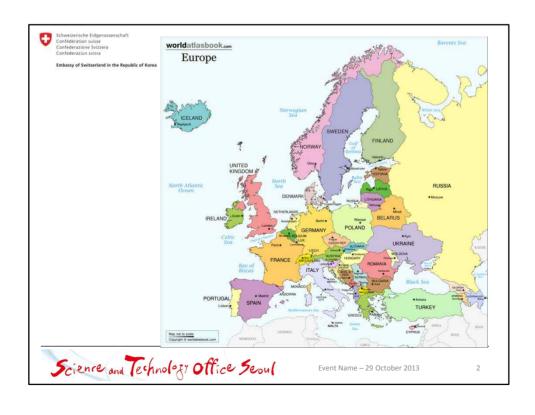


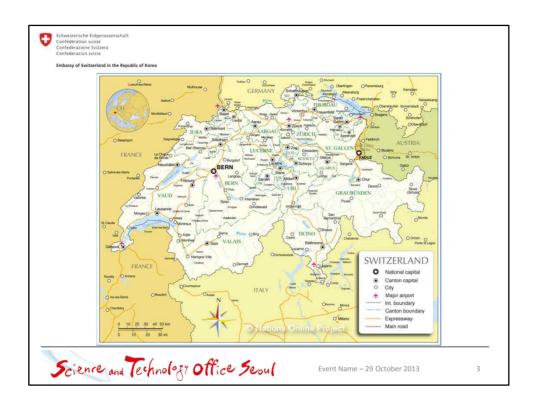
Pusan National University EU Center

Christian Schneider

Science and Technology Office, Embassy of Switzerland

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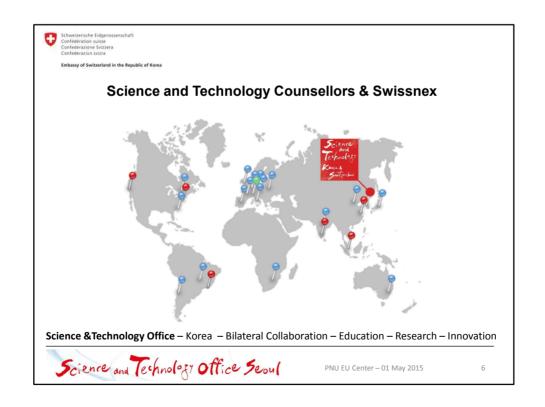


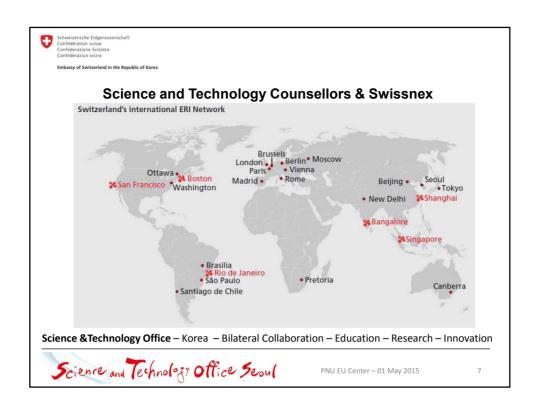


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Bilateral Collaboration





- Korea is one of 7 priority countries for Science & Technology of Switzerland
- ¬ Since 2008: Bilateral Agreement on cooperation in Science & Technology

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Bilateral Collaboration

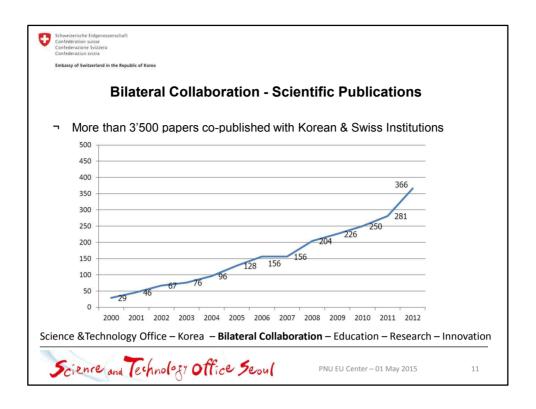
- Over 49 bilateral scientific projects funded
- Korean-Swiss Science Days taking place consecutively in Switzerland and Korea
- ¬ Over 30 agreements between universities
- 5 Alumni Chapter (ETHZ, EPFL, Uni St. Gallen, IMD, EHL) in Korea

