

Overview of the Swiss Personalized Health Network Initiative

Keep the Fire Going NRP 74, 31 August 2018, Lausanne

Adrien Lawrence Management Office SPHN Swiss Academy of Medical Sciences



A project of:



Schweizerische Akademie der Medizinischen Wissenschafter Académie Suisse des Sciences Médicales Accademia Svizzera delle Scienze Mediche Swiss Academy of Medical Sciences

International initiatives



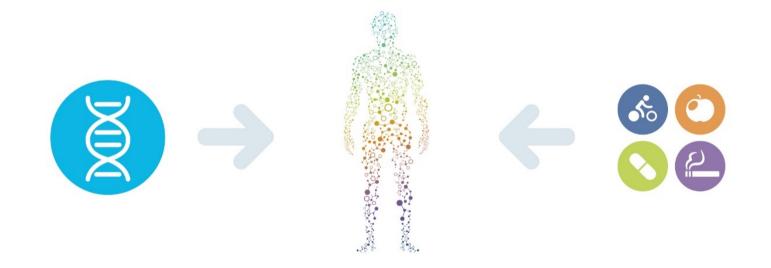


Bundesministerium für Bildung und Forschung

Aktionsplan Individualisierte Medizin





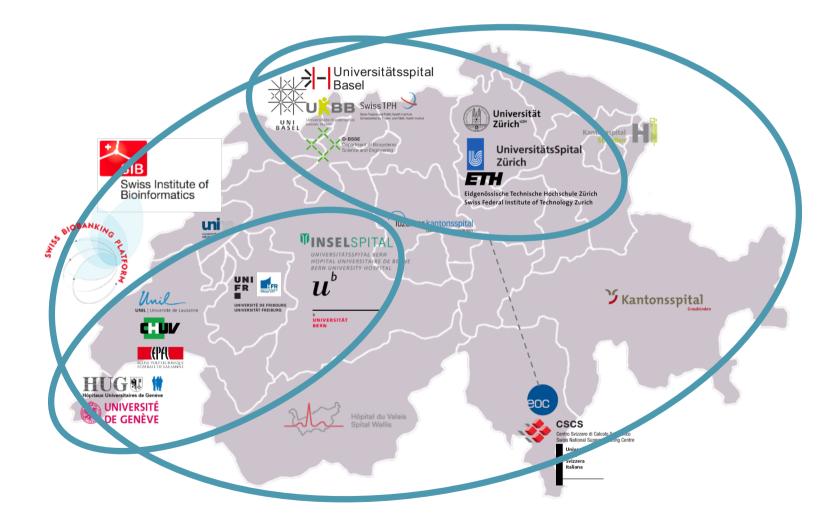


The main goal of the SPHN initiative is to bring Switzerland at the forefront of **personalized health research** by establishing **nationwide interoperability of biomedical information**. **Data sharing** must be the guiding principle.

