



Science-Policy-Dialogue Projects (2012-2016)

Priority area “Promotion of young scientists and education”

Project “STEM”

For some years now, Swiss youths have been showing a lack of interest in natural sciences, which has resulted in a decreasing number of students in science, technology, engineering and math (STEM) subjects at the universities and, consequently, in a shortage of specialists in those disciplines. A wide and heterogeneous number of public and private STEM promoters have been trying to counter this trend. However, currently there is no impact analysis of their efforts even though such an assessment must be the base for any further STEM promotion. Furthermore, the activities of the vast number of supporters must be coordinated in order to create synergy effects.

This project is supported by the Swiss State Secretariat for Education, Research and Innovation. Its goals are the enhancement of scientific literacy amongst children and youth, the increased attractiveness of STEM subjects and professions and a reduction of the lack of engineering specialists. These aims will be pursued at three levels. First, a basic knowledge base has to be created in order to gain a general overview of the activities of the different players and the impact of their undertakings. This will be accomplished by increasing the transparency between the promoters. Second, optimal promotional initiatives of these stakeholders will be identified and supported with funds. The players themselves will also have to partly finance their projects. Third, the Swiss Academies will encourage networking and cooperation amongst the promoters and thereby help create assessments, best practices, synergies and new undertakings.

Key academic players: SCNAT, SATW

Priority area “Sustainable use of limited resources”

Energy Commission

To guarantee a future energy supply poses a political, societal and economic challenge of global magnitude. In 2011, the Swiss government decided to gradually end the country's nuclear energy programme, which currently produces 40% of the nation's energy demand. The newly established Energy Commission promotes research and dialogue relating to the technical, economic, social, ecological and political aspects of energy production, use and delivery. It accomplishes these tasks by offering a network for scientists of all disciplines involved in the subject energy and by co-ordinating the Swiss scientific community. It also supports the participation of Swiss scientists in international energy programmes. The Commission represents the voice of science in energy matters and conducts a neutral and evidence-based dialogue with policy makers and society. In 2012, the Commission issued a statement regarding the “Swiss federal concept for energy research 2013-2016”, emphasising the importance of a long-term perspective and the involvement of the humanities and social sciences. Another statement is planned for the Swiss federal “Energy strategy 2050” during its legislative process of public consultation. The Commission also maintains the energy section of the climate portal, a website designed to inform the general public on climate change issues.

Key academic players: SCNAT (ProClim), SATW, SAGW

Priority area “Societal dealings with new insights and technologies”

Project “Personalised medicine”

With diagnostics methods becoming ever more efficient, it is possible to make increasingly precise statements on disposition and physiological functions. Private companies already offer genetic Internet tests for a few hundred US Dollars – a saliva sample is all that is needed. In theory, these findings should lead to us receiving treatment that is tailored precisely to our requirements if we fall ill. In addition, such data should also help to detect risks of disease early on. This study will examine the current possibilities and consequences of this “Personalised medicine”. In a first step, an analysis of the biomedical, clinical, social, ethical, economic and legal aspects will be conducted and the role of the different actors will be examined. In a second step, the results will be evaluated and an impact report with scenarios will be drafted. The study aims at concluding with recommendations for various target groups in form of a report.

The Swiss Academies are conducting this project together with the Swiss Federal Office of Public Health and the National Advisory Commission on Biomedical Ethics. Members of these two government branches are part of the project’s supervisory group, as are representatives of the pharmacy industry, health insurance companies, health professionals and media, to ensure wide the dissemination of the project results.

Key academic players: TA-SWISS, SAMW

Priority area “Health care system in transformation”

Project “Sustainable health system”

During the last decades, the health system in Switzerland strongly expanded: the number of medical doctors, carers and others active in this area increased strikingly. In addition, a variety of technical and pharmacological developments contributed to a considerable improvement of prevention, diagnosis and treatment of many diseases and ailments. The resulting health system is therefore most successful. At the same time, the personal and financial resources deployed are so high that Switzerland will barely be in a position to maintain them in the long-term. A major problem is that health professionals use everything at their disposal to treat patients regardless of the fact that many of the currently available diagnostic and therapeutic treatments are not necessarily efficient, appropriate or cost-effective under the given situation, although Swiss legislation clearly stipulates these provisions. Already now, the economic and ethical limits of this “maximum medicine” are becoming increasingly clear. In order to assess where adjustments are reasonable and possible the benefit respectively the value of medical services has to be known. For this reason, the Swiss Academies launched the project “Sustainable health system” with four sub-projects. As a first project, the study methods to determine the benefit respectively the value of medical services were initiated. Its results were published as a report and presented to the general public during a symposium in Berne. A second undertaking was the statement “Responsibility of health professionals for sustainable medicine and its implications for daily practice”. As a third sub-project, the report “Cost and benefit of medical treatments” was published. The fourth task are a second study on “Efficiency, utilisation and funding of the Swiss health system” and a symposium to be held in a major hospital in Berne.

Key academic players: SAGW, SAMW, TA-SWISS