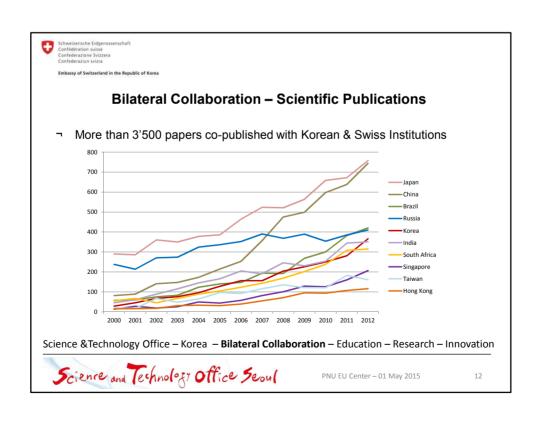


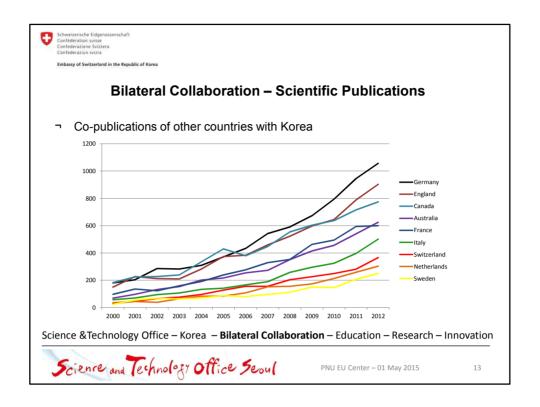
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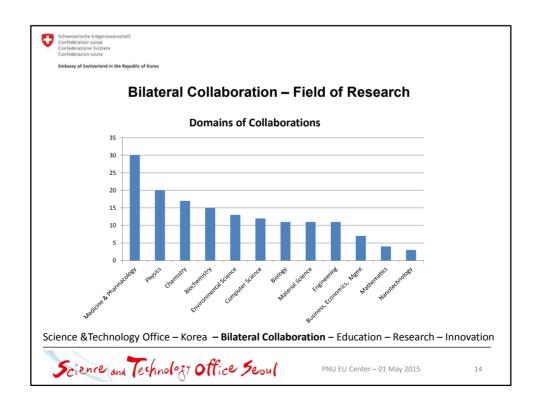


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Bilateral Collaboration - Students & Researchers



- Around 150 Korean scientists work at Swiss universities
- Around 250 Korean students study in Switzerland
- About 100 Swiss students study in Korea

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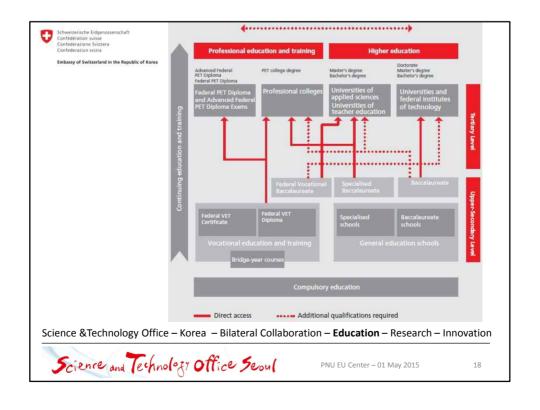


Education

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Vocational & Professional Education and Training

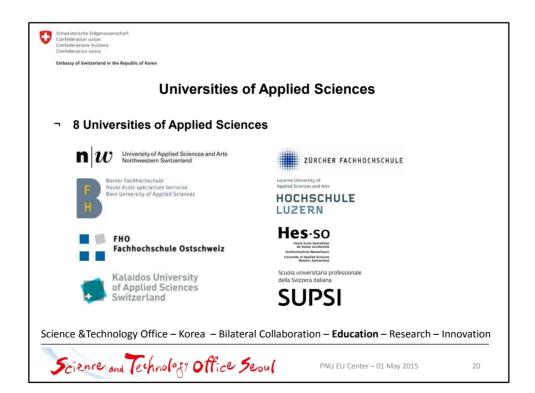


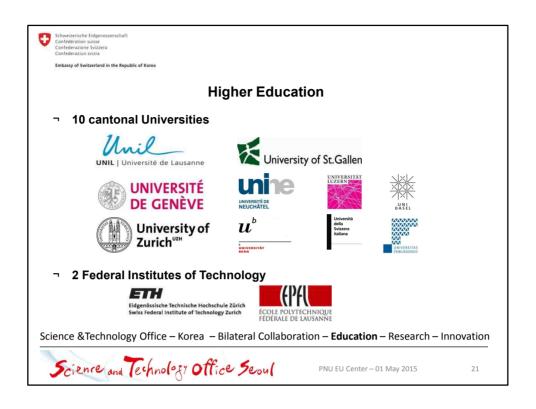
- ¬ Enables young people to enter the labour market
- ¬ Ensures that there are enough qualified workers and managers in the future
- VET and PET sectors are closely correlated with the labour market and are an integral part of the education system
- Provides two-thirds of young people in Switzerland with a solid foundation in a given occupation
- Dual-track variety (i.e. part-time classroom instruction at a VET school combined with a part-time apprenticeship at a host company).

