Ministry of Foreign Affairs of Slovenia
10/09/24	Meeting with ITU
13/09/24	Meeting with UNIDIR (Innovations Dialogue partnership)
16/09/24	Meeting with the Permanent Mission of Jordan
17/09/24	Meeting with the FDFA in preparation for the GESDA Summit 2024
25/09/24	Meeting with the Permanent Mission of Brazil
27/09/24	Meeting with the FDFA in preparation for the GESDA Summit 2024
30/09/24	Meeting with the Permanent Mission of India

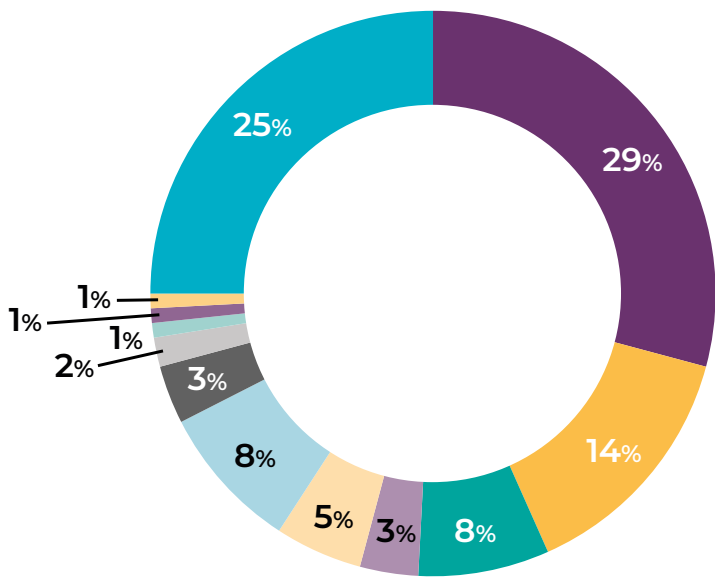
02/10/24	Meeting with FMSTAN
03/10/24	Meeting with the Ministry of foreign affairs of Chile
03/10/24	Meeting with the Permanent Mission of Mexico
03/10/24	Meeting with the FDFA in preparation for the GESDA Summit 2024
07/10/24	Meeting with the Permanent Mission of India
14/10/24	Meeting with the Permanent Mission of Mexico
15/10/24	Meeting with the Permanent Missions of Lithuania and Mexico
15/10/24	Meeting with the Permanent Mission of China
16/10/24	Meeting with the Permanent Mission of Finland
23/10/24	Meeting with the Permanent Mission of Mexico
28/10/24	Meeting with the Permanent Missions of Lithuania and Mexico
04/11/24	Meeting with the Swiss Embassy in Chile
06/11/24	Meeting with the Diplo Foundation
07/11/24	Meeting with GSCP
13/11/24	Congreso Hispano-Suizo
18/11/24	Meeting with the Permanent Mission of El Salvador
18/11/24	Meeting with UN Habitat
21/11/24	Meeting with the Permanent Mission of the Republic of Korea
22/11/24	Meeting with the Permanent Mission of Turkey
26/11/24	Meeting with the Permanent Mission of France
26/11/24	Meeting with the Permanent Mission of Lithuania
26/11/24	Meeting with the FDFA for a review session of the GESDA Summit 2024
27/11/24	Meeting with ITU
29/11/24	Meeting with the Permanent Mission of Chile
02/12/24	Meeting with the Permanent Mission of Mexico
02/12/24	Meeting with the Permanent Mission of Malta
02/12/24	Meeting with the Ministry of Science, Technology and Innovation of Chile
03/12/24	Meeting with the Permanent Mission of the United Kingdom
03/12/24	Meeting with the Permanent Mission of France
04/12/24	Meeting with the Permanent Mission of Switzerland
05/12/24	Meeting with the Geneva Water Hub
09/12/24	Meeting with the Permanent Mission of Mexico
10/12/24	Meeting with WIPO
12/12/24	Meeting with the Permanent Mission of Mexico
16/12/24	Meeting with the Permanent Mission of Greece
16/12/24	Meeting with the Permanent Mission of India
17/12/24	Meeting with the Office of the Principal Scientific Advisor to the Govnt India
18/12/24	Meeting with ILO
18/12/24	Meeting with ITU
19/12/24	Meeting with the Permanent Mission of Switzerland

GESDA media analysis

From January to October, 645 articles were published on GESDA, compared to 299 articles in the same period in 2023. This was mainly due to the strong coverage of the launch of the Open Quantum Institute and the XPRIZE-Google-GESDA Quantum Applications Contest in March 2024.

The GESDA 2024 Summit attracted substantial media attention, with 122 articles highlighting the event. Building on a media campaign with the Financial Times, NZZ and Le Temps, major media outlets supported the summit significantly.

The summit reached an impressive **287 million people**, twice the audience size of the previous (143 million).



- GESDA Summit presentation
- Ignazio Cassis, Swiss Federal Councillor, at the GESDA Summit
- The Gesda Science Breakthrough Radar identifies trends in global science
- Barbara Sherwood Lollar, Canadian biogeochemist, at the GESDA Summit
- Enrico Letta, GESDA Board Member, at the GESDA Summit
- Peter Brabeck-Letmathe, Chairman of GESDA, at the GESDA Summit
- Michael Hengartner, GESDA Board Member, at the GESDA Summit
- Benedetto Marelli, associate professor at the Massachusetts Institute of Technology, at the GESDA Summit
- Vera Gorbunova, Professor of Biology at the University of Rochester, at the GESDA Summit
- Quantum computers in the fight against water waste
- Rethinking Intellectual Property Rights In The Age Of AI
- Articles that mention the GESDA Summit marginally

Top coverage:

