ECOSYSTEM

The BioSynCare Ecosystem

From open knowledge to practical sensory technology

BioSynCare

PURPOSE

Mission

Make high-quality, scientifically informed and aesthetically meaningful sensory stimulation accessible through everyday digital devices - supporting performance, well-being, health and contemplative experience.

Vision

Establish sensory stimulation as a reliable and widely accessible component of everyday life, research and professional practice.

A connected architecture

KNOWLEDGE → OPEN TECHNOLOGY → EVERYDAY DELIVERY

01 SSTIM →

OPEN FORMALIZED KNOWLEDGE

Infrastructure for symbolic and hybrid AI

A machine-readable knowledge foundation for sensory stimulation, combining an OWL ontology, SKOS vocabularies, RDF data, evidence annotations and implementation profiles.

02 BSC Lab →

RESEARCH & TECHNOLOGY

Shared research and creation workbench

The open-source environment connecting knowledge, prototypes and executable tools for research, experimentation and reusable implementation. Defensive publication is chosen over patenting to preserve open access, reuse and collaboration across the wider ecosystem.

Patch Studio Visual workbench for designing, combining, testing and documenting stimulation patterns.

03 BioSynCare

PRACTICAL DELIVERY

End-user access and adoption

The commercial multiplatform application that turns the ecosystem's knowledge and technology into structured sessions for web, iOS and Android. Its AI agent, Seraphony, transforms user input into tailored sensory-stimulation sessions.

W3C Sensory Stimulation Vocabulary Community Group · Shared language, interoperability and community

An international forum developing shared terminology, semantic models and implementation guidance, creating a route toward interoperability and future standards.

Coalition building BSC is working to convene an international coalition of researchers, developers, practitioners and institutions around sensory stimulation, shared knowledge and responsible standards, to strengthen coordination and collective representation among existing initiatives and present the field clearly and credibly to public authorities, professional communities and the general public.

One continuous pathway SSTIM structures knowledge. BSC Lab and Patch Studio make it executable and testable. BioSynCare delivers it through everyday experiences, with Seraphony providing AI-driven personalisation. The W3C Community Group supports collaboration and interoperability.

Long-term direction Develop an open sensory and semantic layer through which people, symbolic and hybrid AI systems, and sensory technologies can describe, validate and responsibly coordinate sensory interactions.

People and network

Core team: Renato Fabbri, Ph.D. - research, architecture, software and coordination; Riccardo Berti - development; Eva Castilho and Clarice Garcia - communication and marketing; Edson Correa - production and project management.

Scientific and institutional network: Juliana Braga de Salles Andrade, Ph.D. - neuroscience; Dr. Rafael Reinehr and Dr. Marco Fracasso - medicine; IPRJ - research; Junto Innovation Hub - territory, innovation and entrepreneurship.

Main resources

BioSynCare biosyncare.com
BSC Lab labiosyncare.github.io
SSTIM w3id.org/sstim
SSTIM on BioPortal bioportal.bioontology.org/ontologies/SSTIM
W3C Group w3.org/community/sstim