

ANNUAL REPORT 2017



Annual Report 2017

FOREWORD BY THE DIRECTORS

For the Swiss Polar Institute (SPI), the year 2017 was the time for very different types of challenges and a very steep learning curve.

On the one hand, following its launch in the course of 2016, the SPI had to “invent” itself. Reaching out to the Swiss Polar community and offering services and support with real added-value cannot be achieved in one day. In 2017, the SPI took numerous steps towards the launch of new activities and support schemes, launched a community consultation to better define its medium-term activities. SPI collaborated with many new partners in order to support these goals and instruments. Our thanks notably go to the excellent collaboration and trust of the BNP-Paribas Swiss Foundation and to the future Swiss Polar Foundation.

In parallel, the implementation (until end April 2017) of the Antarctic Circumnavigation Expedition (ACE) and the follow-up work throughout the year will leave SPI with an incredible legacy in terms of scientific work and data, but also in terms of networks and management experience. The management of the ACE data and the support obtained from the Swiss Data Science Center will enable the SPI to develop expertise and networks in the crucial field of data management and data science for polar-related science.

We are convinced that the success of the SPI will be measured through the added-value and opportunities it will offer to the Swiss Polar community in the years to come. In addition, SPI should prove itself as open, fair and transparent in its processes and communication. A set of internal rules and processes were therefore defined to guarantee transparency and a maximum amount of fairness in its funding and support.

In 2017, we have reached out to the polar networks and colleagues abroad and we will continue to do so in the future. However, it is essential that the SPI contributes to the rise of a wider polar community and is anchored beyond its founding institutions in order to guarantee that it can continue to support scientists from all Swiss research institutions. This will be one of the main targets for our work in 2018.

We would like to thank the Board of Directors of the SPI and the SPI Science and Technology Advisory Board (STAB) for their support and trust during 2017 and look forward to continuing to work together with them.

Prof. Konrad Steffen
SPI Scientific Director

Danièle Rod
SPI Executive Director

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SPI ACTIVITIES AND HIGHLIGHTS 2017

A) Expeditions

Antarctic Circumnavigation (ACE)

The Antarctic Circumnavigation Expedition (ACE) was a historical endeavour for SPI and beyond. 22 international projects, bringing together scientists from over 75 research institutions in 23 countries were selected following a call for proposal in 2016. The research projects were funded by Ferring with the support of SPI and EPFL.

Set up in over one year by the team of Dr. F. Paulsen, Prof. D. Walton as Chief Scientist and the team of SPI, ACE was an incredible logistical challenge. SPI and the EPFL support were in the lead in terms of the set-up of the science programme on board (call for proposals, evaluation, granting procedures and grant management/payments), management of the over 150 scientists who came on board (medical checks, administration) and setting up of the ACE Maritime University which allowed 49 master and PhD students to follow courses and practical training during the one-month navigation from Bremerhaven to Cape Town. The SPI also collaborated very closely with Présence Suisse (PRS) and the Federal Department of Foreign Affairs (FDFA) in order to guarantee local support during the expedition's stops (Cape Town, Hobart, Punta Arenas) as well as to organise a set of extremely well-attended and attractive events during these stop-overs.

In 2017, a large part of the SPI's resources was dedicated to making ACE a success. Here the main highlights in short:

- Dec. 2016-March 2017: Implementation of the expedition (Cape Town to Cape Town);
- January 2017: Stop-over in Hobart and events (conferences, reception, workshops);
- February 2017: Stop-over in Punta Arenas (reception and dinner);
- 19-21 March 2017: Events and conferences upon return in Cape Town;
- March-April 2017: 4th Leg of ACE with arrival in Bremerhaven followed by demobilisation of equipment and material;
- April (1st round) and July (2nd round) 2017: successful submission of the ACE-DATA project (proposal for an ACE data platform and data science project) to the Swiss Data Science Centre's first call for proposals;
- July-August 2017: Checking and validation of 22 ACE (interim) scientific and financial reports with support of ACE Chief Scientist and EPFL financial services;
- August 2017: Mandate to Jen Thomas to work on ACE Data (cleaning, updates, link with PIs, support for ACE-DATA project);
- September-October 2017: Payment of 2nd tranche of funding (40%) for each project.

Throughout the year, SPI maintained permanent contact with ACE PIs and regularly sent them relevant updates (notably: logistics, data management, preparation of joint papers, reporting on permits, contributions to conferences and "internal" meetings).



March 2017: Zodiac returning to the Akademik Treshnikov (South Sandwich islands)
©Parafilms/EPFL

A particular emphasis was also laid on communication throughout and after the expedition. This was made possible by the support of EPFL's Mediacom unit. The ACE blog and social media raised considerable interest and the journalists on board produced widely broadcasted high-quality contents in renowned media (RTS, SRF, France TV, Al Jazeera English, Geo). Following the expedition, the ACE website was revamped in order to accommodate post-cruise news and to valorise the content and images produced.