- The publisher's supplements, created in partnership with NZZ in both English and German**—with the French edition featured in Le Temps and receiving high visibility in the Financial Times—have made a substantial media impact, reaching around 200.000 people. These publications provide a comprehensive preview of the planned GESDA Summit activities, building excitement in advance of the summit's opening.
- SDA / ATS - GESDA Summit presentation**
This topic, serving as a general presentation and announcement of the summit, was covered by 33 different publishers. The ATS story was picked up by 11 additional Swiss media outlets, while the English version of the SDA was featured by only 2.
- NZZ - Ignazio Cassis, Swiss Federal Councillor, at the GESDA Summit**
Ignazio Cassis' presence at the Summit was reported by a total of 16 sources.
- Le Temps - The Gesda Science Breakthrough Radar identifies trends in global science**
GESDA's analysis of the Science Breakthrough Radar was featured by 8 other different media outlets, such as Neue Zürcher Zeitung and Financial Times.
- RTS - Enrico Letta, member GESDA in interview**
A 13-minute segment on RTS's La Matinale features Enrico Letta. This segment was also broadcasted on RTS Audio.
- NZZ - Peter Brabeck-Letmathe, President of the GESDA Board of Trustees, at the GESDA Summit**
Peter Brabeck-Letmathe's statements were reported by four different outlets, including Le Temps and ATS.
- NZZ - Michael Hengartner, chairman of the GESDA academic committee, at the GESDA Summit**
Michael Hengartner's interviews were featured in three Swiss media outlets, including Geneva Solutions and Le Temps.
- An article by NZZ discusses new technologies that enable the detection and sustainable repair of water pipe leaks, while The Innovator covered a panel discussion at the GESDA Summit titled "The Great Scientific Acceleration," which addressed the issue of intellectual property.
- Other notable articles include interviews with Barbara Sherwood Lollar and Vera Gorbunova in Le Temps, a research by Benedetto Marelli, and coverage of the Latvian Minister's presence at the summit.
- Several articles mentioned the event in passing, such as those focusing on Enrico Letta, comprising 20% of the total coverage.



Monday 7 October 2024

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Geneva Science and Diplomacy Anticipation Foundation

Use the future to build the present

The Geneva Science and Diplomacy Anticipation (GESDA), established by Switzerland for the world, is a foundation created to prepare leaders and citizens for a world of rapid and accelerating change. It does so by anticipating scientific and technological developments that could have a significant impact on humans, politics and economics over the next five, 10 and 25 years. As a think and do tank, its mission is to work with all actors from academia, diplomacy, business and society to ensure the opportunities of science benefit everyone.

Discover the GESDA 2024 Science Breakthrough Radar®
8 anticipated scientific trends which will change your life

Living longer

New approaches to genetic modification will allow us to make extremely precise changes that offer lifespan extension. The emerging fields of epigenome editing and metagenomics, which can provide a complete profile of all of the diverse organisms in a given microbiome, will take this further, allowing fine-tuned optimisation of environmental and symbiotic factors for a longer, healthier life.

Eco-augmentation

Advances in our understanding of the mechanisms of evolution and life are allowing us to deliberately and strategically modify nature and thus develop more robust and sustainable social-ecological systems. This increasing ability to modify or invent ecosystems will redefine the future relationship between humankind and the environment.

Neuro-augmentation

Advances in neurotechnology such as brain-machine interfaces or genetically-engineered brains mean that it's now possible to augment missing or damaged sensory inputs to the brain – or even enhance specific aspects, such as attention, empathy and memory. Such innovations may transform healthcare and personal well-being but raise fundamental questions for humanity and society.

Unconventional computing

It's all change for computers as our expectations of what they are and what they will be able to do are reshaped by advances in quantum computing, computers that operate with light rather than electrons, and "neuromorphic" machines which seek to emulate the power, flexibility and efficiency of the human brain.

Space-based R&D

From discovering new drug compounds to improving semiconductors, researchers are harnessing the unique properties of space – such as microgravity, radiation and a continuous near-vacuum – to create products with exceptional properties not found on Earth. However, the recent increase in space-based infrastructure is intensifying the need to peacefully manage our orbital environment.

Datafication of society

New technologies, such as AI, and new sources of data are making it possible to model group behaviour that had previously been estimated or assumed. These better models of social behaviour and interactions will allow us to understand how conflict, polarisation and extremism arise – and develop targeted interventions to defuse dangerous situations before they ignite.

Redefining archaeology

Significant advances in molecular-level analyses of archaeological remains are allowing us to detail the biology and behaviours of our ancestors, as well as the history of our environment, climate and societies. Such unparalleled insights into our past will have revelatory implications for our understanding of our present and future.

Redesigning life

Precision tools for editing and engineering biological systems are enabling the modification of organisms in fundamental and enduring ways, or the creation of entirely new life forms. The development of cheap, off-the-shelf kits for designing biology from scratch will create huge opportunities but also raise questions of how such powerful technology will be regulated.

Join us for the Geneva Science and Diplomacy Anticipation Summit
From 9-11 October under the theme of the "Great Scientific Acceleration"

You can follow the full summit programme on our live stream channel. Key sessions include:

- The launch of the GESDA 2024 Science Breakthrough Radar®, showcasing 8 anticipatory briefings on future scientific advancements.
- Geneva Political Talks on the importance of democratising access to knowledge about emerging science.
- Insights on the Open Quantum Institute's progress and future plans.
- Discussions on Human Augmentation, Eco Augmentation, Data Augmentation and Knowledge Augmentation.

Fondation Campus Biotech | Chemin des Mines 9 | 1202 Geneva | communication@gesda.global
Sponsored by the Fondation Hippomène

www.gesda.global

LE TEMPS

Découvrez huit percées scientifiques qui changeront vos vies

Le Gesda Science Breakthrough Radar® 2024 identifie et anticipe les principales tendances de la science mondiale dans cinq domaines clés. Décryptage



NZZ

Für die Zukunft braucht es schon heute einen klaren Rahmen

Michael Hengartner ist Vorsitzender des akademischen GESDA-Ausschusses. Der Präsident des ETH-Rats und ehemalige Rektor der Universität Zürich im Interview über den Sinn von Voraussagen und mögliche Zukunftsszenarien.



gesda

LE TEMPS

Vera Gorbunova: «Les êtres vivants n'obéissent pas tous aux règles du vieillissement»

Professeure de biologie à l'Université de Rochester, Vera Gorbunova explore les mystères de la longévité. Dans cet entretien, elle évoque l'état de la recherche et dévoile les secrets de l'hétérocephale, encore appelé «rat-taupo»



NZZ

Wie GESDA die Zukunft der Wissenschaft erforscht und erklärt: Der Science Breakthrough Radar®

Der Science Breakthrough Radar ist ein einzigartiges Instrument zur Antizipation wissenschaftlicher Durchbrüche und technologischer Entwicklungen für eine faire Gestaltung der Welt von morgen. Ein Überblick.



Insgesamt 2100 Wissenschaftler weltweit tragen zum GESDA-Radar bei.

NZZ

Für eine vorausschauende Wissenschaftsdiplomatie – ein Kommentar von Ignazio Cassis

Aussenminister Ignazio Cassis erklärt, warum das in Genf gegründete Open Quantum Institute ein Meilenstein für Zukunftstechnologien ist.



Bundesrat Ignazio Cassis am GESDA Summit 2023.

