

SPHN Short Report (2017)

Yearly update and overview of activities.

1. Editorial

The beginning of 2017 was dedicated to the framing and final definitions of the administrative and legal preconditions. The Swiss Academy of Medical Sciences (SAMS), the State Secretary for Education, Research and Innovation (SERI), and the Federal Office of Public Health (FOPH) signed a service contract for the period 2017–2020 in May 2017. Together with the Rules of Procedure, the Funding Principles, and the Funding Regulations, they define the overall framework of the initiative. The Data Expert Group (DEG) worked extensively on identifying the steps that are required to achieve nationwide interoperability of health-related data. In addition, the Ethical-Legal-Social-Issues Advisory Group (ELSIAG) developed an Ethical Framework for Responsible Data Processing between the SPHN partner institutions.

On 16 June 2017, the first call for proposals was published in coordination with the ETH-Domain Strategic Focus Area in Personalized Health and Related Technologies (PHRT). Applicants could submit a proposal for 'Infrastructure development projects' and 'Driver projects' until 15 September 2017. A total of 38 proposals, 11 of which were joint SPHN-PHRT 'Driver project' proposals, were received requesting CHF 58.6 million in total. After the evaluation phase, 11 projects were funded, 3 of which were joint SPHN-PHRT 'Driver project' proposals, for a total amount of CHF 15.66 million.

In parallel to the call for proposals, a Task Force was constituted in September 2017 in order to discuss and finalize the collaboration agreements with the University Hospitals. The group was dissolved at the end of November 2017 following the agreement reached between the parties.

Two events were also organized during the year. The first one was dedicated to researchers interested in applying to the call for proposals and was held at the University of Bern in June 2017. The second event, which also took place in Bern, targeted a wider audience (patient organizations, representatives of research, public health, authorities, etc.) and aimed to present the initiative as a whole and its positioning vis-à-vis ethical and legal framework conditions in Switzerland. With more than 140 participants, both events were well attended. In addition, SPHN co-organized two events in 2017 and participated in international meetings.

Given the timetable proposed implementation report of November 2015, the progress made in 2017 is huge. According to this report, it was originally planned that the year 2017 would be dedicated to the installation of the organization and the finalization of the configuration of national and local infrastructures; the first call for SPHN was planned from 2018.

Yours sincerely,

Prof. Peter Meier-Abt
Chairperson of the National Steering Board

Dr. Adrien Lawrence
Managing Director

2. Activities and achievements in 2017

SPHN's activities are outlined according to three main categories:

- Funding activities;
- National and international collaboration;
- Events & communication.

2.1 Funding activities

The call for proposals was open to two types of projects: Infrastructure development projects and Driver projects. The call for proposals for both types of projects was coordinated with the 'Personalized Health and Related Technologies' program of the ETH Domain (PHRT). 38 proposals were received by 15 September 2017 (16 Infrastructure Development Projects, 22 Driver Projects including 11 requesting co-financing with PHRT) for a total amount of CHF 58.6 million. The 38 proposals passed the formal check performed by the SPHN Management Office with the support of the Science Department of SAMS, and were evaluated by the International Advisory Board (IAB). Each request was reviewed by a referee and a co-referee during the month of October. Their opinions were used as a basis for discussion at the evaluation meeting which took place from 30 to 31 October 2017 in Bern. At the end of the meeting, the IAB gave funding recommendations to the National Steering Board (NSB) of SPHN. At its meeting on 2 November 2017, the NSB decided to reduce the maximum amount of contributions in order to be able to support a larger number of projects and to organize a second call for proposals in 2018. In total, 15 projects were awarded by SPHN for a total amount of CHF 15.66 million (8 Infrastructure Development Projects, 7 Driver Projects, 3 of which will be co-funded by SPHN and PHRT) (See: Table 1, Table 2). A lay-summary of each project is available on the SPHN website: www.sphn.ch/en/projects.html

In parallel to the call for proposals, a Task Force was constituted in September 2017 in order to discuss and finalize the collaboration agreements with the University Hospitals. Indeed, one goal of the first SPHN funding period (2017–2020) is to support the five University Hospitals with the development of such data management systems. To this end, each institution receives a contribution of CHF 3 million over a period of three years, provided that the milestones are reached. A corresponding collaboration agreement was concluded at the end of 2017 with all five University Hospitals. With this common collaboration agreement, the five participating institutions have sent a strong signal to support the SPHN initiative.