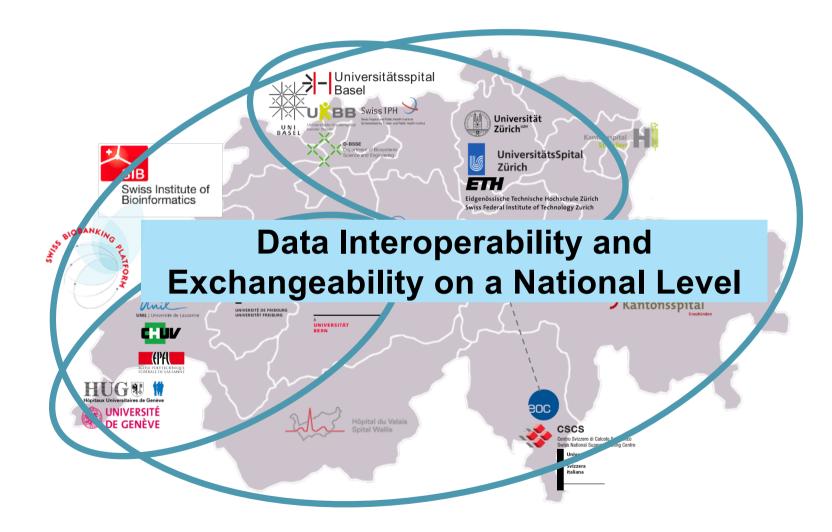




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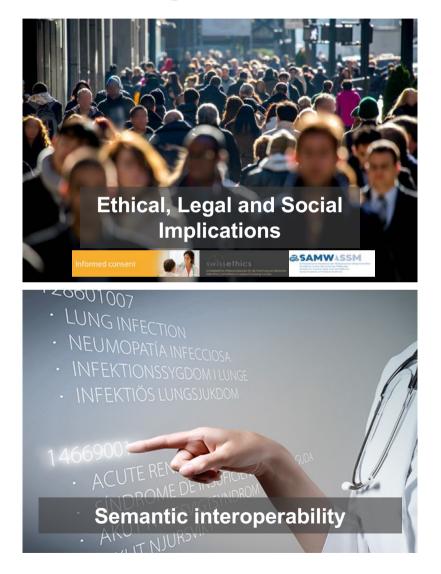




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Swiss Personalized Health Network (SPHN): Challenges









Personalized Health in Switzerland



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra Eidgenössisches Departement für Wirtschaft, Bildung und Forschung WBF Staatssekretariat für Bildung, Forschung und Innovation SBFI Eidgenössisches Departement des Innern EDI Bundesamt für Gesundheit BAG



68 Mio CHF (2017-2020)









50 Mio CHF



FONDS NATIONAL SUISSE Schweizerischer Nati

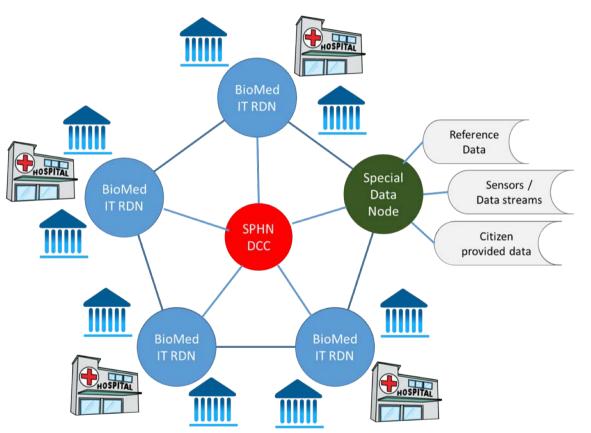
Schweizerischer Nationalfonds Fondo nazionale svizzero Swiss National Science Foundation

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SPHN – A decentralized approach

SPHN establishes a dynamic network of **distributed interoperable** and sharable resources (data, platforms, workflows, competences) with national **coordination**.







SPHN funds three types of projects

To develop and implement the required infrastructure, SPHN funds the the following project types:

Project type	Description	Funding scheme
Infrastructure	Projects that are devoted to build a progressive shareable	Collaboration
implementation projects	data system enabling nationwide interoperability of molecular and clinical patient data.	agreements
Infrastructure development projects	Projects that thrive to develop and test new technologies, methods and infrastructures for personalized health related research in connection with infrastructure implementation.	Call for proposals*
Driver projects	These projects are based in a concrete research field (e.g. cancer research/oncology) and will push the development of clinical data management systems in all University Hospitals by testing data interoperability & data sharing principles within the whole network.	Call for proposals*

*Coordinated call for proposals with ETH- Domain SFA-PHRT: Joint proposals between ETH researchers and non ETH researchers can be submitted for both type of projects.