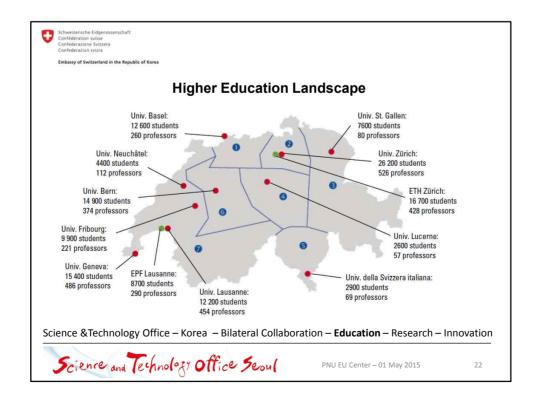
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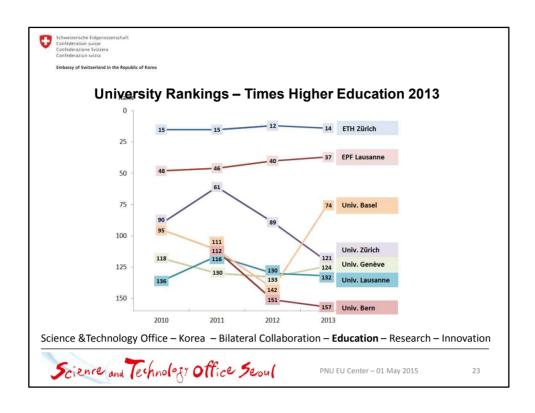


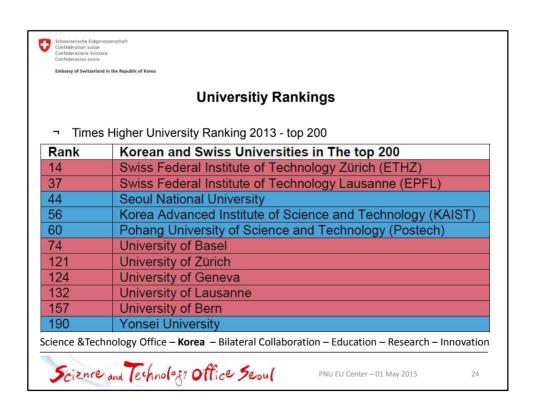
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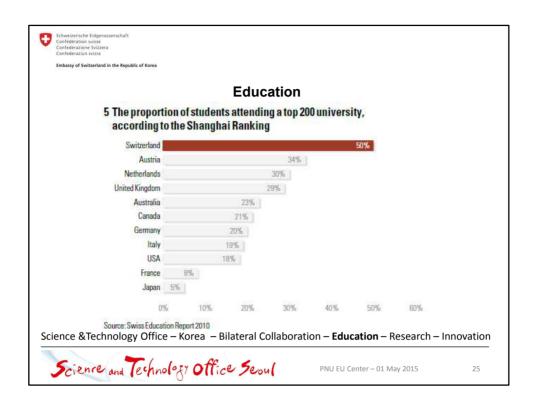


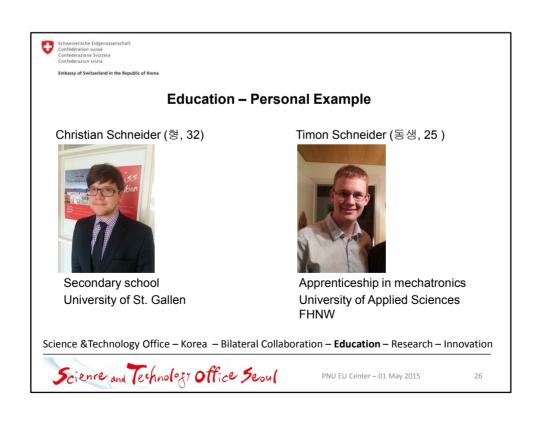














Reasons to study in Switzerland

- Universities
 - Highly renowned universities provide high quality education
 - Low tuition fee
 - World-leading research environment
 - Promising career opportunities
 - Switzerland needs foreign talents (especially in science & engineering)
- ¬ Switzerland
 - High standard of living
 - A multicultural society (over 20% of foreigners) with 4 national languages
 - Host of many international organisations
 - Beautiful landscape