Table 1: Infrastructure development projects awarded in 2017

Project title	Amount awarded
E-General-Consent: Development and Implementation of a Nationwide Harmonized Interactive Electronic General Consent Prof. Christiane Pauli-Magnus, Basel	CHF 400'000.–
Development of a governance and quality management system for exchange of patient related data for research purposes Dr. Joerg Willers, Basel	CHF 290'000.–
C3-STuDY: Citizen Centered Consent: Shared, Transparent and Dynamic Prof. Christian Lovis, Genève	CHF 280'000.–
DeID: De-identification of clinical narrative data in French, German and Italian Prof. Christian Lovis, Genève	CHF 100'000.–
Harmonising the collection of health-related data and biospecimens in paediatric hospitals throughout Switzerland Prof. Claudia Kuehni, Bern	CHF 400'000.–
LOINC for Swiss Laboratories (L4CHLAB) Prof. Christian Lovis, Genève	CHF 200'000.–
Swiss Variant Interpretation Platform for Oncology (SVIP-O) Dr. Daniel Stekhoven, Zürich	CHF 400'000.–
NLP-powered mapping of clinical reports onto SNOMED-CT concepts for tumour classification (NLPforTC) Dr. Thomas Fabbro, Basel	CHF 400'000.–

Table 2: Driver projects awarded in 2017

Project title	Amount awarded
Swiss Frailty Network and Repository (SFNR) Prof. Heike Bischoff-Ferrari, Zürich	CHF 1.785 Mio.
Population-wide screens of the human immune repertoire Prof. Adriano Aguzzi, Zürich	CHF 1.785 Mio.
Swiss Molecular Pathology Breakthrough Platform (SOCIBP) Prof. Mark Rubin, Bern	CHF 2.3 Mio.*
Swiss Personalized Oncology (SPO) Prof. Olivier Michiélín, Lausanne Prof. Mohamed Bentires-Alj, Basel	CHF 2.3 Mio. CHF 1.275 Mio.
Identification of biomarkers and therapeutic targets in inflammatory disease immunotherapy by high-dimensional single cell analysis and cluster proteomics Prof. Manfred Claassen, Zürich	CHF 1.445 Mio.*
Personalized Swiss Sepsis Study (PSSS) PD Dr. Adrian Egli, Basel	CHF 2.3 Mio.*
Swiss Frailty Network and Repository (SFNR) Prof. Heike Bischoff-Ferrari, Zürich	CHF 1.785 Mio.
Population-wide screens of the human immune repertoire Prof. Adriano Aguzzi, Zürich	CHF 1.785 Mio.

*Co-financed by SPHN and PHRT (ETH-Domain). The figures indicate the amount received from SPHN only.

A lay-summary of each project is available on the SPHN website: www.sphn.ch/en/projects.html

2.2 National and international collaborations

2.2.1 National collaboration

At the national level, SPHN has been collaborating with the ETH-Domain program PHRT in the frame of the first call for proposals and with the Swiss Biobanking Platform (SBP) regarding the ethical framework, governance and standard issues.

SPHN has also worked with the Public Health Schweiz and the International Risk Governance Council for the organisation of events.

2.2.2 International collaboration

SPHN is a member of the International Consortium for Personalized Medicine (ICPerMed) since July 2017 and attends the Executive Committee meetings that take place twice per year.

In addition, the SPHN initiative was presented at the 1st European Alliance for Personalised Medicine Congress in Belfast (27-30.11.2017). With the help of SwissCore, SPHN representatives met several EU services in Brussels (6-7.12.2017);

2.3 Events & Communications

In 2017, SPHN organized and co-organized the following events:

- SPHN Info Event, Bern, 29.6.2017;
- SPHN Public Event, Bern, 28.8.2017;
- H+ Congress – Knowledge Lounge, Bern, 8.11.2017;
- Swiss Public Health Conference 2017, Basel, 22-23.11.2017;
- IRG Workshop 'Trust & Precision Medicine', Geneva, 23-24.11.2017.