ACE also prompted a lot of requests for SPI presentations at various events. It was not possible to honour all invitations but those events organised or attended by SPI are listed in the "events section".

CircumGreenland Expedition (CGE)

An unprecedented CircumGreenland Expedition (CGE) should take place in August-September 2019 and is currently being planned in collaboration between the team of F. Paulsen and SPI.

Main activities by SPI in 2017:

- April-July 2017: Planning and logistics in collaboration with ArcticNet (Canada) and team F. Paulsen
- From September 2017: Preparation of an alternative programme on Swedish Oden and visit to the vessel (November 2017)
- November 2017: Establishment of an international experts' committee to define CGE scientific programme (to meet on 2-3 February 2018)



Visit on the Oden (Nov 2017) © SPS

B) Further activities

Definition and launch of (funding) instruments for 2018 and beyond

- May-September 2017: Preparation of concepts by SPI Secretariat and STAB
- October 2017: Adoption of new instruments by Board of Directors
- October 2017: Financial support by BNP-Paribas (2018-2020) for the future “Polar Access Fund”
- November 2017: Launch of a “**Call for Ideas**” devised by the STAB and SPI Secretariat in order to gather a maximum number of ideas for future priorities and activities of SPI and deepen SPI’s understanding of the “polar-interested” community in Switzerland. Deadline was set on 12 January 2018.

Funding instruments:

- “**Polar Access Fund**” (polar field trips for young scientists): Definition of rules, application forms, preparation of call for proposals (online platform and communication) to be launched on 10 January 2018;
- Support for the participation in **maritime or field universities abroad**: First opening publicised for spring field university by Sentinelle Nord (Canada) – one student selected and funded. Contact with other potential maritime or field universities whether SPI could support the participation of Swiss students or young scientists by covering fees and travel costs (Canada and Russia).

One of SPI’s missions is to support the participation of the Swiss Polar community in programmes beyond its own. On 7 November 2017, SPI therefore collaborated with Euresearch to organise an information event on the funding opportunities for cryosphere and polar science in the **Horizon 2020** programme.

Collaboration with partners and sponsors

As a new organisation, SPI will continue to work on increasing its visibility and networks. Within Switzerland, SPI is a member of the Swiss Committee on Polar and High-Altitude research (SKPH). Exchange with institutions such as the Swiss National Foundation as well as the Swiss Federal administration is also crucial for SPI to function efficiently and are glad to be able to count on their support.

At the Swiss level, SPI collaborated closely in 2017 with the BNP-Paribas Swiss Foundation and with the Swiss Polar Foundation, which is currently being set up.

Joining international networks and exchanging with “(big) sister” organisations is hugely important and useful for SPI. We have been lucky to count on the support of many leading institutions for polar research within the context of ACE (notably, AARI, BAS, AAD, IPEV, SANAP, NPO, AWI) and we look forward to working further with them whilst expanding our network. In 2017, SPI was admitted to join EUPolarNet (<http://www.eu-polarnet.eu/>), a network of 22 polar organisations in 17 European countries. Such exposure allows SPI to benefit from their

experience, identify niches for Switzerland and enables SPI to anticipate opportunities which could benefit the Swiss polar community.

C) Events and communication activities

Conferences and events organised by SPI

21 January	ACE Events (collaboration with team Paulsen, FDFA and Présence Suisse) – 20-150 participants	Hobart, Tasmania, Australia
23 February	ACE Event (collaboration with team Paulsen, FDFA and Présence Suisse) – 60 participants	Punta Arenas, Chile
20 March	ACE arrival conference (collaboration with team Paulsen, FDFA and Présence Suisse), presentation of projects and first results, 120 participants	Cape Town, South Africa/internet
10 May	Event for ACE and COMNAP/SCAR photo exhibition (held from 10 May to 5 June)	EPFL Campus, Lausanne, Switzerland
11-12 September	High Altitudes meet High Latitudes conference, 150 participants, introduction by F. Paulsen, Ambassador S. Flückiger, State Councillor C. Darbellay,	Crans-Montana, Switzerland
7 November	Horizon 2020 -Cryosphere and Polar Calls, 25 Participants, co-organised with Euresearch	Bern, Switzerland