NZZ

Quantencomputer im Kampf gegen Wasserverschwendung

Neue Technologien ermöglichen die Aufspürung und nachhaltige Reparatur von Lecks in Wasserleitungen. Und könnten so zur Bekämpfung von Armut beitragen.



RFJ

Le GESDA entame une nouvelle étape vers un public mondial



SUISSE

LA LIBERTÉ

Alimentation. Prolonger la durée de conservation des aliments avec de la soie? C'est le pari d'un chercheur

En enveloppant des fruits et des légumes d'une membrane faite de soie comestible, le professeur Benedetto Marelli permet de maintenir leur fraîcheur plus longtemps et de réduire ainsi le gaspillage alimentaire.



NZZ

Ein Wegweiser für die Zukunft der Wissenschaft: 8 Trends aus dem Science Breakthrough Radar® 2024

Als internationales Gemeinschaftsprojekt fasst der Science Breakthrough Radar der GESDA die wichtigsten Forschungstrends weltweit in fünf Schlüsselbereichen zusammen. Ziel ist, Entscheidungsträger, Diplomaten und die Öffentlichkeit über die Möglichkeiten und Auswirkungen neuer Technologien zu informieren und ihr Verständnis dafür zu fördern. Acht Trends aus Wissenschaft und Forschung, die unser Leben in Zukunft verändern werden.



TheInnovator

Key Takeaways From The 2024 GESDA Summit

6 days ago • by Jennifer L. Schenker • 10 min read



Written by Jennifer L. Schenker

NZZ

Die Stiftung GESDA: «Die Zukunft voraussehen, um die Gegenwart zu gestalten»

Geneva Science and Diplomacy Anticipator (GESDA) antizipiert wissenschaftliche Durchbrüche für eine verantwortungsvolle Zukunftsgestaltung. Ein Gastbeitrag von Stiftungspräsident Peter Brabeck-Letmathe und Vizepräsident Patrick Aebischer.



TheInnovator

Rethinking Intellectual Property Rights In The Age Of AI

2 weeks ago • by Jennifer L. Schenker • 10 min read



Written by Jennifer L. Schenker

LE TEMPS

«Avec la découverte de nouvelles formes de vie, notre travail a élargi le concept d'habitabilité d'une planète»

La canadienne Barbara Sherwood Lollar est une spécialiste de l'eau dans les entrailles de la Terre, à des kilomètres de profondeur. Ces fluides abritent des micro-organismes étonnants. Mieux les connaître pourrait aider à identifier la vie sur d'autres planètes.



RTS

Enrico Letta: "Nous avons été dépassés par les Américains et les Chinois sur l'innovation"



L'invité de La Matinale - Enrico Letta, membre du Geneva Science and Diplomacy Anticipator (GESDA) / La Matinale / 13 min. / vendredi à 07:00

GESDA presence in Social Media

In 2024, GESDA has been scaling up its digital communication approach to build its brand as a leading international organization in science anticipation and diplomacy. GESDA's social media platforms are now the main entry point to easy-to-digest and up-to-date information related to GESDA and its work.