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More Useful Information for Future Students

- www.studyinginswitzerland.ch
- ¬ www.studyprogrammes.ch
- ¬ www.ethboard.ch/ko
- ¬ Swiss Government Excellence Scholarships
- www.stofficeseoul.ch

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Research

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Research - Facts about Switzerland

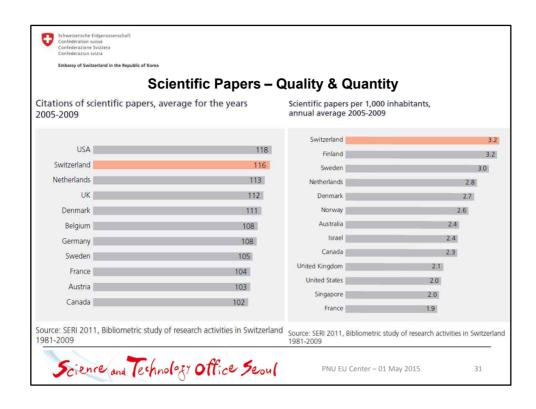
- 25 Nobel Laureates with Swiss citizenship
- Highest number of Nobel Prizes per capita!
- ¬ 50% of university professors are from abroad
- Switzerland's expenditures on R&D constitute of 3% of GDP
- Swiss researchers produce 1.2% of all scientific papers published worldwide
- With 3.2 publications per 1000 inhabitants Switzerland is worldwide the leading country

Gross Domestic Expenditure on Research and Development (GERD)	
24.17%	Higher Education sector
73.50%	Business sector
0.74%	Government sector
1.6%	Private Non-Profit sector

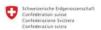
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EU Horizon 2020

- ¬ Switzerland is a partly associated Horizon 2020 member for 2014-2020
- ¬ Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years
- Researchers in Switzerland can take part in certain Horizon 2020 projects and submit project proposals
- → more in part 2 of presentation!

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Research at CERN

- ¬ European Organization for Nuclear Research
- ¬ Located on the Franco-Swiss border near Geneva
- One of Europe's first joint ventures, founded in 1954
- ¬ 20 European member states
- Many non-European countries are also involved in different ways
- ¬ Birthplace of the World Wide Web in 1989



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Leading Research Projects - Solar Impulse



- Long-range solar-powered aircraft
- first circumnavigation of Earth with an aircraft using only solar power
- Developed in partnership with EPFL and Schindler



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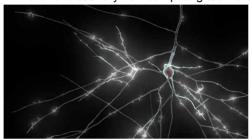


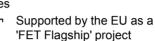
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Leading Research Projects - Human Brain Project

- Aims to simulate the complete human brain on supercomputers to understand it better
- Gain profound insights into what makes us human
- Develop new treatments for brain disease
- Build revolutionary new computing technologies





ÉCOLE POLYTECHNIQUE

FÉDÉRALE DE LAUSANNE

- ¬ 242 Researchers
- 86 institutions across Europe
- One billion €uro in funding of EU over ten years

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Leading Research Projects - Cray XC30 supercomputer "Piz Daint"

- Theoretical peak performance7787 Petaflops
- ¬ System storage capacity 2.5 PB
- ¬ Europe's most performing supercomputer
- ¬ Top 6 worldwide
- Most energy efficient in top 10



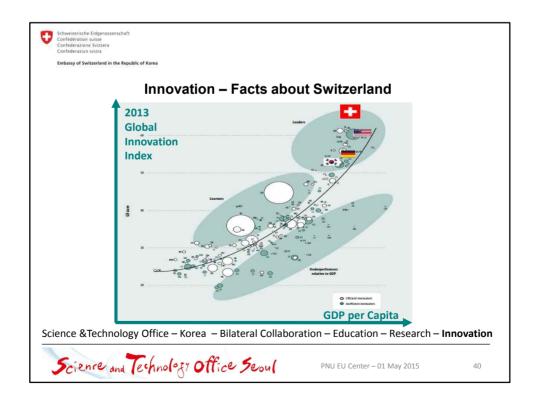


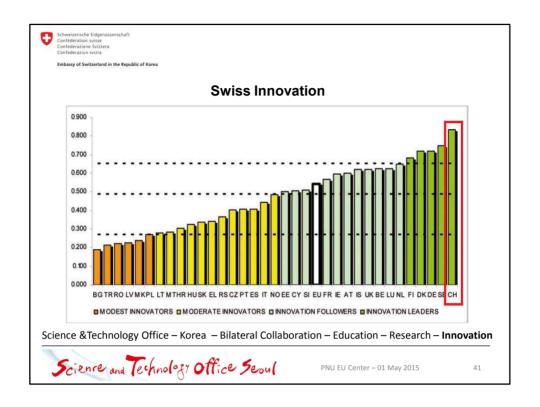
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Korean Products - Swiss Innovation inside



