Founding Charter of the Swiss Genomics Association (SGA)

The joint Swiss Genomics Association committee[1]

[1]The Swiss Genomics Association.

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Deutsch: Schweizerische Genomik-Vereinigung
Français: Association Suisse de Génomique
Italiano: Associazione Svizzera di Genomica
English: Swiss Genomics Association

Summary

This Charter defines the founding purpose, principles, and initial priorities of the Swiss Genomics Association (SGA). It describes how Switzerland's academic, clinical, industrial, and public sectors can work together to ensure that genomics develops responsibly, transparently, and for the benefit of society. The document outlines the Association's vision for ethical governance, open collaboration, and long-term resilience in the genomic century.

1 Founding principles - vision, structure, and continuity

The Swiss Genomics Association (SGA) is founded on the belief that science and society can grow together through careful structure, shared goals, and open reflection. The organisation exists to guide the use of genomics as a tool for progress that remains ethically grounded and publicly trusted. Its purpose is not to regulate, but to align the people and institutions who shape the national and global genomics landscape.

Across history, the most enduring institutions have shown that strong systems are not those that avoid disagreement, but those that prepare for it. Stable societies, research programmes, and international partnerships all rely on frameworks that balance ambition with reflection. When decisions must pass through several layers of reasoning, short-term enthusiasm gives way to long-term understanding.

This pattern repeats wherever progress endures: vision must be linked to structure, ambition balanced by review, and innovation guided by memory. Systems that last are those that preserve a clear connection to their founding purpose while continuing to evolve. The SGA adopts this philosophy from the start. It treats governance not as a form of control but as a way to maintain coherence, transparency, and purpose over time.

The Association is therefore designed to combine foresight with restraint. Its structure encourages bold ideas while ensuring that each one is tested against the shared vision that unites its members. The SGA's framework rests on three guiding commitments.

1. Shared long-term goals

All projects, strategies, and public resources should relate to a single purpose: to advance genomics in ways that strengthen human and environmental resilience, uphold ethical responsibility, and support reliable cooperation across institutions. Each initiative should consider how it serves that purpose so that direction remains clear even as details evolve.

The founding narrative provides stability in times of rapid change. It reminds every participant that the value of their work lies not only in innovation, but in how well it prepares future generations to act responsibly with the knowledge we create today.

2. Reflection without stagnation

The Association uses an efficient but thoughtful decision process. Debate is seen as a sign of quality, not delay. When questions arise that affect science, ethics, or implementation, they are open for review by people with relevant expertise from academia, healthcare, industry, and the public sector.

This review is meant to keep action proportional to evidence. Decisions can move quickly when facts are clear and pause when reflection is warranted. Any reasonable member may request such a pause, and that request must be respected until the issue has been considered. This balance keeps progress steady without creating unnecessary bureaucracy.

Regular review points can be scheduled within major programmes so that discussion becomes routine rather than disruptive. By treating reconsideration as a normal part of work, the Association avoids both the sunk-cost fallacy and the temptation to act before understanding.

3. Renewal through continued relevance

The SGA's role is to provide open reference materials, frameworks, and recommendations that others may use freely. It does not enforce compliance. As better technologies and standards emerge, older versions will fade from use by their own accord.

The Association's duty is to ensure that what it publishes remains current, accurate, and accessible. Renewal happens through public release, not by mandate. When existing guidance no longer represents the most informed practice, new versions can be issued and documented. Some may become widely known, others may serve mainly as archives, yet all contribute to a continuous record of improvement.

Public trust and voluntary adoption are the true measures of success. The relevance of the SGA's work is proven when others choose to build upon it because of its clarity, reliability, and quality.

A system designed for memory and foresight

The SGA's structure follows a tradition of deliberate governance that links innovation to long-term memory. It builds foresight into its processes by asking members to

consider the effects of their work a century from now, not only its benefits today. It maintains distributed ownership so that direction does not depend on individuals but on shared understanding.

This model of self-correction allows the Association to adapt without losing coherence. Policies and practices evolve, but the foundation remains constant: to use genomics for the collective good of society, grounded in ethics, evidence, and cooperation.

