

# „CONNECTING WITH SWITZERLAND“



Nina Kaufmann

Attaché of the Swiss Embassy to  
Australia

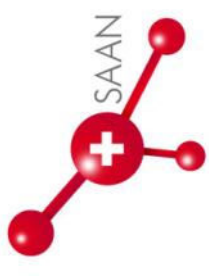
SWISS AUSTRALIAN ACADEMIC NETWORK

Proudly supported:

Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra  
Embassy of Switzerland in Australia

- Location Switzerland
- Universities/Research /Funding
  - swissnex
  - SAAN





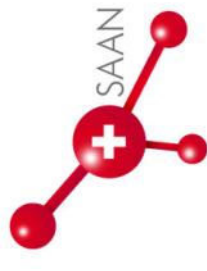
# An outstanding quality of life

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## Global Ranking of Cities with a High Quality of Life

City	Ranking
<b>Zurich</b>	<b>1</b>
<b>Geneva</b>	<b>2</b>
Vienna	2
Vancouver	4
Auckland	5
Düsseldorf	6
Frankfurt	7
Munich	7
<b>Bern</b>	<b>9</b>
Sydney	10





# A highly competitive economy

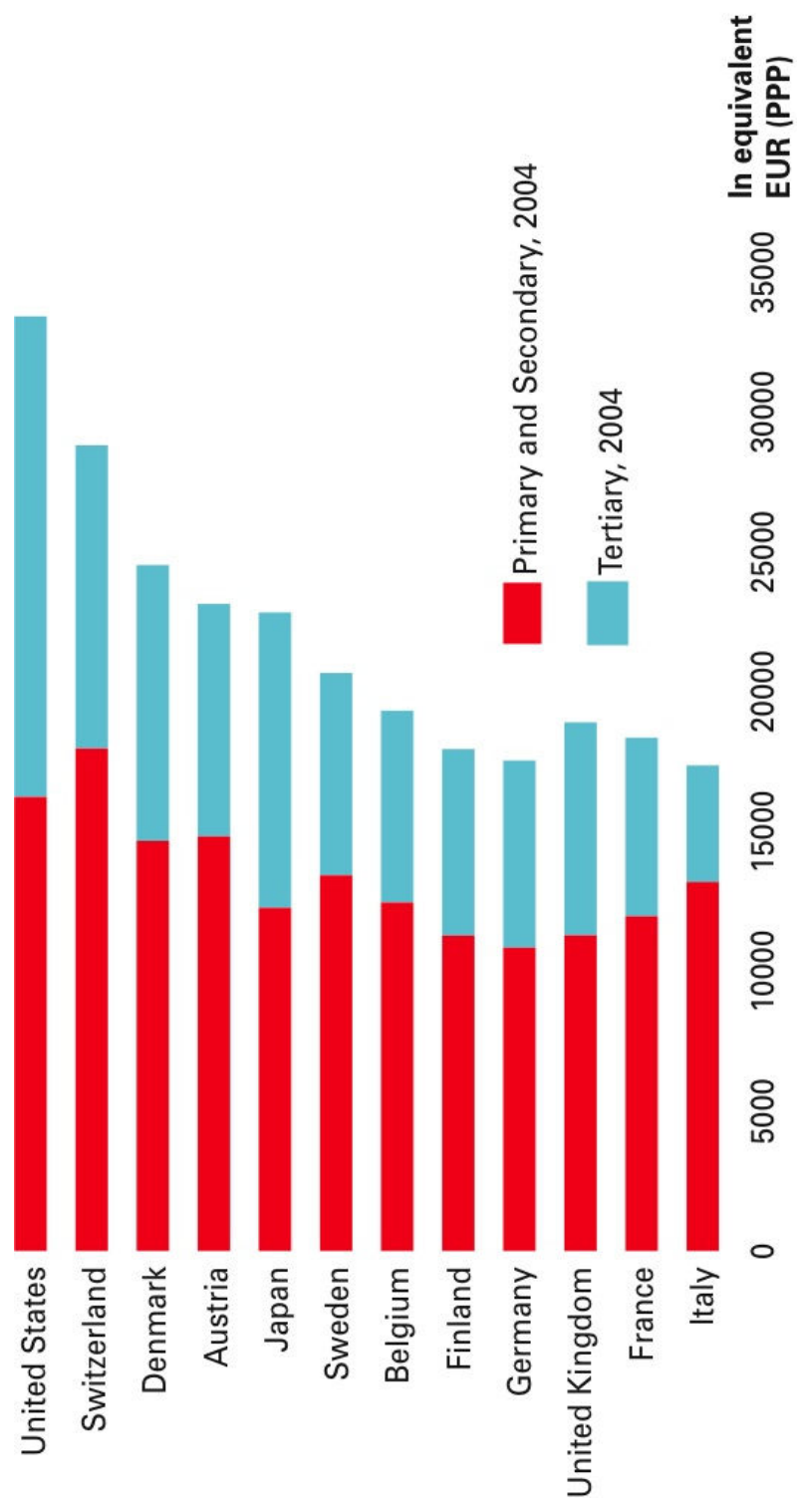
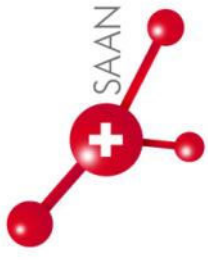
## Global Competitiveness Index