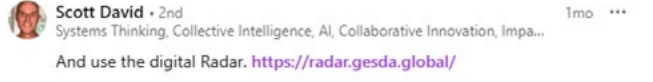
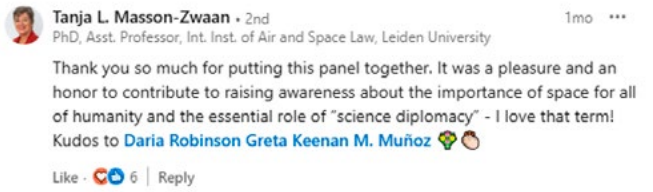
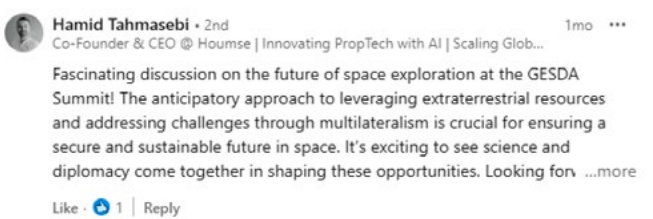
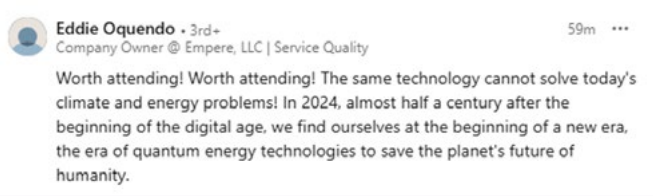
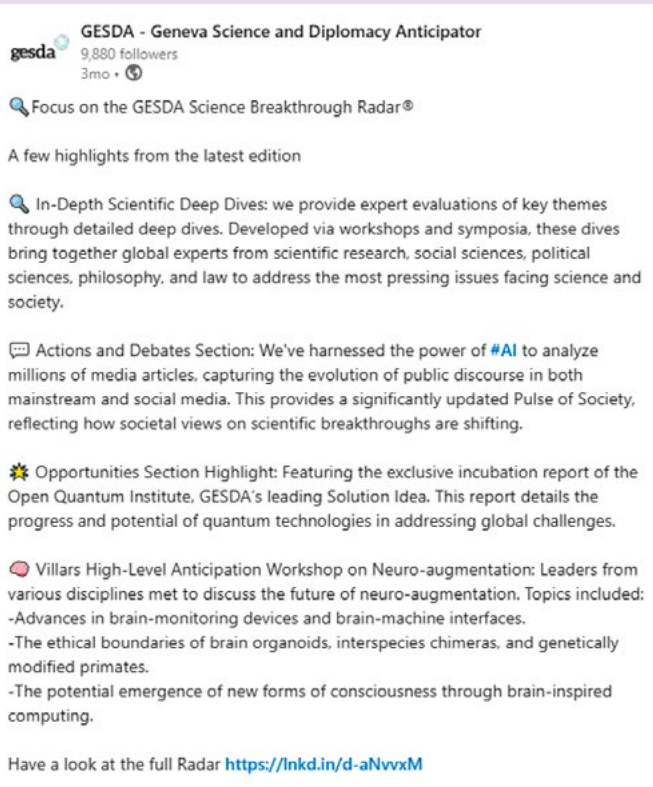
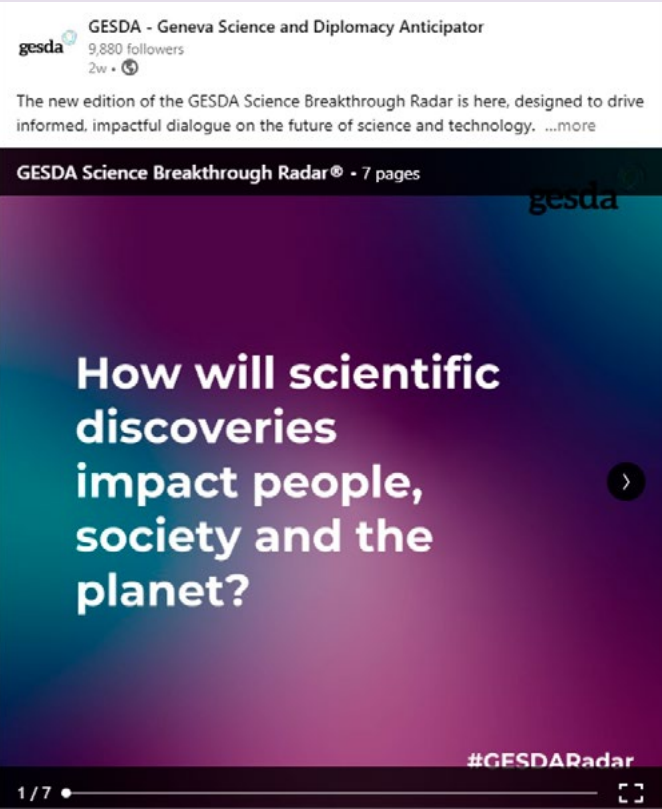
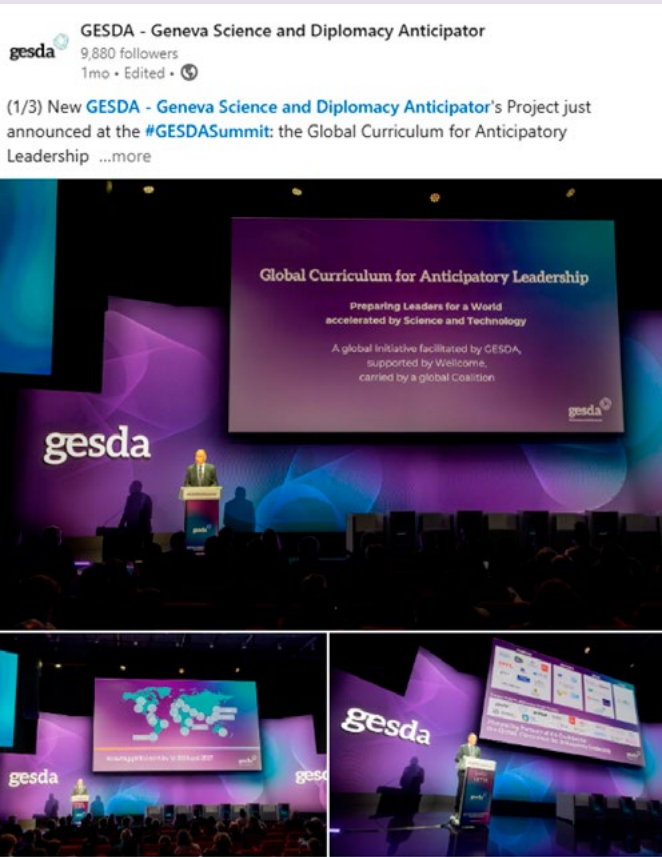
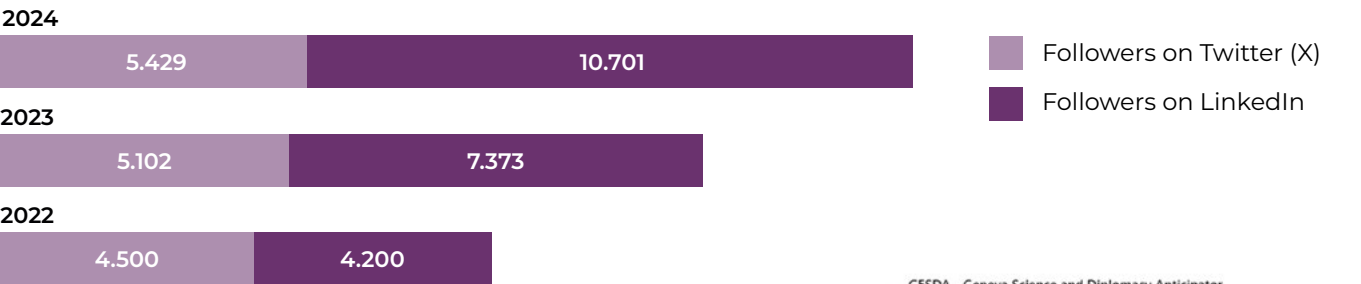
16.130 followers on communication channels, including:
5.429 followers on Twitter (X) (7 % growth compared to 2023)
10.701 followers on LinkedIn (33 % growth compared to 2023)

Branded Content – Through branded visual communication and consistent key messages, GESDA built its unique voice and recognizable brand

Digital Launches – On its digital platforms, GESDA has launched the three projects part of the new “Gateway Initiative”

Unpacking Complex Information – Through visual communication, GESDA made complex information available to the larger public

Fostering Conversations – GESDA is increasing its efforts in engaging with experts, researchers and the public on the topics of anticipation, and science and diplomacy



GESDA News: an original publication for keeping up with GESDA's activities

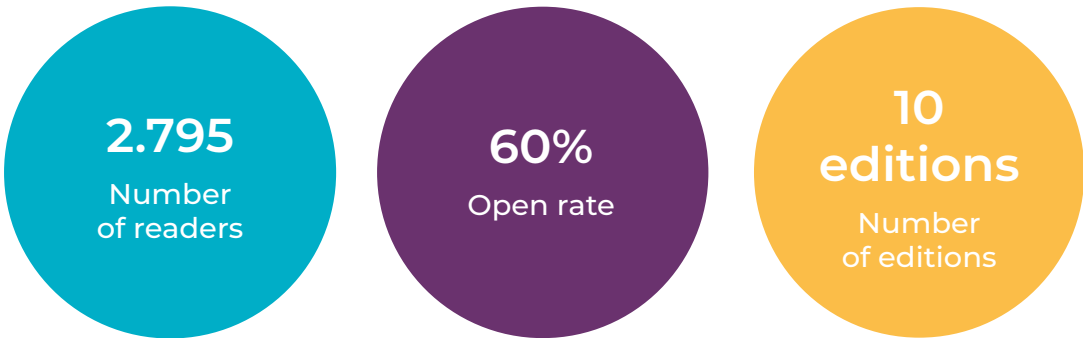
Some 2.500 readers follow GESDA's monthly news in the GESDA News newsletter. It provides valuable information on GESDA's work and audience. Producing original and timely reports as well as information on the latest events, the newsletter has achieved an open rate of over 60% and has reached audiences on 5 continents, particularly in the USA, Switzerland, the UK and the rest of Europe. The highlight of each edition is an article based on the information available in the GESDA Science Breakthrough Radar®. This scientific data is treated in a journalistic manner and supplemented with topical information.