Swiss Personalized Health Network erhält ein starkes Signal aus den Universitätsspitälern

(English version below)

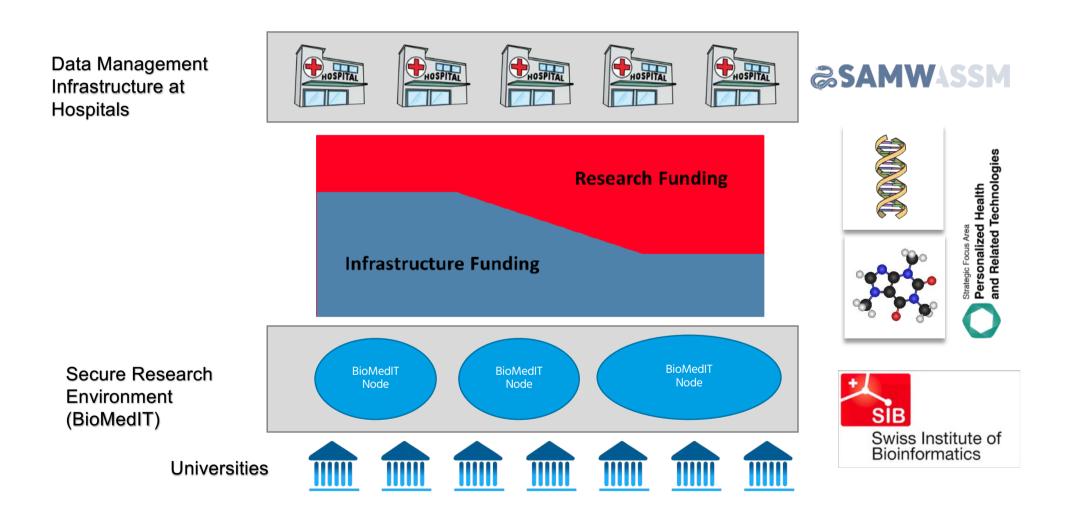
Das Swiss Personalized Health Network (SPHN) ist eine nationale Initiative unter Federführung der SAMW. Es trägt zur Entwicklung, Implementierung und Validierung einer koordinierten Dateninfrastruktur bei, um gesundheitsrelevante Daten schweizweit für die Forschung nutzbar zu machen. Ende 2017 konnten wichtige Leistungsvereinbarungen mit allen fünf Universitätsspitälern abgeschlossen werden.

Das übergeordnete Ziel der SPHN Initiative ist es, die Forschung im Bereich der personalisierten Medizin und Gesundheit zu unterstützen, um Krankheiten besser vorbeugen, diagnostizieren und behandeln zu können. Dabei spielen Patientendaten eine Schlüsselrolle. Der Aufbau kompatibler klinischer Datenmanagementsysteme in forschenden Gesundheitsinstitutionen ist eine Voraussetzung für den Erfolg der Initiative.

Ein Ziel der ersten SPHN-Finanzierungsperiode (2017-2020) besteht darin, vorerst die fünf Universitätsspitäler zum Aufbau solcher Datenmanagementsysteme zu verpflichten. Im Gegenzug erhält jede Institution einen Beitrag von 3 Mio. Franken über eine Periode von drei Jahren, sofern die vorgegebenen Zwischenziele (sog. Meilensteine) erreicht werden. Eine entsprechende Leistungsvereinbarung konnte Ende 2017 mit allen fünf Universitätsspitälern abgeschlossen werden. Ungeachtet der unterschiedlichen Voraussetzungen in den beteiligten Institutionen haben die fünf Standorte mit der gemeinsamen Leistungsvereinbarung ein starkes Signal gegeben, sich für die SPHN Initiative einzusetzen.

Die Liste der Meilensteine und mehr Informationen zu den Rahmenbedingungen, Zielen und Instrumenten des SPHN finden Sie online: www.sphn.ch/de

Infrastructure Implementation Projects



2017 Call Results: Infrastructure Development Projects

Project Title

Management and Policy Infrastructure:

- E-General-Consent: Development and Implementation of a Nationwide Harmonized Interactive Electronic General Consent - Prof. Christiane Pauli-Magnus (USB). CHF 400'000.
- 2. Development of a governance and quality management system for exchange of patient related data for research purposes Dr. Joerg Willers (USB). CHF 290'000.
- 3. C3-STuDY: Citizen Centered Consent: Shared, Transparent and Dynamic Prof. Christian Lovis (HUG/UniGE). CHF 280'000.
- 4. DeID/De-identification of clinical narrative data in French, German and Italian Prof. Christian Lovis (HUG/UniGE). CHF 100'000.