	2008-2009 Ranking	2007-2008 Ranking	2006-2007 Ranking
USA	1	1	6
<b>Switzerland</b>	<b>2</b>	<b>2</b>	<b>1</b>
Denmark	3	3	4
Sweden	4	4	3
Singapore	5	7	5
Finland	6	6	2
Germany	7	5	8
Netherlands	8	10	9
Japan	9	8	7

Source: World Economic Forum (WEF) – Global Competitiveness Report (2006-2007 – 2008-2009)

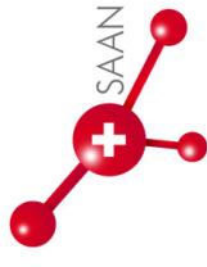
# Investment in Education



Source: Education at a Glance 2007, OECD Indicators (Note: Japan, incl. R&D)

# Innovation

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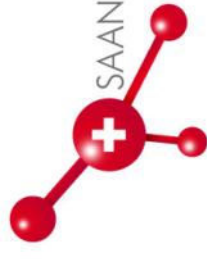


## **‘Switzerland, European champion of innovation’**

According to the 2008 analysis of the European Innovation Scoreboard (EIS) which ranks 27 European countries, Switzerland has improved its performance in the field of innovation and is now European leader...

Federal Statistics Office, 22.1.2009

# Outstanding R&D output



Rank	Country	Citation Rate per scientific paper		% of GDP invested in Research
		2006	2002	
1	Switzerland	14.05	12.22	2.57
2	USA	13.36	11.75	2.60
3	Netherlands	12.39	10.34	1.84
4	Denmark	12.35	10.12	2.62
5	Sweden	11.82	10.02	3.98
6	Great Britain	11.76	9.86	1.88
7	Finland	11.19	9.18	3.48
8	Canada	10.94	9.42	1.95
9	Belgium	10.56	8.95	1.89
10	Germany	10.36	8.37	2.52

- LocationSwitzerland

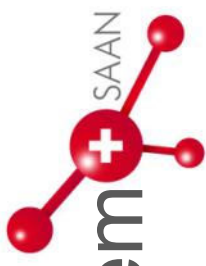
- Universities/Research /Funding

- swissnex

- SAAN



# Strengths of the Swiss ERT System



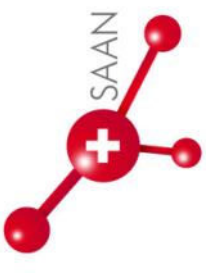
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- Diversity (cultures, languages)
- Highly international, 20% foreign students and 35% foreign researchers
- Central location in Europe
- More than 500 years of higher education tradition
- Open university system to foreign students with recognized degrees
- Very low student fees (average 1'500 AUD p.a.)
- Tradition of scientific excellence at research universities
- Strong ties with industry
- Wide arrays of international networks and programs