GESDA news - 2024 Trend


The March issue was the most widely read last year, with over 2.795 readers:

- 2.182 readers in the US
- 530 readers in Switzerland
- 83 readers in the UK

These three countries are consistently among the most interested. Sweden, Germany, France and Spain follow.




HOT OFF THE PRESS




The (133-Page) Proceedings of the 2023 Geneva Science and Diplomacy Anticipation Summit Has Arrived!


Dive into the Proceedings to discover or re-live the expert-led sessions from the 2023 GESDA Summit in Geneva, held for the first time at CERN last October.

A total of 23 sessions, two open events and three side events were held. The four main objectives of the summit were to advance science anticipation, diplomacy acceleration, impact translation and political assessment.

It drew a diverse crowd to Switzerland from across five continents and four communities: academic, citizen (including youth), diplomatic and impact.

Newsletter March


HOT OFF THE PRESS



GESDA Summit previewed in the Financial Times and Switzerland's leading Neue Zürcher Zeitung and Le Temps newspapers

Read all about it!

A publisher's supplement published in the NZZ and Le Temps coincides with the opening of the 2024 GESDA Anticipation Summit, preceded on October 7 by a one-page Financial Times ad thanks to the support of the Fondation Hippocrène.

The "Future of Science" eight-page supplement features a message from GESDA Chairman Peter Brabeck-Letmathe and Patrick Aebischer, vice-chairman of GESDA's Board of Directors, along with an op-ed by Swiss Federal Councilor Ignazio Cassis, head of Switzerland's Federal Department of Foreign Affairs.

Newsletter October


COMING UP




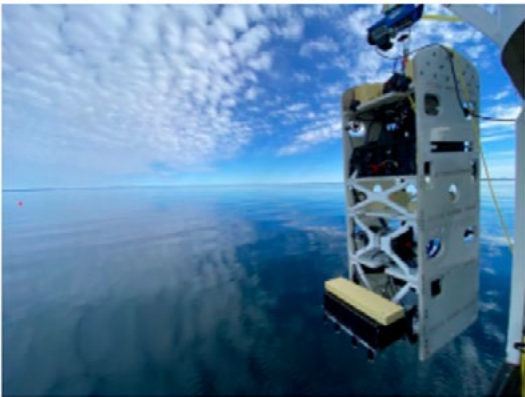
'Navigating geopolitical waters of change 2025'

Anticipation and geopolitics: Three well-known figures, invited by the Julius Bär bank, will debate geopolitics, politics, and the economy under the theme, 'Navigating Geopolitical Waters of Change 2025', on November 12th in Geneva.

Tina Fordham, co-founder of Fordham Global Foresight, Børge Brende, president of the World Economic Forum, and Peter Brabeck-Letmathe, chairman of GESDA, will each outline their vision of tomorrow's world, including their thoughts on the 2024 United States elections held on November 5th.

Newsletter November


SPOTLIGHT ON GESDA SCIENCE BREAKTHROUGH RADAR



Impossible Metals demonstrates its Eureka 1 autonomous underwater vehicle

Asteroids to Seabeds: Does Sustainability Need More Exotic Mining?

Nations, businesses and entrepreneurs are looking up to space and down to the ocean floor to obtain the minerals and rare earth elements that will be needed to complete our battery-powered transition to greener economies.

The 2023 Science Breakthrough Radar® anticipates that asteroid resources, including minerals, metals and water, will someday be useful for off-world activities such as space manufacturing, settlements on the Moon or Mars, or refueling for long-duration space missions to the Outer Solar System.

Newsletter February

6.1. Governance

Governance Structure

The Geneva Science Diplomacy Anticipator (GESDA) Foundation is an independent, private, not-for-profit foundation governed by Swiss law with its headquarters in Geneva.

GESDA was jointly founded by the Swiss and Geneva cantonal governments in close collaboration with the City of Geneva.

Initially established in September 2019 for a pilot phase of three years, the Foundation's statutes were amended on April 22 2022 by the Board of Directors to extend its operations for 10 years (Sept. 2022 to Sept. 2032). The amended Statutes were approved by the Swiss Federal Authority Supervising Foundations on Aug. 26 2022.



The Foundation is governed by the Foundation's Board of Directors (BoD), which serves as its top decision-making body.

- The BoD is chaired by a President (Chairman) and Vice-President (Vice-Chairman), both of whom are appointed by mutual agreement between the founders.
- At least one member is appointed by the Swiss Foreign Minister with a formal decision of the Swiss government.
- At least one member is appointed by the Geneva cantonal government with the City of Geneva.
- The Secretary General is a member of the Board of Directors.

The Foundation Board is supported in its work by the General Secretariat of the Board.

The Foundation Board can delegate the daily supervision of the Foundation's affairs to a Board Committee: The Chairman's Committee, which consists of the Chairman and Vice-Chairman of the Foundation Board, the Secretary General, the chairs of the Fora, and the Chief Executive Officer.

The Board and the CEO are supported and advised by the Fora and thematic expert groups. The Fora are generally chaired by a member of the Board. There are four fora: Academic, Diplomatic, Impact and Citizens.

The Foundation Board has appointed an Executive Team, under the leadership of the Chief Executive Officer. The Executive Team implements the strategy and ensures GESDA's global operation.

Task Forces for Solution Ideas and Advisory Board to the GESDA Science Breakthrough Radar®

As GESDA rolls out its design and incubation of solution ideas, it sets up Expert Task Forces and Advisory Committees to implement them.

A small group of scientists constitute the Advisory Board to the Radar and supports the integration of the scientific content into the Radar.

Working groups can also provide expertise and guidance to the Board and Executive Team. The fora, advisory board and task forces are critical components of GESDA's governance but are not decision-making bodies from a statutory perspective.

2024 from a governance perspective

19 February	Chairman's Committee Meeting
10-11 June	Board Meeting
23 August	Chairman's Committee Meeting
8-9 October	Board Meeting
6 December	Chairman's Committee Meeting
6 December	Board Meeting

Second year of GESDA's scale-up phase completed

From a governance and operations perspective, 2024 was pivotal in setting up GESDA for the scale-up phase. Many changes have already been implemented. GESDA's structure and organisation, however, will keep evolving with its strategy over the next decade.