Further, the following articles were published:

- Swiss Personalized Health Network (SPHN):
Die nationale Initiative im Überblick/ L'initiative nationale en un clin d'œil;
Schweizerische Ärztezeitung, 2017, 98, 595. / Bulletin des Médecins Suisse, 2017, 98, 19.
- Ein ethischer Rahmen für den Austausch von Gesundheitsdaten / Un cadre éthique pour l'échange de données,
Schweizerische Ärztezeitung, 2017, 98, 1138. / Bulletin des Médecins Suisse, 2017, 98, 36.
- The Swiss approach to precision medicine, Swiss Medical Weekly, 2018, in press.

In addition, SPHN communicates continuously via its website (www.sphn.ch; available in English, French, and German), Twitter, LinkedIn, and punctual newsletters.

3. Finance

As a large part of the year was devoted to the implementation of the funding instruments, the majority of the amounts granted to the various activities were transferred in 2017. The first payments for the projects supported during the 2017 call will be made in January 2018 and the first payments for the collaboration agreements will be made after the signature of the contract.

During the past year, the main costs of the Management Office were salaries and working groups (travel expenses, compensation of group leaders), communication & events, and external staff costs (consultant, lawyer).

The passing on of the costs resulting from negative interest rates adopted by the Swiss National Bank to customers by commercial banks was an unexpected burden. Given the high proportion of liquidity at the beginning of the initiative, the additional costs are considerable (CHF 25,116. – for the period August-December 2017) and may have a significant impact on the operational functioning of the initiative. In order to limit these costs, the assets of SPHN were spread over several banks during the year and more favorable terms were negotiated with the banks. In addition, it was agreed with SERI to adapt the payment schedule.

Table 3: Balance sheet (2017)

Description	Amount [CHF]
ASSETS	
Non-Current Assets	0
Cash	4'964'122
SAMW current account	6'978'096
Current Assets	11'942'218
Total Assets	11'942'218
LIABILITIES	
Total Equities	0
Grants payable	9'190'900
Long-Term Liabilities	9'190'900
Grants payable, accrued and other liabilities	2'718'144
Accounts payable	33'174
Short-Term Liabilities	2'751'318
Total Liabilities	11'942'218

Table 4: Cash flow statement 2017

Description	Amount [CHF]
SERI – payment SAMS	7'500'000
SERI – payment SIB	5'000'000
Financial expenses	-25'210
Cash flow from financing activities	12'474'790
Personnel costs	-287'373
Administrative costs	-10'753
Bodies, working group, audit	-103'411
Events and communication	-66'591
Consulting fees	-57'619
Funding activities (projects)	-40'000
Cash flow from operating activities	-565'747
Net increase/decrease in cash	11'909'043
Cash at the beginning of the period	0
Cash at the end of the period	11'909'043

4. Board Members

National Steering Board

Prof. Peter Meier-Abt, Zürich
Chairperson

Prof. Urs Frey, Basel
Vice-Chairperson

Prof. Ron Appel, Lausanne

Prof. Herbert Binggeli, Bern

Prof. Mirjam Christ-Crain, Basel

Dr. Katrin Cramerli, Bern

Dr. Christine Currat, Lausanne
Guest

Prof. Matthias Egger, Bern
Guest

Prof. Matthias Gugger, Bern

Prof. Detlef Günther, Zürich

Prof. Nouria Hernandez, Lausanne

Prof. Denis Hochstrasser, Genève

Prof. Christoph Hock, Zürich

Dr. Saskia Karg, Zürich - Guest

Dr. Adrien Lawrence, Bern
Managing Director, ex officio

Prof. Arnaud Perrier, Genève

Prof. Anita Rauch, Schlieren

Prof. Torsten Schwede, Basel
Chair SPHN Executive Board, ex officio

Prof. Gabriela Senti, Zürich

Prof. Dominique Soldati-Favre, Genève

Prof. Jean-Daniel Tissot, Lausanne

Prof. Didier Trono, Lausanne

Prof. Effy Vayena, Zürich
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Prof. Marie-Christine Jaulent, France

Prof. Paul Klenerman, UK

Prof. Oliver Kohlbacher, Germany

Prof. Dan Roden, USA

Prof. Amalio Telenti, USA

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