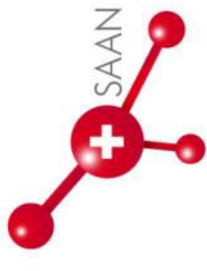
# University Ranking

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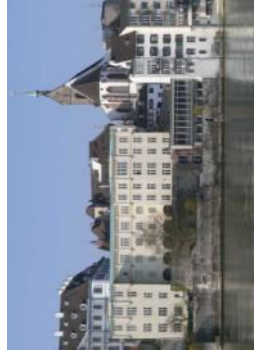
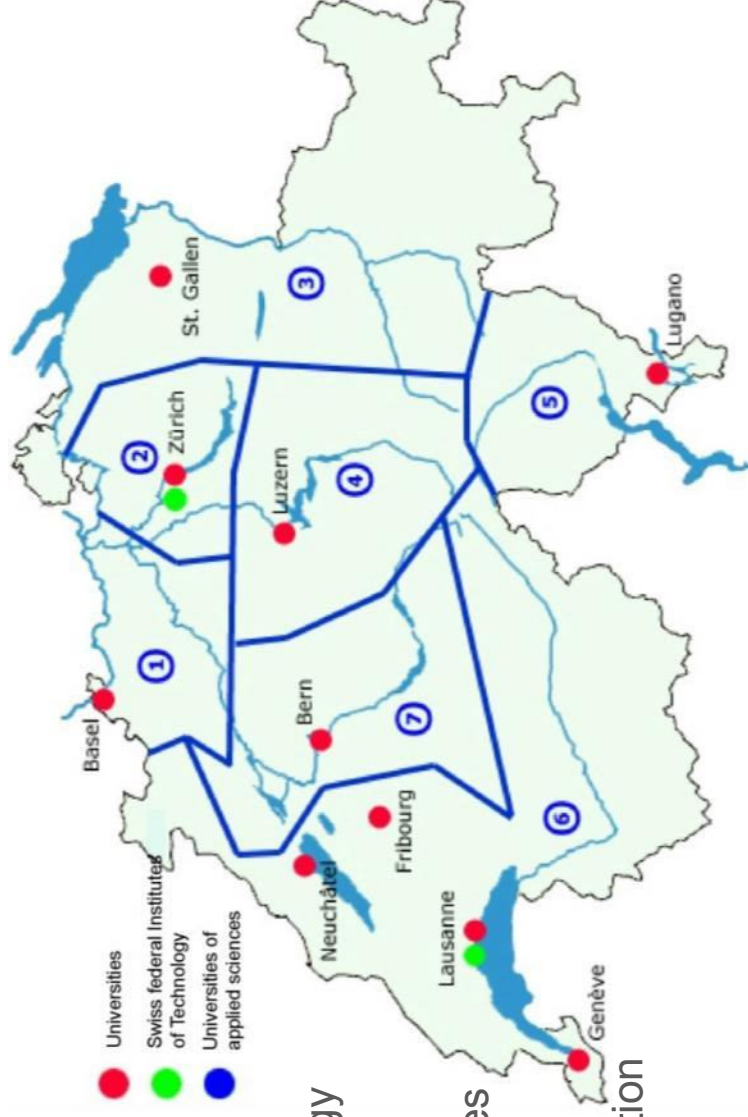
<b>Australian Universities</b>		<b>Swiss Universities</b>	
Australian National University	42	Federal Institute of Technology, Zurich	32
Monash University	104	University of Geneva	83
University of NSW	118	Federal Institute of Technology, Lausanne	100
University of Sydney	121	University of Zurich	169
University of Melbourne	128	University of Berne	222
University of Queensland	150		

*2008 Ranking Web of World Universities (Webometrics)*



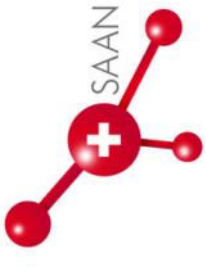
# Higher education landscape

- 10 cantonal Universities  
100,000 students
- 2 Federal Institutes of Technology  
20'000 students
- 8 Universities of Applied Sciences  
60,000 students
- 15 Universities of Teacher Education  
12,000 students (2007/08)