GESDA Foundation Board of Directors as of the end of 2024



Peter Brabeck-Letmathe
Chairman of GESDA



Patrick Aebischer
Vice Chairman of GESDA



Micheline Calmy-Rey
Former President of the Swiss Confederation / Member of the Council of the Global Leadership Foundation



Stéphane Decoutère
Secretary General of the Board of Directors of GESDA



Henrietta H. Fore
Chair and CEO of Holsman International



Urs Gasser
Dean TUM School of Social Sciences and Technology



Michael Hengartner
President of ETH Board



Enrico Letta
Dean of IE School of Politics, Economics and Global Affairs



Michael Møller
Former Director General UN at Geneva



John-Arne Røttingen
Chief Executive Officer (CEO) of the Wellcome Trust



Anton Rupert
Non-executive Director at Richemont



Lindiwe Majele Sibanda
Director and Chairwoman, African Research Universities Alliance Centre of Excellence in Sustainable Food Systems (ARUA-SFS)








Eng Chye Tan
Professor and President of the National University of Singapore (NUS).

GESDA Fora and their Chairs

Academic Forum	Diplomacy Forum	Impact Forum	Citizen Forum
 <p>Michael Hengartner President of the Board of the Swiss Federal Institutes of Technology (ETH Board) Zurich/ Bern.</p>	 <p>Enrico Letta Dean of IE School of Politics, Economics and Global Affairs.</p>	 <p>Patrick Aebischer Professor of Neuroscience; former President of the Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland.</p>	 <p>Henrietta H. Fore Chair and CEO of Holsman International.</p>

Advisory Board to the GESDA Science Breakthrough Radar®

 <p>Sir Peter Gluckman Chair of the International Network of Government Science Advice (INGSA) and president of the International Science Council (ISC).</p>	 <p>Michael Hengartner President of the Board of the Swiss Federal Institutes of Technology (ETH Board) Zurich/ Bern.</p>	 <p>Michel Mayor Representative of the Fondation pour Genève, Professor Emeritus and 2019 Physics Nobel Prize Laureate University of Geneva.</p>
 <p>Marie-Laure Salles Director of the Graduate Institute of International and Development Studies.</p>	 <p>Michael Schaepman President, University of Zurich.</p>	

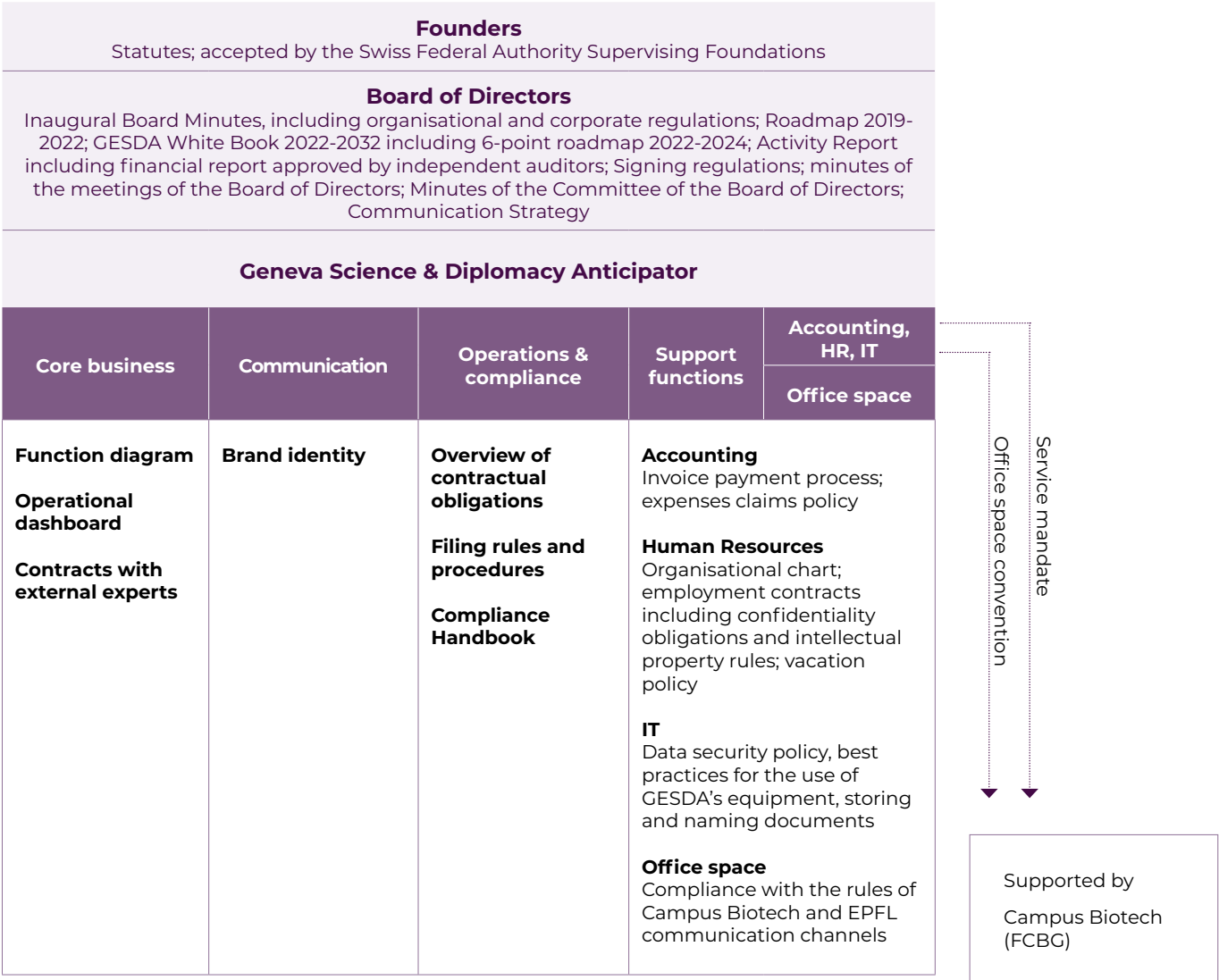
GESDA TEAM, as of end of 2024

By end of 2024, the team consisted of 25 members.