Platforms:

- 1. Harmonising the collection of health related data and biospecimens in paediatric hospitals throughout Switzerland Prof. Claudia Kuehni (UniBE). CHF 400'000.
- 2. L4CHLAB Prof. Christian Lovis (HUG/UniGE). CHF 200'000.

Oncology:

- Swiss Variant Interpretation Platform for Oncology (SVIP-O) Dr. Daniel Stekhoven (ETHZ). CHF 400'000.
- 2. NLPforTC Dr. Thomas Fabbro (USB). CHF 400'000.



2017 Call Results: Driver Projects

	Project Title
İ A	Frailty: Swiss Frailty Network and Repository (SFNR) – Prof. Heike Bischoff-Ferrari (USZ). CHF 1.785 Mio.
	Immune repertoire: Population-wide screens of the human immune repertoire – Prof. Adriano Aguzzi (USZ). CHF 1.785 Mio.
	Pathology: Swiss Molecular Pathology Breakthrough Platform (SOCIBP) – Prof. Mark Rubin (Inselspital). CHF 2.3 Mio. *
	Oncology: Swiss Personalized Oncology Driver (SPOD) – Prof. Olivier Michielin (CHUV). CHF 2.3 Mio & Multidisciplinary Multicentre Molecular and Cellular Cancer Consortium – Prof. Mohamed Bentires-Alj (USB). CHF 1.275 Mio. <i>Projects were merged.</i>
Suspect	Inflammation: Identification of biomarkers and therapeutic targets in inflammatory disease immunotherapy by high-dimensional single cell analysis and cluster proteomics – Prof. Manfred Claassen (ETHZ). CHF 1.445 Mio. *
Save Lives	Sepsis: Personalized Swiss Sepsis Study (PSSS) – PD Adrian Egli (USB). CHF 2.3 Mio. *

*Joint funding through SPHN & PHRT. Numbers refer to SPHN contributions only.



Call for proposals 2018

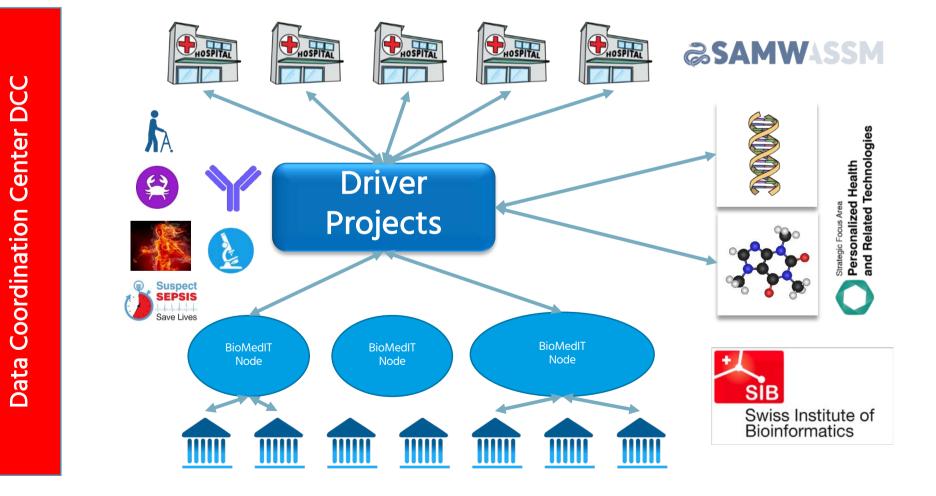
The second and last call for proposals during the period 2017-2020 was launched mid-March.

- The call is coordinated with PHRT for **both** "driver" and "infrastructure development" projects.
- Submissions in the following **focus areas** are encouraged:
 - Imaging and radiology interoperability (infra. development projects)
 - Public health, healthy citizens
 - Nationwide interoperability of cohorts (infra. development projects)
- Call budget: up to CHF 9.3 mio
- Timeline:
 - Call publication:
 - Application deadline:
 - IAB meeting:
 - NSB meeting:

- 15 March 2018
- 30 June 2018
 - 29 September 2018
- 9 November 2018

National Coordination of Standards

The SPHN initiative requires central coordination of the geographically distributed stakeholders such as University Hospitals, research institutions, data protection specialists and centres of competence for scientific computing.