# Higher education landscape

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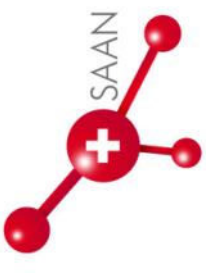
- On tertiary level the Confederation and cantons share responsibility and funding
- Switzerland participates in the European Education Area (Bologna system)
- Language of instruction: Bachelor level: D / F / I  
Master level: mostly E or partly E
- Universities and UAS actively pursue their own international strategies

[www.swissuniversity.ch](http://www.swissuniversity.ch)

Rectors Conference of the Swiss Universities

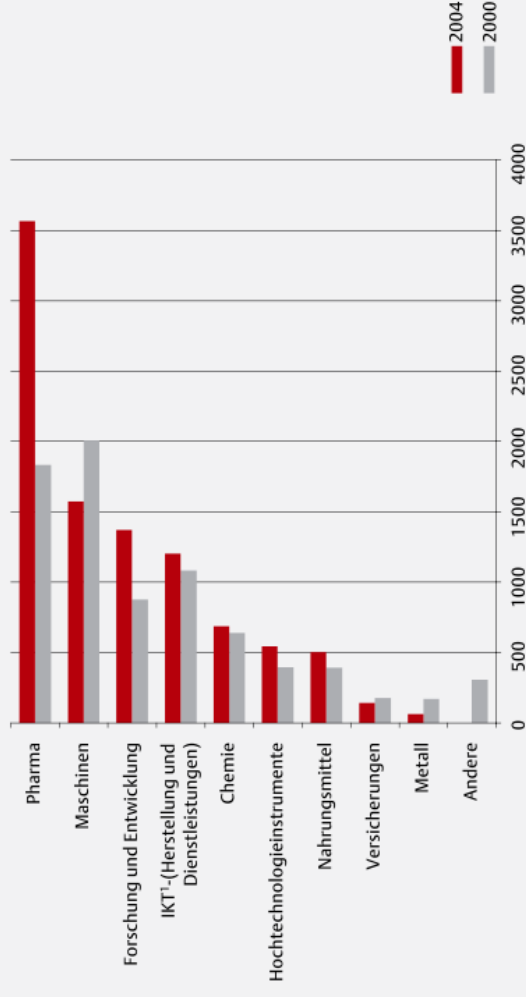
[www.crus.ch](http://www.crus.ch)

# Research in Switzerland



- 2/3 of investment in R&D is private with the major interest coming from the pharmaceutical, chemical, electronics and metallurgical industries