 <p>Sandro Giuliani Chief Executive Officer (CEO)</p>	 <p>Esther Cappelli Communications and Digital Content Manager</p>	 <p>Jean-Marc Crevoisier Director, Communications and Marketing</p>	 <p>Federica Du Pasquier Program Lead, Future of Peace and War</p>	 <p>Gerard Escher Senior Advisor</p>
 <p>Estelle Fontaine Stakeholder Engagement Lead</p>	 <p>Claudia Freymond Project Manager, Solution Accelerator</p>	 <p>Florent Gaillard Program Manager, Anticipation Observatory</p>	 <p>Sophie Gilbert Program Lead, GESDA Science Breakthrough Radar ®</p>	 <p>Marga Gual-Soler Head of Science Diplomacy Capacity Building</p>
 <p>Alice Hazelton Director Events and Communications</p>	 <p>Marieke Hood Executive Director Impact Translator</p>	 <p>Greta Keenan Head of Summit</p>	 <p>Catherine Lefebvre Senior Advisor for the Open Quantum Institute</p>	 <p>Brigida Melillo Intern, Impact Translator</p>
 <p>Laurent Mentek Head of Data</p>	 <p>Marie Sophie Mueller Program Lead, Solution Accelerator</p>	 <p>Martin Müller Executive Director Science Anticipator</p>	 <p>Maricela Muñoz Director, Strategic Partnerships</p>	 <p>Niniane Paeffgen Program Lead, Public Portal to Anticipation</p>
 <p>Daria Robinson Executive Director Solution Accelerator</p>	 <p>Miquel Sanagustin Llousas Board Manager and Executive Assistant</p>	 <p>Marianne T. Schörling Program Manager, Open Quantum Institute</p>	 <p>Agota Seguin Head of Operations</p>	 <p>Elena Torres Back Office Manager</p>

6.2. Compliance

The GESDA Foundation is aligned with the highest standards of compliance. GESDA has a solid internal control system in place to ensure accurate monitoring of operations, progress towards objectives, and a secure framework for activities. GESDA's Board of Directors approved at its Board Meeting on Oct. 9 2024 an updated version of GESDA's Compliance Handbook.



6.3. Finance

GESDA's Board of Directors approved the budget for 2024 at its Board Meeting on Oct. 9 2023.

The income and expenditures have been recorded in the financial report 2024 based on the following principle: A grant is recognised as income for GESDA per annual allocation defined in the contractual document framing the relationship. If not specified, GESDA will recognise the committed amount of the grant in the year of signature of the contractual document respectively confirmation of the grant. The same principle is applied for GESDA contributions to third party projects.

Together with the annual result carried forward from 2023, and the profit of 2024 of CHF 923k, GESDA ends the year 2024 with a total equity of CHF 1.4 Mio

2024 Audited results (in CHF)

Financial Results 2024	Result 2023 ⁽¹⁾	Result 2024	Budget 2024 ⁽²⁾	Var 2024 vs Budget
	Jan 23 - Dec 23 12 months	Jan 24 - Dec 24 12 months	Jan 24 - Dec 24 12 months	Jan 24 - Dec 24 12 months
Core Expenses	7.061.693	8.741.418	8.700.000	41.418
Operations	4.758.747	6.013.496	5.950.000	63.496
Personnel Costs	4.045.726	4.748.545	5.000.000	-251.455
<i>Indemnities Board of Directors</i>	117.194	75.776	120.000	-44.224
<i>Salaries and Other Employment Costs</i>	3.928.531	4.672.769	4.880.000	-207.231
Communication	225.722	363.751	400.000	-36.249
Infrastructure and expenses	487.300	901.200	550.000	351.200
Products	2.302.946	2.727.922	2.750.000	-22.078
GESDA Science Breakthrough Radar	661.635	766.436	800.000	-33.564
Geneva Science and Diplomacy Anticipation Summit	1.290.872	1.422.315	1.200.000	222.315
GESDA Anticipation Observatory	143.077	467.890	250.000	217.890
GESDA Science and Diplomacy Solution Accelerator*	207.362	71.280	300.000	-228.720
GESDA Impact Translator	0	0	200.000	-200.000
Core Income	3.630.500	10.700.000	8.650.000	2.050.000
Core Funding	3.580.500	10.700.000	7.850.000	2.850.000
Public	400.000	3.400.000	3.400.000	0
1 - Swiss Confederation	0	3.000.000	3.000.000	0
2 - Geneva Canton	300.000	300.000	300.000	0
3 - Geneva City	100.000	100.000	100.000	0
Private/Philanthropy	3.180.500	7.300.000	4.450.000	2.850.000
Product Funding	50.000	0	800.000	-800.000
GESDA Science Breakthrough Radar®	50.000	0	800.000	-800.000
Core Result	-3.431.193	1.958.582	-50.000	2.008.582
Impact expenses	585.755	4.721.362	12.970.000	-8.248.638
Solutions **	574.133	2.597.980	9.460.000	-6.862.020
Open Quantum Institute	388.665	1.907.924	2.000.000	-92.076
Global Curriculum for Anticipatory Leadership	185.467	690.056	1.610.000	-919.944
NeuroTech Initiative	0	0	1.350.000	-1.350.000
New Solutions	0	0	4.500.000	-4.500.000
Initiatives **	11.622	2.123.382	3.510.000	-1.386.618
GESDA-XPRIZE Quantum Contest	0	927.800	810.000	117.800
Geneva Public Portal to Anticipation	0	866.581	2.250.000	-1.383.419
Anticipation Campaigns	0	258.157	0	258.157
Future of Peace and War	0	66.279	0	66.279
Human Rights to Science	11.622	4.565	450.000	-445.435
Impact income **	2.071.106	3.708.662	13.930.000	-10.221.338
Solutions	2.068.106	3.488.966	10.930.000	-7.441.034
Open Quantum Institute	1.093.106	2.380.521	2.100.000	280.521
Global Curriculum for Anticipatory Leadership	975.000	1.108.445	2.330.000	-1.221.555
NeuroTech Initiative	0	0	1.500.000	-1.500.000
New Solutions	0	0	5.000.000	-5.000.000
Initiatives	3.000	219.697	3.000.000	-2.780.303
GESDA-XPRIZE Quantum Contest ***	0	0	0	0
Geneva Public Portal to Anticipation	0	0	2.500.000	-2.500.000
Anticipation Campaigns	0	219.697	0	219.697
Human Rights to Science / Manifesto	3.000	0	500.000	-500.000
Impact Result	1.485.352	-1.012.700	960.000	-1.972.700
Operational Result	-1.945.842	945.882	910.000	35.882
Investments ****	15.002	466.143		
Depreciation	-8.586	-22.229		
Annual result	-1.954.427	923.653		
Share capital	50.000	50.000		
Result carried forward	2.384.850	430.422		
Annual result	-1.954.427	923.653		
Total equity	480.422	1.404.075		