The long-term perspective

Progress will always bring disagreement. The SGA welcomes that as a natural sign of engagement. Consensus does not mean uniform thinking; it means disciplined dialogue guided by shared purpose. Each decision is valued for how well it prepares the next generation to work wisely with the tools available to them.

In this way, the SGA maintains balance between innovation and continuity. It grows with the world it serves, remembers the principles that guide it, and keeps the horizon in view as it builds the scientific and ethical foundations of a genomic future.

2 Initial strategic priorities (2025-2035)

1. Genomics as adaptive infrastructure

Genomics will be treated as an enabling layer of civilisation, comparable to energy, transport, or information systems. The SGA's goal is to ensure that genomic understanding underpins how societies adapt to health, environment, and technology.

Focus areas: It will integrate genomic standards and interoperability across healthcare, industry, research, agriculture, and environmental systems. The Association will connect genomic diversity to ecosystem modelling and future environmental adaptation. It will promote a concept of resilience based on biological diversity as a stabilising element of sustainable design. The SGA will also encourage public and private institutions to view genomic knowledge not as a by-product of medicine, but as a foundation for societal foresight.

2. Ethical and legal foresight

Technological capacity must be matched by ethical readiness. The Association will promote a forward-looking understanding of responsible genomic practice across both human and non-human systems.

Focus areas: It will encourage open collaboration between academic, legal, industrial, and clinical experts to anticipate and interpret emerging technologies such as synthetic biology, gene editing, and bio-environmental engineering. The Association will support continued dialogue that keeps ethical reasoning grounded in evidence and adaptable to new discoveries. It will contribute to discussions that help decision-makers recognise the difference between innovation that strengthens resilience and actions that risk ecological or social harm. The SGA will also promote transparent communication on the societal and environmental consequences of new genomic methods.

3. Shared literacy and equitable participation

For genomics to serve society responsibly, it must be both understood and chosen freely. The SGA will promote literacy, fairness, and trust, supporting every

individual's right to benefit from genomic progress without compromising personal privacy or autonomy.

Focus areas: It will partner with schools, universities, and public media to integrate genomic education into science and civic understanding. The Association will encourage fair access to genomic knowledge and tools, ensuring that benefits reach the whole population rather than a select group. It will support policies that uphold clear rights for privacy, consent, and data use, recognising that participation must always remain voluntary. Genomic systems will be designed to deliver benefits even for those who choose not to share personal data, so that participation remains voluntary without limiting access to progress. The SGA will also foster open dialogue between citizens and professionals so that progress reflects public confidence and shared ethical ground.

4. Standards and global interoperability

Switzerland's reputation for neutrality and precision allows it to serve as a trusted broker of standards. The SGA will connect national efforts to international frameworks to ensure that Swiss systems remain interoperable and globally relevant.

Focus areas: It will endorse and adapt recognised international schemas and data frameworks, contributing to an open repository of recommended practices. The Association will promote long-term compatibility between research, clinical, and industrial infrastructures through open technical documentation and shared technologies. It will collaborate on Switzerland's representation in global genomics consortia and act as a bridge for international initiatives. Finally, it will encourage consistent standards that remain valid across changing technologies and future global contexts.

5. Foresight and demonstration for the genomic century

The SGA will legitimise imaginative yet physically grounded exploration as part of national preparedness. Research that tests how humans and ecosystems adapt to new conditions will guide policy and innovation for generations.

Focus areas: It will support research programmes that model biological and ecological adaptation across the full range of extreme terrestrial, extraplanetary, or

orbital environments. The Association will integrate genomic science with fields such as artificial intelligence, aerospace, environmental design, materials engineering, and contribute to the translation of long-horizon ideas into practical research objectives and pilot studies. It will also publish national foresight assessments that track technological, ethical, and social readiness for emerging genomic capabilities.

Projects currently underway

The following projects illustrate the early implementation of strategic priorities for translation into practice.