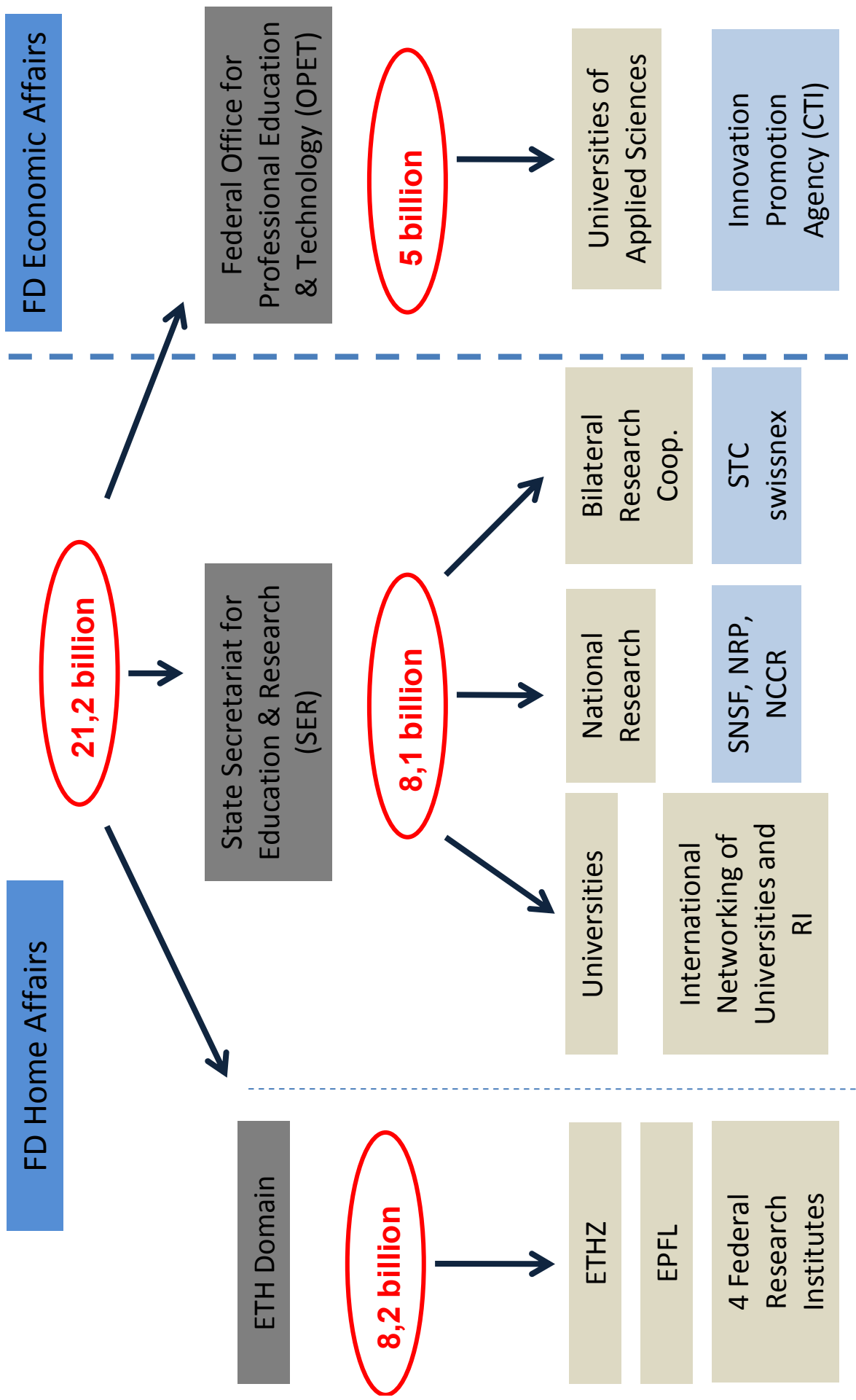
Intramuros-F+E-Aufwendungen nach Wirtschaftszweig, Entwicklung 2000–2004  
In Millionen Franken



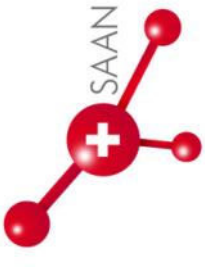
¹ IKT: Informations- und Kommunikationstechnologien

# National funding of ERT system

(2008-2011)



# National Science Foundation



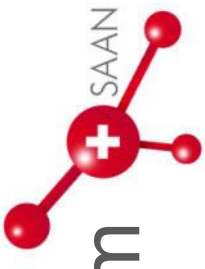
[www.snf.ch](http://www.snf.ch)



SWISS NATIONAL SCIENCE FOUNDATION

- Funding policy
  - Financial backing of high-quality investigator-driven research projects in all disciplines on a competitive basis
  - Funding is available to scientists of all nationalities working in Switzerland
- SNSF international funding schemes
  - *International short research visits* of up to 3 months to initiate or consolidate international collaborations
  - Participation in international and European programs

# NCCR International PhD program



- NCCR Genetics PhD Program 2009

Frontiers in Genetics proposes an international program supported by the Swiss National Science Foundation. The program is based at the University of Geneva and includes participating members from the Universities of Louvain and Zurich, the Swiss Federal Institute of Technology in Lausanne, the Swiss Institute for Experimental Cancer Research (Lausanne) and the Friedrich Miescher Institute (Basel). The program starts in October 2009 and provides a strong background in molecular genetics and genomics for the study of modern biological problems.