(1) New presentation according to the financial plan 2023-2027 presentation

(2) Budget not audited

*includes pipeline (Neurotech, Eco-Augmentation & others)

** to populate on a rolling basis accorging to pipeline activity and Impact Fund availability

*** indicated for purposes of funding need but not going through GESDA accounts

**** of which Geneva Public Portal to Anticipation CHF 355'443

2024 Balance Sheet (in CHF)

Assets		31/12/24	31/12/23
Current assets	Cash and cash equivalents	2.329.104,95	1.936.021,07
	Other receivables	141.839,82	0,00
	Prepaid expenses	80.989,74	111.502,60
	Short-term receivables	465.524,35	1.933.506,40
	Total current assets	3.017.458,86	3.981.030,07
Non-current assets	Long-term receivables	0,00	440.400,00
	Total non-current assets	0,00	440.400,00
Fixed assets	Tangible assets	468.171,26	24.257,34
	Total fixed assets	468.171,26	24.257,34
Total assets		3.485.630,12	4.445.687,41

Liabilities and equity		31/12/24	31/12/23
Current liabilities	Short-term payables	1.734.322,24	811.509,63
	Accrued liabilities	347.232,88	153.755,95
	Loan	0,00	3.000.000,00
	Total Current Liabilities	2.081.555,12	3.965.265,58
Equity	Capital	50.000,00	50.000,00
	Results carried forward	430.421,83	2.384.849,12
	Profit/(Loss) for the period	923.653,17	-1.954.427,29
	Total equity	1.404.075,00	480.421,83
Total Liabilities and equity		3.485.630,12	4.445.687,41


2024 Profit and loss statement (in CHF)

		2024	2023
Income	Contributions of public entities	3.400.000,00	400.000,00
	Philanthropic donations	10.967.523,20	5.298.606,40
	Other income	41.138,93	3.000,00
	Total Income	14.408.662,13	5.701.606,40
Expenses	GESDA Science Breakthrough Radar	766.436,42	661.635,06
	Geneva Science and Diplomacy Anticipation Summit	1.422.315,34	1.290.872,30
	GESDA Solution Accelerator	71.280,43	207.361,58
	Open Quantum Institute	1.907.923,85	388.665,22
	GESDA-XPRIZE Quantum Contest	927.799,75	0,00
	Global Curriculum for Anticipatory Leadership	690.055,71	185.467,30
	GESDA Anticipation Observatory	467.889,91	143.076,97
	Geneva Public Portal to Anticipation	866.580,84	0,00
	Future of Peace and War	66.279,22	0,00
	Human Rights to Science	4.565,30	11.622,30
	Anticipation Campaigns	258.157,25	0,00
	Project-related expenses	7.449.284,02	2.888.700,73
	Personnel costs	4.748.545,31	4.045.725,51
	Communication	363.750,76	225.721,65
	Other infrastructure expenses	809.445,96	430.313,13
	Total Expenses	13.371.026,05	7.590.461,02
Earnings before depreciation		1.037.636,08	-1.888.854,62
Depreciation		22.229,27	8.585,70
Earnings after depreciation		1.015.406,81	-1.897.440,32
Financial expenses		-18.627,03	-2.663,06
Financial products		7.530,39	10.438,43
Interest on loan		-69.657,53	-77.029,09
Financial result		-80.754,17	-69.253,72
Exceptional expenses		-12.321,37	0,00
Exceptional incomes		1.321,90	12.266,75
Profit/(Loss) for the period		923.653,17	-1.954.427,29

2024 Cash-flow statement (in CHF)

	2024	2023
Profit/(Loss) for the period	923.653,17	-1.954.427,29
Depreciation	22.229,27	8.585,70
Working capital	945.882,44	-1.945.841,59
Variations of current assets	1.356.655,09	985.343,49
Variation of liabilities	1.116.289,54	736.765,77
Change in net operating assets	2.472.944,63	1.722.109,26
Cash flow from operating activities	3.418.827,07	-223.732,33
Variations of non-current assets	440.400,00	-440.400,00
Investments	-466.143,19	-15.002,40
Cash flow from investing activities	-25.743,19	-455.402,40
Variations in loans	-3.000.000,00	0,00
Cash flow from financing activities	-3.000.000,00	0,00
Variations of cash and cash equivalent	393.083,88	-679.134,73
Cash and cash equivalent at the beginning of the period	1.936.021,07	2.615.155,80
Cash and cash equivalent at the end of the period	2.329.104,95	1.936.021,07

Auditor's report



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To the Board of Trustees of
Geneva Science and Diplomacy Anticipator (GESDA), Geneva

Geneva, 15 April 2025


Report of the statutory auditor on the limited statutory examination

As statutory auditor, we have examined the financial statements (balance sheet, profit and loss statement, cash flow statement and notes) of Geneva Science and Diplomacy Anticipator (GESDA) for the financial year ended 31 December 2024.

These financial statements are the responsibility of the Board of Trustees. Our responsibility is to perform a limited statutory examination on these financial statements. We confirm that we meet the licensing and independence requirements as stipulated by Swiss law.

We conducted our examination in accordance with the Swiss Standard on the limited statutory examination. This standard requires that we plan and perform a limited statutory examination to identify material misstatements in the financial statements. A limited statutory examination consists primarily of inquiries of company personnel and analytical procedures as well as detailed tests of company documents as considered necessary in the circumstances. However, the testing of operational processes and the internal control system, as well as inquiries and further testing procedures to detect fraud or other legal violations, are not within the scope of this examination.


Based on our limited statutory examination, nothing has come to our attention that causes us to believe that the financial statements do not comply with Swiss law and the deed of foundation.



Ernst & Young Ltd

Alfred Widmann
(Qualified Signature)

Licensed audit expert
(Auditor in charge)



Pauline Dalla-Rosa
(Qualified Signature)

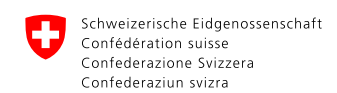
Licensed audit expert

Enclosure

- Financial statements (balance sheet, profit and loss statement, cash flow statement and notes)

Acknowledgments

The Geneva Science and Diplomacy Anticipator (GESDA) was founded by the Swiss Government and the State Council of the Republic and Canton of Geneva in collaboration with the City of Geneva in 2019 and operates as an independent Swiss foundation. A global public-private partnership in the field of science anticipation and action, GESDA benefits from public funding by the Swiss Confederation as well as the Canton and City of Geneva.



**Geneva Science and Diplomacy Anticipator
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