High Altitudes meet High Latitudes Conference, Crans-Montana, Switzerland

Invited talks

12 April	ACE presentation on local television, Canal 9 Valais	Sierre, Switzerland
26 April	ACE event Brussels, organised by the Swiss Mission to the EU	Brussels, Belgium
29 April	ACE presentation during EPFL, Scientastic, EPFL Valais open doors, 50 participants	EPFL Valais/Wallis campus, Sion, Switzerland
16 June	ACE event in St Petersburg, organised by FDFA	St Petersburg, Russia
July	ACE and SPI presentation, SCAR Biology meeting (50 participants)	Leuven, Belgium
12 – 14 July	EU High-level Ministerial and Scientific Event on “Blue Enlightenment”: presentation of ACE	Lisbon, Portugal
7 August	FIFAD, Festival International du Film Alpin, Les Diablerets, ACE presentation during events, 150 participants	Les Diablerets, Switzerland
7 September	Swiss Polar Day, WSL, 60 participants	Birmensdorf, Switzerland
17 October	ACE presentation to ENAC, EPFL, 20 participants	Lausanne, Switzerland
18 October	Presentation of SPI, Board of BNP-Paribas Foundation	Geneva, Switzerland
9-10 November	Austrian Polar Research Institute annual meeting (APRI), 30 participants,	Innsbruck, Austria
17 November	Presentation of the SPI and Swiss Polar Research at CENAL	Zurich
1 December	Antarctica Day, 60 participants, presentation and practical activities in a school with APECS Switzerland	St-Aubin, Switzerland

Main external events and meetings attended

6 September	Landsgemeinde of the Arctic	Bern, Switzerland
13-15 October	Arctic Circle Assembly	Reykjavik, Iceland
23 November	SKPH annual meeting	Bern, Switzerland
11-15 December	3rd International Arctic Change Conference	Québec, Canada

Institutional communication

SPI activities and events are announced through a mix of channels in order to touch the broadest possible public.

Most importantly, SPI has invested a lot of time establishing a **comprehensive contacts database** of “Swiss polar contacts” with currently more than 1’000 addresses. The necessary resources will also be invested in the future in order to keep this key resource up-to-date. Important news such as calls for proposals or conferences are announced through this mailing list.

Additionally, all news is reflected on the **SPI website** which is evolving weekly and the SPI has launched a **twitter account** in October (@SwissPolar) on which all SPI news is also spread.

Communication related to **ACE**, revolved around the media on board (see above), which gave the expedition exceptional coverage, but also its website (<http://spi-ace-expedition.ch/>) which was updated very regularly during the expedition and fully revised at the end of 2017. The ACE Facebook and Twitter accounts are still active and have a large following (@ACEexpedition still has close to 1’000 followers).

D) Internal developments

SPI Secretariat

- Hiring of SPI Executive Director (July-August 2017)
- Hiring of Maternity leave replacement for N. Pasche (Oct 2017-July 2018)



SPI staff (as of 31.12.2017)

Konrad Steffen	Scientific Director
Danièle Rod	Executive Director
Natacha Tofield-Pasche	Deputy to the Directors
Basil Fahrlaender	Scientific collaborator
Laurence Wharton	Secretary

SPI Board of Directors

The SPI Board of Directors is the ultimate decision-making body of the SPI and is particularly tasked with decisions regarding the SPI's strategy and finances. Its members are high level representatives of the SPI's funding institutions.

In 2017, the Board of Directors met on 28 June and 19 October.

SPI Board of Directors (as of 31.12.2017)

Prof. Martin Vetterli – Chair	EPFL
Dr. Frederik Paulsen	Editions Paulsen
Prof. Detlef Günther	ETHZ
Prof. Christoph Hegg	WSL
Prof. Christian Leumann	University of Bern

The State Secretariat for Education, Research and Innovation (SERI), the Federal Department of Foreign Affairs (FDFA), the Swiss Commission for Polar and High-Altitude Research as well as the chair of the SPI STAB and the SPI Directorate are present as guests at SPI Board meetings.

SPI Science and Technology Advisory Board (STAB)

The STAB of the SPI is composed of experts active in various fields of polar and earth sciences. The STAB advises the SPI on scientific activities and priorities. In 2017, the membership of the STAB evolved and was expanded in order to include international members.

In 2017, the STAB met on 24 February, 5-6 June (STAB Retreat) and 12 October.

SPI STAB members (as of 31.12.2017)

Prof. Karin Lochte – Co-Chair	AWI, Germany
Prof. Thomas Stocker – Co-Chair	University of Bern, Switzerland
Christian de Marliave	Editions Paulsen, France
Prof. Hubertus Fischer	University of Bern, Switzerland
Prof. Philippe Gillet	EPFL, Switzerland
Prof. Gerald Haug	ETHZ, Switzerland / MPG, Germany
Prof. Gabriela Schaepman	University of Zurich, Switzerland
Prof. David Walton	BAS, United Kingdom
Prof. Heini Wernli	ETHZ, Switzerland

Lausanne, 12 February 2018