We are seeking outstanding candidates with a degree in biological sciences and a commitment to a career in research. The selected students will receive stipends for four years, subject to completion of all program requirements. Applicants should send the registration form, a letter describing their interests, background and research experience, an official transcript of their university curriculum with grades, and 3 letters of recommendation, to:

**Frontiers in Genetics**  
UNIVERSITÉ DE GENÈVE

## International PhD program

**Registration form:**  
[www.frontiers-in-genetics.org](http://www.frontiers-in-genetics.org)

**Application deadline:**  
May 1, 2009

**Participating members:** Sylvain E. Antonarakis, Konrad Beikirch, Ben Dagnelidze, Emmanuel M. Delmetzakis, Denis Duboucq, Susan W. Gasser, Marcos Gonzalez-Gaitan, Monica Gatto, Thomas Holzerová, Noelia Hernandez, Wai-ship Hien, Pedro Herrera, François Koch, Ulrich K. Laemmli, Joachim Lingner, Robbin Lovatt, Serge Helf, Ivan Rodriguez, Roland Miska, Ariel Ruiz i Altaba, Leif Schreiber, David Shore, Françoise Strazi, Bernard Thoenen, Didier Trono, Walter Wald

**NCCR Frontiers in Genetics**  
International PhD Program  
Sciences III - University of Geneva  
30, quai Ernest-Anserme  
CH - 1211 Geneva 4, Switzerland

**INSERM**  
Institut National de la Santé et de la Recherche Médicale

**ETH**  
ETH ZÜRICH  
University of Zurich

**EPFL**  
École Polytechnique Fédérale de Lausanne

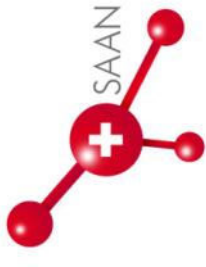
**UCL**  
Université de Lausanne

**IGREC**  
Institut de Génétique et de Développement

[www.frontiers-in-genetics.org](http://www.frontiers-in-genetics.org)

# International ERT cooperation

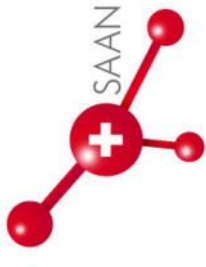
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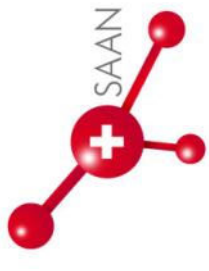
- 2008-11 increase of public funding for international cooperation by 50%
- Switzerland is a member of the most important international research organizations and participates in the main international research programs
- Current focus of Swiss international science policy:
  - Participation in the European Research and Technology Area
  - Participation in the European Education Area
  - Promotion of bilateral partnerships of Swiss Universities and institutions
  - Multilateral cooperation (OECD, Council of Europe)

# European Research Area

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- The pillars of EU-Swiss Research collaboration
  - *EU Framework Programs*
- Since 2004 Switzerland participates and enjoys the same rights as EU Member States
- The Euresearch network ([www.euresearch.ch](http://www.euresearch.ch)) created by SER informs interested parties about the possibilities of participation in European research activities
  - *COST* (coordination and stimulation of nationally-funded research activities)
- In 2007 Switzerland, a founding member, participated in 149 of 191 *COST* actions
- Information about Researcher mobility, career development, job vacancies in Switzerland [www.euraxess.ch](http://www.euraxess.ch)



# Bilateral R&D Cooperation

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- Federal instruments to promote ERT abroad:
  - Global network of 12 Science & Technology Counselors
  - 5 swissnex offices (Boston, San Francisco, Singapore, Shanghai, Bangalore)
  - Specific programs to promote research cooperation with priority countries (China, India, Russia, South America)

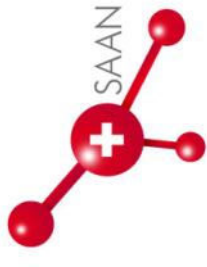


- Location Switzerland
- Universities/Research/Funding
  - swissnex
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# swissnex offices