Current project: Development of a harmonised, tool-agnostic specification for variant interpretation in Mendelian disease, designed to align with national strategies and best practices. The framework follows guidance from SPHN, DCC, SIB, SDSC, GA4GH, and related initiatives, ensuring compliance, transparency, and compatibility with standards used in both public and private sectors.

Current project: A national-scale investigation of whether genomics can deliver measurable societal benefit while fully respecting public choice and legal safeguards. The project explores how precision medicine could be integrated into Swiss healthcare and insurance systems through secure, privacy-preserving infrastructure that aligns with the Federal Act on Human Genetic Testing, national digital health strategies, and data privacy. It aims to test whether genomics can sustainably reduce healthcare costs, improve early diagnosis, and strengthen public trust by ensuring that genomic benefits remain accessible without impeding personal choice, privacy, or freedom. The initiative is concerned with supporting compatibility between research, healthcare, and industry while maintaining strict data sovereignty for individuals.

Outlook

The initial strategic priority pillars form a foundation for both near-term coordination and deep, long-range continuity. In our first ten years, we aim to produce a shared reference system: a body of standards, ethics, and public engagement strong enough to evolve with the next century of technology.

The ultimate measure of success is not how quickly the Association advances but how well its structures are adopted and endure. Switzerland, with its balance of science,

commerce, and civic trust, provides the right ground for this kind of long-term thinking. Through the SGA, that balance becomes a model for how societies everywhere can prepare for a genomic future; responsibly, cooperatively, and with imagination.

3 Constituency and collaboration framework

One of Switzerland's great strengths lies in the balance between its technical institutes, universities, hospitals, private companies, public institutions, and civic organisations. Each contributes a distinct form of accountability. Academic research drives discovery and methodological rigour. Industry develops and tests new technologies that demonstrate real-world value. Hospitals and clinics translate new advances into measurable outcomes for patients, where integration and efficiency are as important as innovation. Public agencies, data infrastructure providers, educators, and policy experts sustain the frameworks that make this cooperation possible, while non-profit foundations and patient organisations ensure that public interest and long-term benefit remain central.

The SGA welcomes all of these perspectives. It serves as a shared forum where progress in one domain strengthens the others, and where innovation, ethics, and evidence remain in continuous dialogue. Membership is targeted at a broad community that includes scientists, clinicians, engineers, educators, policymakers, industry professionals, ethicists, and public representatives.

A valuable idea or insight can arise from any participant. While members bring different expertise, the Association values contributions across boundaries. Its systems and communication will remain clear, open, and usable to all. Each member contributes a different form of precision, whether scientific, technical, clinical, ethical, or human. Together they form a living ecosystem that reflects Switzerland's national balance, where scientific ambition is guided by trust, industrial capability is grounded in ethics, and public benefit is supported by collaboration and transparency.

4 Publication and authorship policy

Good-faith principles: In keeping with the Association's open and collaborative spirit, most content is developed transparently and intended for public release. No publication, contribution, or participation within the SGA implies any legal or financial obligation beyond the explicit agreement of those involved. The Association operates in good faith, ensuring that members and collaborators can contribute freely without unexpected binding terms.

Content produced under the SGA is created by its members, who take personal responsibility for the accuracy and integrity of their contributions. Individual contributing authors should be named where appropriate, and their preferred institutional affiliations may be included when relevant. Publications can be released with inclusion of the SGA name once approved by authors and the Release Committee, which ensures that materials meet the Association's standards of quality, transparency, and relevance. Material that is reviewed but not approved for publication under the SGA name remains the full property of its authors. Such content is not subject to any copyright or restriction by the Association, and authors are free to publish or distribute it independently without limitation.

The views expressed in any publication represent those of the named authors and contributors, and not necessarily the position of the Association as a whole. Each publication should include a clear notice stating this distinction.

The SGA exists to promote collaboration among individuals and institutions that may hold different or even competing perspectives. Commercial, academic, clinical, and public interests all play legitimate roles in the progress of genomics, and such diversity is considered a strength. While individual authors may benefit professionally or commercially from their work, the Association's guiding purpose remains to serve the shared progress of the wider community.