¬ Müller Martini printers are used to print newspapers

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Korean Products - Swiss Innovation inside





 Incheon bridge uses expansion joints, anti-skid surface, high grade sliding material and a remote monitoring system made by the Swiss company Mageba

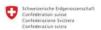
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Small and Medium Enterprises (SME)

- ¬ SME form the backbone of Swiss economy
- ¬ 66% of total workforce is employed by companies with less than 250 employees
- 73% of workforce employed by SMEs work for exporting companies
- ¬ 53% of the working hours spent on R&D are invested by companies with less then 500 employees

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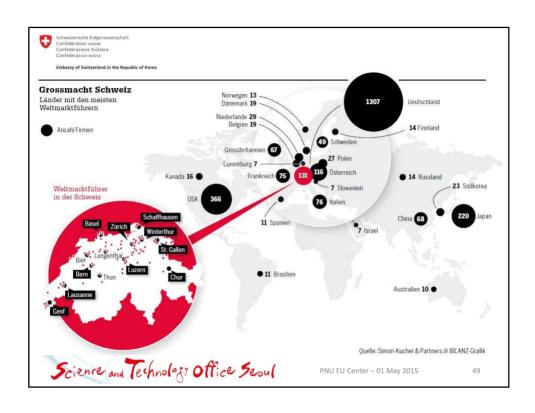
Hidden Champions

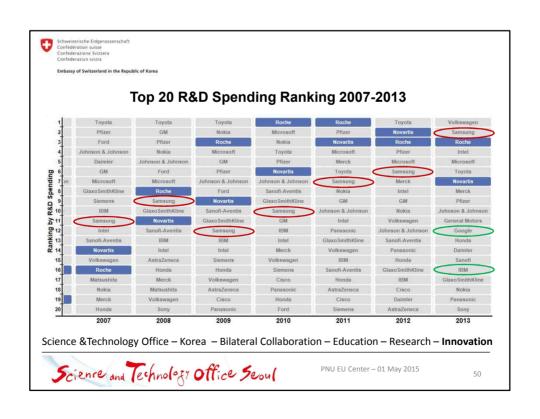
- ¬ Are market leader on their continent or globally in the top 3 in their field
- Are specialists that focus on their core-competences
- ¬ Are often unknown to the wide public
- ¬ Sell their products directly to their customers (no intermediaries)
- ¬ Their formula for success is focus and depth
- ¬ Switzerland has 131 hidden champions
- 16 hidden champions per 1 million habitants (same ratio with Germany, much more than USA and Japan)
- In Switzerland such Hidden Champions created 82'500 new jobs in the last decade

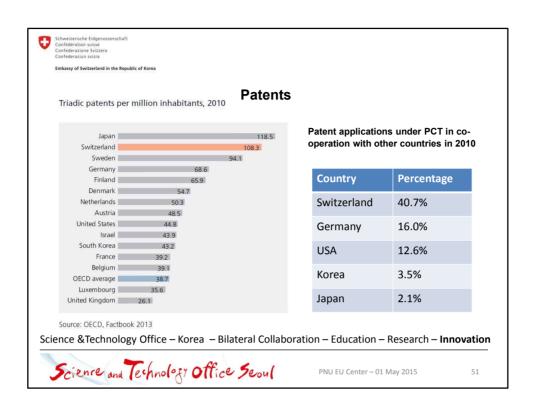
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Location for innovative Research Centers of Global Companies

- ¬ IBM Research Center Rüschlikon
- ¬ Birthplace of the scanning tunneling microscope







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EO



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Location for innovative Research Centers of Global Companies

- Google Zürich Research center
- ¬ Works on integrated flight simulator in Google Earth...
- ¬ ...Google maps and many other projects





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Location for innovative Research Centers of Global Companies

- Logitech founded 1981 in Apples
- Headquarters in Lausanne
- ¬ First computer mouse





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Part 2 – Switzerland and the EU

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