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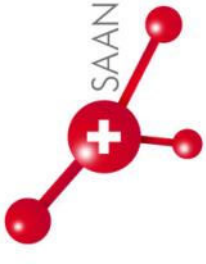


- Key component of Swiss international science policy since 2000
- Run by the FD Home Affairs and backed by the FD Foreign Affairs
- Not in embassies but in high-tech hubs
- Public-private initiative (1/3 of the costs by Swiss Government, 2/3 private funding)
- Unique in its approach
- Promotion of Swiss excellence in science, education, art and innovation and supporting the international activities of Swiss institutions of higher learning and research institutes





# swissnex Singapore

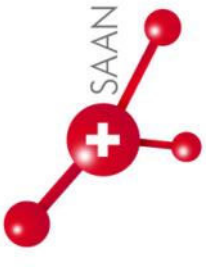


- Inaugurated in 2004 in Biopolis, Singapore's Biotechnology hub comprising public and private research institutes (Novartis Institute for Tropical Diseases)
- swissnex Singapore is a platform of the Swiss Embassy operating in synergy with research, government and economic partners, as the only, highly visible, foreign governmental structure, amidst local institutions
- Why Singapore?
  - Commitment in the field of education, research and entrepreneurship
  - State-of-the-art facilities
  - Start-up creation incentives

[www.swissnexsingapore.org](http://www.swissnexsingapore.org)



# swissnex Singapore



## *'Promote Swiss excellence in innovation and research'*

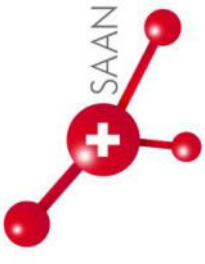
'Workshop on Innovation in Food Consumer Interaction 2008'

- Co-organized with Nestlé R&D Center Singapore and corporate stakeholders (National University of Singapore (NUS), Swiss Center for Affective Sciences, Givaudan Singapore Pte Ltd,...)
- Tackle interdisciplinary issues, enabling to reach out to academic, governmental as well as to industrial partners in Singapore
- Innovation-related action plan driven by Nestlé throughout the Asian swissnex network
- Interdisciplinary event that allowed partners form a variety of horizons to initiate collaborations





# swissnex Singapore



## *‘Support the internationalization of Swiss institutions of higher learning’*

- Since 2006 the University of St. Gallen operates a Representative Office at the swissnex Singapore premises to extend the presence of the University in Asia and to allow for synergies arising from joint activities with swissnex.
- 2008 visit of a delegation of the Directorate General of Higher Education of the Canton de Vaud (DGES) and the University of Applied Sciences (UAS) Western Switzerland (HES.SO) to explore opportunities for collaboration with appropriate partners in Singapore.



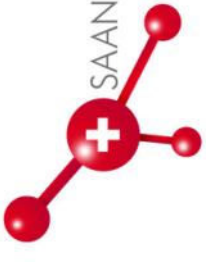
University of St. Gallen



**Hes·SO**  
Haute Ecole Spécialisée  
de Suisse occidentale  
Fachhochschule Westschweiz  
University of Applied Sciences  
Western Switzerland



# swissnex Singapore



*‘Help structure, implement and extend bilateral cooperation programs’*

- *Institutional agreements*

swissnex Singapore supports the signing of Memoranda of Understandings (MoU) between Swiss and Singaporean institutions to enable student and professor exchange

A major increase by Singaporean students in Switzerland was recorded by institutions such as ETHZ (14 exchange students compared to 1-2 previously) and HSG (23 exchange students instead of 5) (2007)
- *Academic programs*

In collaboration with local and Swiss partners, swissnex Singapore has set up Academic programs

Master of Science in Infectious Diseases, Vaccinology and Drug Discovery jointly organized by National University Singapore, Novartis Institute of Tropical Diseases, University of Basel and the Swiss Tropical Institute