SPHN Data Coordination Center



The SPHN Data Coordination Centre (DCC), managed by the SIB Swiss Institute of Bioinformatics, is headquartered in Basel.

It is the DCC's task to work towards establishing secure technical and semantic interoperability of health-related data for personalized health research in Switzerland, coordinating the research projects.

3 strategic areas:

Technical	National Data	Information
Interoperability	Standards	Repository & Training
operating central IT services and	leading the process for definition	managing systems for exchange
coordinating processes for secure	and implementation of national	within the Swiss Personalized
data transfer between BioMedIT	data standards by coordinating	Health Network and organizing
nodes, Hospitals, Clinical Data	expert working groups.	events for training and knowledge
Warehouses, Research Platforms.		exchange.



Website: dcc.sib.swiss

4TH ESPT SUMMER SCHOOL

September 24-27, 2018 Geneva, Switzerland

PRECISION MEDICINE AND PERSONALISED HEALTH Supported by SPHN

<u>Chair</u>: Prof Marc Ansari (ESPT); <u>co-chair:</u> Prof Peter Meier-Abt (SPHN) <u>ESPT Educational Division</u>: Prof Janja Marc (chair), Prof Vangelis Manolopoulos (co-chair) Prof Ron van Schaik (ESPT President)

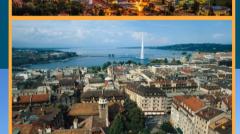
> Early bird registration: Until June 30, 2018 Deadline registration : September 1, 2018

NOTE: Please be aware that the number of participants is limited to 80! Registration will be on a "first come, first serve" basis!

www.esptsummerschool.eu













Federation of European Academies of Medicine

FEAM Conference 2018 on Precision Medicine and Personalized Health – 28 September 2018, Geneva

Hosted by the Swiss Academy of Medical Sciences (SAMS)

28 September 2018

Campus Biotech

Geneva, Switzerland



Event Details

The GA4GH 6th Plenary Meeting will be held at the **Congress Center Basel** in **Basel**, **Switzerland** and will present the first set of deliverables developed under GA4GH Connect – our 5-year strategic plan to enable real-world genomic data sharing by 2022.

We are grateful for the support of our local meeting sponsors, the SIB Swiss Institute of Bioinformatics and ELIXIR, who will co-host the meeting.

121	00	12	51
DAYS	HOURS	MINS	SECS

To stay up to date on GA4GH 6th Plenary Meeting announcements and other news, subscribe to our mailing list.

SUBSCRIBE





FUNDING PROJECTS ORGANISATION

ABOUT SPHN

En | De | Fr

www.sphn.ch

Swiss Personalized Health Network

The Swiss Personalized Health Network (SPHN) is a national initiative designed to promote the development of personalized medicine and personalized health in Switzerland.

SPHN will lay the foundations that are needed to facilitate research projects in this area such as a system for a nationwide exchange of health-related data.

The ultimate goal is to promote health and well-being, to prevent, diagnose and treat unfavourable health conditions more precisely, thus reducing the risk of developing such conditions and permitting more effective treatments of disease states with fewer adverse effects.

4th ESPT Summer School supported by SPHN 24-27 September 2018, Campus Biotech, Geneva. A More information



Job opening

The position of "Director, Data Coordination **Centre and Personalised Health Informatics** Group' is open for application.

Further information on // LinkedIn and on ↗ Refline.

Call for proposals 2018

The second \rightarrow call for proposals was open from mid-March until 30 June 2018, Results will be communicated from mid-November 2018

New publications

The following documents were published in Spring/Summer 2018:

- J SPHN Short Report 2017: a brief review of SPHN's activities in the year 2017.
- **Responsible Data Processing in** Personalized Health Research, This version is endorsed by the Swiss Biobanking Platform and PHRT. Applicants should note that version 2 is the valid version for the Call for proposals 2018.