

Shaping the future through cutting-edge science with the Geneva Public Portal to Anticipation, one of the attractions at Expo 2025 in Osaka-Kansai, Japan


Geneva/Osaka, 13 April 2025

Expo 2025 opened its doors on Sunday in Osaka Kansai, Japan. Switzerland is present through a pavilion in which GESDA presents an innovative installation that will allow citizens from all over the world to explore and shape the scientific advances that will define the future.

The Geneva Public Portal to Anticipation, created by the Geneva Science and Diplomacy Anticipator (GESDA) in collaboration with the Experimental Museology Laboratory (eM+) of the Swiss Federal Institute of Technology in Lausanne (EPFL), is an immersive experience based on artificial intelligence, designed to make cutting-edge science and its development accessible and appealing.

Transforming science into shared narratives

The Geneva Public Portal to Anticipation invites visitors to take an interest in new scientific trends and to co-create potential futures for the next 5, 10 and 25 years. Through interactive narratives, visitors will blend human creativity with artificial intelligence, exploring possible futures related to quantum technologies, space exploration and the future of infectious disease treatment, for example.






Synthetic Hearts and Crafts

Radar Scientific Platform:	Timeframe: 10-year
Knowledge Foundations	Entity: Group of Humans
-	Domain: Healthcare
Synthetic Biology	Emotion: Interest
Medicine and health	Country: Switzerland

Story

In 2048, a team of Swiss bioengineers at a Zurich clinic faced a daunting task. Their patient, an elderly watchmaker, needed a new kidney. Within days, programmable organ production using synthetic biology offered a solution. As fondue melted slowly at a nearby restaurant, symbolizing Switzerland's patient craft, the bioengineers guided stem cells into forming the organ. The fusion of tradition and innovation mirrored the city's own blend of ancient clock towers and cutting-edge technology. When the transplant succeeded, the group celebrated with a round of Rivella, marveling at how synthetic biology was quietly revolutionizing healthcare—one organ at a time.

One of these visions takes place in 2048, when Swiss bioengineers at a Zurich clinic use synthetic biology to 3D print a kidney for an elderly person. The organ is formed from stem cells, combining age-old know-how with cutting-edge science. The whole thing is treated with a touch of humour and a nod to Switzerland, since the patient is a watchmaker and the intervention team celebrates the success of the operation with a fondue and drink Rivella!

By exploiting the knowledge of the GESDA Science Breakthrough Radar© - which synthesises the contributions of more than 2,100 scientists from 197 countries - the Geneva Public Portal to Anticipation transforms complex scientific ideas into tangible experiences. Visitors will be able to select parameters such as the scientific subject, emotion and time horizon to generate unique visualisations, powered by AI, promoting a collaborative exploration of possible futures.

Connecting science and society

As scientific and technological progress accelerates at an unprecedented pace, public engagement is more important than ever. The rapid adoption of AI tools such as ChatGPT, which reached 100 million users in just two months, compared to seven years for the internet, demonstrates the urgency of anticipating and shaping future developments. GESDA's mission is to encourage scientists, diplomats, the private sector, philanthropists and citizens to use scientific anticipation to take action on a global scale.

"Through the Geneva Public Portal for Anticipation, we want to bring science and society closer together, fuel the collective imagination and empower citizens to seize the opportunities offered by science," said Henrietta Fore, Chair of the GESDA Citizens' Forum and former Executive Director of UNICEF.

GESDA has joined forces with Presence Switzerland (PRS) to realise this vision. Its launch at Expo 2025 is in keeping with the exhibition theme of 'Designing Tomorrow's Society for our Lives', reflecting Switzerland's commitment to collaborative innovation. The installation is enriched by the expertise of Sarah Kenderdine, director of the Laboratory of Experimental Museology at EPFL, whose work on augmented reality and interactive cinema has shaped more than 90 exhibitions worldwide.

By providing a space for collaborative exploration, GESDA hopes to encourage individuals to engage actively in scientific advances and to reflect on their societal implications. Expo 2025 represents a unique opportunity to strengthen the global commitment to making science accessible and to ensure that anticipation is the driving force behind positive actions for the future.

Placing scientific anticipation at the heart of the Swiss Pavilion

During the first two months of Expo 2025, the Swiss Pavilion will be highlighting the theme of 'Augmented Humans'. GESDA is contributing to the discussion by offering a forward-looking perspective, highlighting four key trends specifically designed for Expo 2025:

1. AI as a daily collaborator: seamlessly supporting productivity, decisions and personal life.
2. Living in multiple realities: AR/VR transforms the way we learn, play and communicate.
3. Enhanced mind: brain-computer technology expands memory, emotions and thinking.

4. Longevity revolution: genetic advances eliminate disease and prolong healthy life.

In addition, GESDA is encouraging a multi-stakeholder dialogue with several anticipation events planned at the Swiss pavilion.

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For any questions, please contact:

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The Geneva Public Portal to Anticipation

OSAKA-KANSAI, 13 APRIL-13 OCTOBER 2025

Where science meets imagination: an immersive installation at the Swiss Pavilion, 2025 Expo, exploring what science and technology mean for



The Geneva Public Portal to Anticipation is an interactive installation as part of the Anticipation Sphere of the Swiss Pavilion developed by the **Geneva Science and Diplomacy Anticipator (GESDA)** in collaboration with the **EPFL Laboratory for Experimental Museology (eM+)**. It offers visitors a unique opportunity to explore and co-create speculative futures based on anticipated scientific breakthroughs projected over the next 5, 10, and 25 years.

The installation harnesses the power of generative AI, data visualization, and user-generated content to bridge the gap between complex scientific knowledge and public engagement. Visitors can select parameters such as science topic, emotion, and time period to generate unique, AI-powered visions and stories of possible futures.

By **democratizing access to science information**, the Portal aims to fuel collective imagination and empower individuals to actively participate in shaping the future. Its debut at Expo 2025 aligns with the Expo's theme of "Designing Future Society for Our Lives," reflecting Switzerland's commitment to collaborative innovation.

What makes it unique

- Combines art, science, and AI to explore futures at 5, 10, and 25 years.
- Offers personal and speculative explorations of science's role in shaping society
- Encourages public engagement with emerging scientific themes

- Based on data and insights from over 2'100 scientists across 197 countries, the GESDA Science Breakthrough Radar®, mapping scientific breakthrough predictions and trends over 5, 10, and 25 years across 42 emerging science and technology topics

Why it Matters

The Portal bridges the gap between science and society by making cutting-edge scientific knowledge accessible and personalized. The goal is to empower citizens to engaged with future science—equipping them with the tools to anticipate our world to come.

Living in the Augmented Human Era: Four Key Trends

Rapid scientific advances are reshaping the essence of human life. During the initial two months of Expo 2025, the Swiss Pavilion highlights the theme "Augmented Human". GESDA contributes to the discussion by offering an Anticipation Perspective, highlighting four key trends curated specifically for Expo 2025:

- 01** AI as Everyday Collaborator - enhancing decision-making and productivity
- 02** Living in Multiple Realities - with virtual and augmented spaces as vital as the physical world
- 03** Technology Enhancing the Mind - through brain-computer interfaces
- 04** Healthier, Longer Lives - via genetics and immune system optimization

<https://portal.gesda.global/>

<https://vitality.swiss/en>