- Location Switzerland

- Universities/Research/Funding

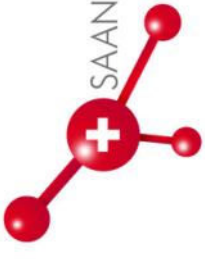
- swissnex

- SAAN



# Why SAAN?

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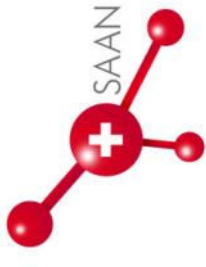
- Switzerland and Australia have world-class academic institutions and research facilities along side innovative industries
- 1996 Nobel Prize in Medicine for Rolf Zinkernagel and Peter Doherty

SAAN therefore aims at:

- Raising awareness and profile of Australia in Switzerland as a world-class location for (post graduate) training and vice versa
- Fostering, expanding and facilitating bilateral exchange between Australia and Switzerland of academics at different stages of their career
- Creating and promoting a highly interactive “peoples-network” among academics of different fields
- Acting as network and resource hub for (young) academics seeking exchange (undergraduate, postgraduate student, postdoctoral training)

# History

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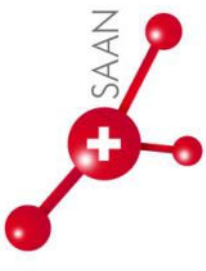


- Established in 2005 as a “grass-root” network open to Swiss and non-Swiss academics as the Swiss Academic Network Melbourne (SANM)
- Financial support from the Swiss Embassy and Consulate and recently Novartis
- Transition to national network (**SAAN**) as a non-for-profit, incorporated entity with office bearers in all Australian States and Territories
- Patronage by the Swiss Ambassador



# Past activities

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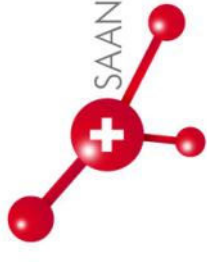


- Talk by Dr. Boris Baer which led to a research collaboration between LaTrobe University and the University of Western Australia
- Visit of the Australian Synchrotron => MOU with the Paul Scherrer Institute in Switzerland
- Successful collaboration with DIIRD on several occasions most recently on the occasion of the talk: ‘Swiss-Australian Biotechnology: *The Cytosia-Novartis example*’



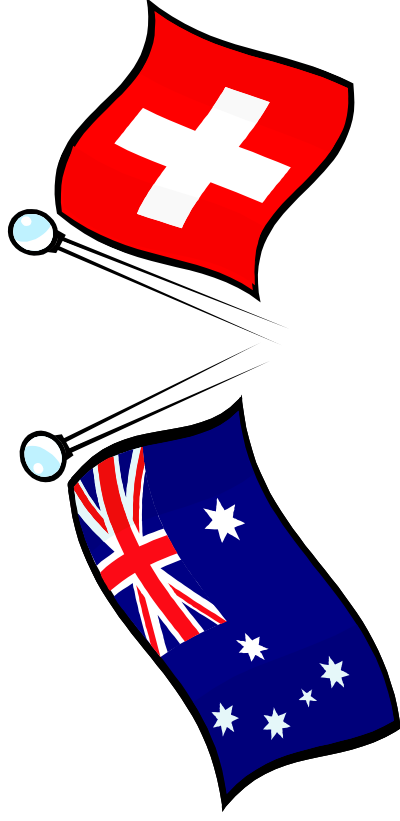
# Next steps

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- Attract new members from all professional directions who share the vision of SAAN and can help the network
- Encourage connectivity between Swiss and Australians who can facilitate bilateral exchange on all levels (Government, Universities etc.)
- Visit of the Director of Friedrich Miescher Institute for BioMedical Research to Walter Eliza Hall Institute in 2009
- Contacts between Sydney Conservatorium of Music and College of Fine Arts and the designated Director, Zurich University of the Arts
- Exposure of SAAN in media (web, radio)
- Launch of 2009 SAAN “Roadshow” in Switzerland
- *For the future:* SAAN contribution and sponsorship for Scientific Meetings and Fellowships

Thank you for your  
attention!



[www.saan.id.au](http://www.saan.id.au)



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AUSTRALIAN  
ACADEMIC  
NETWORK

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