**Evaluating Applied v. Fundamental Research Projects** 

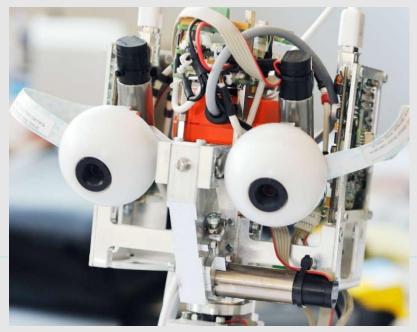
ESF MO Forum

,Evaluation of Funding

Schemes and Research

Programmes'

Dublin, 16-17 November 2009





Schweizerischer Nationalfonds zur Förderung der wissenschaftlichen Forschung

### **SNSF Mandate**

#### Federal Mandate to SNSF to:

Encourage scientific research in all disciplines

\_Strengthen its competitiveness, its insertion into international networks and <u>its capacity to</u> solve problems

Place particular emphasis on encouraging young academics



## From Fundamental to Applied Research

#### **Pasteur's Quadrant, Stokes 1997**

Research inspired by	considerations of use?	
	no	yes
quest for fundamental under-standing?	Pure basic research	Use-inspired basic research
no		Pure applied research



## Research Funding by SNSF in Practice

**Strong focus on fundamental research** 

\_Use-inspired research funded mainly (not exclusively) through two funding lines

#### **Total Funds allocated 2008**

663 Mio CHF / 430 Mio €

,Free' Research Funding (projects and individuals)

598 Mio CHF / 388 Mio €

Incl. Doresearch (Univ. of applied sciences)

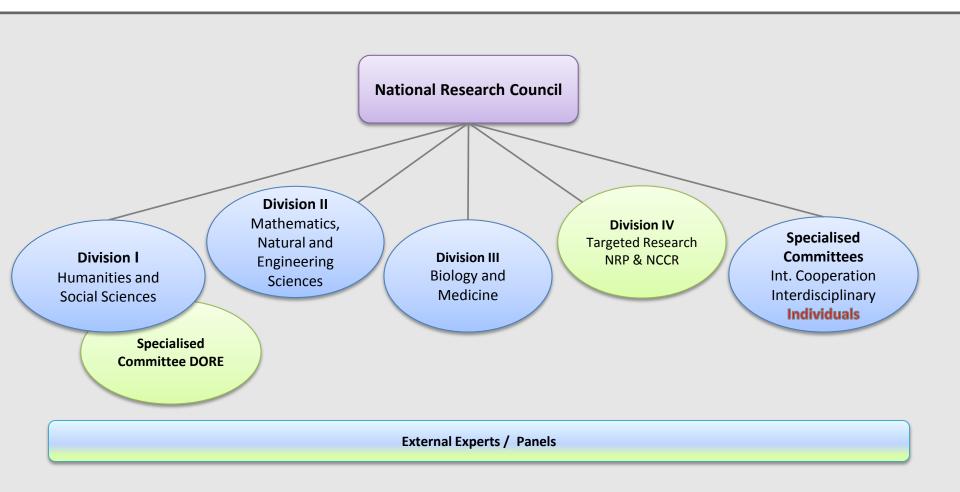
8 Mio CHF / 5 Mio C

National research programs (NRP) and NCCR

65 Mio CHF / 42 Mio C



### **Evaluation Structures**





## Recent Evaluations DoResearch

#### **DoResearch**

- Established to encourage research at the universities of applied sciences – Social work, health, education, art/design, music/theatre, applied psychology, applied linguistics.
- Emphasis on cooperation with praxis-partners

#### **Scheme evaluation (2006)**

- Effect on research activity and quality survey among potential beneficiaries
- Analysis of nature of cooperation with praxis-partners

http://www.snf.ch/SiteCollectionDocuments/dore bericht 04 06 d.pdf (German version only)



# Recent Evaluations National Research Programmes

#### **National Research Programmes**

Problem-oriented - themes selected by government, emphasis on knowledge transfer

#### **Impact Study (2007)**

- Identification of areas of application. Distinction between effects
   (a) in the field of science (b) in the context of practical application
- Evaluation limited by lack of data. System for systematic and electronic collection of output data currently under development
- First output data (2009) confirm link between relevance of indicators, evaluation questions and type of research / programme; Radar system

<u>www.sbf.admin.ch/htm/dokumentation/publikationen/forschung/nfp/Wirkungspruefung\_SNF.pdf</u> (German version with English summary)



# Recent Evaluations SNSF Professorships

#### **SNSF Professorships**

Completes funding chain up to assistant-professor level;
 Generous, highly competitive

#### **Recent Evaluations**

- Background of beneficiaries (young, experimental sciences, female)
- Impact on career paths (85% remain in acadademic position, of which 79% abroad)
- \_ Integration within host institution (varying level of autonomy)

http://www.snf.ch/SiteCollectionDocuments/fp\_evaluationsbericht.pdf (French version with summary in German)



# **Towards the Future One Research – Different Applications**

\_Integration of DoResearch into main project funding line from 2012 - continuum from fundamental to applied research

Strengthening of funding for use-inspired research in additional areas: clinical research, engineering, architecture



### **Challenges for Evaluation**

- \_Ability to assess which types of research are funded in which proportion
- \_Evaluation of very diverse projects within one funding line
- \_Adequate consideration of use-inspired research both ex-ante and during ex-post evaluations



## **Evaluating Use-Inspired v. Fundamental Research**

	Advantages	Difficulties
Use- inspired basic Research	Problem-oriented → easier to assess achievement of objectives	Common criteria of scientific excellence not sufficient eg. Arts
Basic research	Well-established peer- review system	Long-term nature of impact; Difficult to go beyond economic impact



## One Research - Differentiated Evaluations

\_,Label` for research with strong relation to potential application.

\_Different lens, additional criteria for evaluation (broader impact), special consideration for expertise of evaluators

\_Systematic collection of output data along similar categories throughout SNSF (including publication and patent output, but also promotion of young scientists, Events for knowledge transfer, communication with the general public etc.)



### 3 Dimensions of Broader Impact

**\_Development/improvement of processes, products, services, living conditions/ways of living** 

\_Advancement of educational attainment and curricula (personal and institutional)

Contribution to public knowledge



## Capturing Broader Impact Communication with the Broader Public

### Please indicate communication activities directed at the broad public and not a scientific audience:

#### <u>Dropdown-Menu</u> ↓

- Media work (radio, TV, print media)
- Presentations (public conferences, schools, discussion fora...)
- Own content publishing (publications, web, blogs, video, podcasts, etc.)
- Further activities

#### Per category:

number\*

For the most important activity/event per category:

- Title of the contribution/event\*
- Name of the medium (journal, channel, press agency, website) or name and location of event\*
- Date of publication/event\*
- Link (optional)



### **Opportunities**

**Same categories of output/broader impact collected** for very different research projects

\_Scope for capturing unexpected/unintended areas of applications?

New perspectives on research processes?



### **Questions for Discussion**

- How do the 3 dimensions of broader impact relate to other organisations' understanding of the concept?
- Directions to researchers as to potential content of broader impact?
- **\_Broader Impact/Scientific quality: additionality or trade-off?**
- \_If additionality, do researchers need to be offered something in return?



## Thank you for your attention!

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