



# Sparkling Science >

## Science linking with School

## School linking with Science

### Research Project

01.09.2009 – 31.12.2011

### FIT NOT FAT

Developing and implementing a project designed to survey the health status and to promote health awareness of Viennese high school students based on an intervention study in co-operation with Hospital Hietzing

#### LEADING INSTITUTION

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#### SCHOOL INVOLVED

Goethe-Gymnasium, Vienna

#### SCIENTIFIC CO-OPERATION PARTNERS

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Institute of Medical and Chemical Laboratory Diagnostic, Hospital Hietzing, Vienna  
Science Consulting & Clinical Monitoring, Mag. Dr. Thomas Kästenbauer, Vienna



## Basic Information about Sparkling Science

Sparkling Science is a research program of the Federal Ministry of Science and Research (BMWF) which started in 2007 and adopts an unconventional way in the promotion of young scientists that is unique in Europe.

The specific characteristic of the program: so far 168\* projects (94 of them have already been completed) scientists work side by side with young people in current scientific research projects: Sparkling Science supports big research projects and supported from 2007 until 2010 also smaller school research projects.

In the 114 big research projects (42 have already been completed) the young colleagues take an active part and work independently on parts of the research projects. As junior colleagues they introduce important suggestions into the research approach. They collaborate in the conception and conducting of investigations, conduct polls, collect data, interpret these together with the researchers and present the results at schools, universities and even at scientific conferences.

In a second initiative within the Sparkling Science program the BMWF awarded grants to smaller projects that were submitted and conducted not by the involved research institutions, but by the schools, who designed and lead the projects themselves. In these projects, too, schoolchildren worked closely together with researchers, supporting state-of-the-art research activities and contributing to the results.

Both sides of the program is/were open to a broad thematic spectrum. Research is carried out on all sorts of different topics: from mechatronics and molecular biology to migration research, from acoustics and biometrics to literature research.

\* Status quo: January 2012



## One Example out of 168

### FIT NOT FAT

The promotion of health among young people is a major issue that has health and socio-political relevance, but should also cause a change in adolescents' attitude in regard to their health.

This 2-year-project aims at promoting the health and health awareness of high school students as well as their familiarity with medicine and natural sciences. The mainstays of this project are school-based measures that will be developed under scientific guidance by the students themselves.

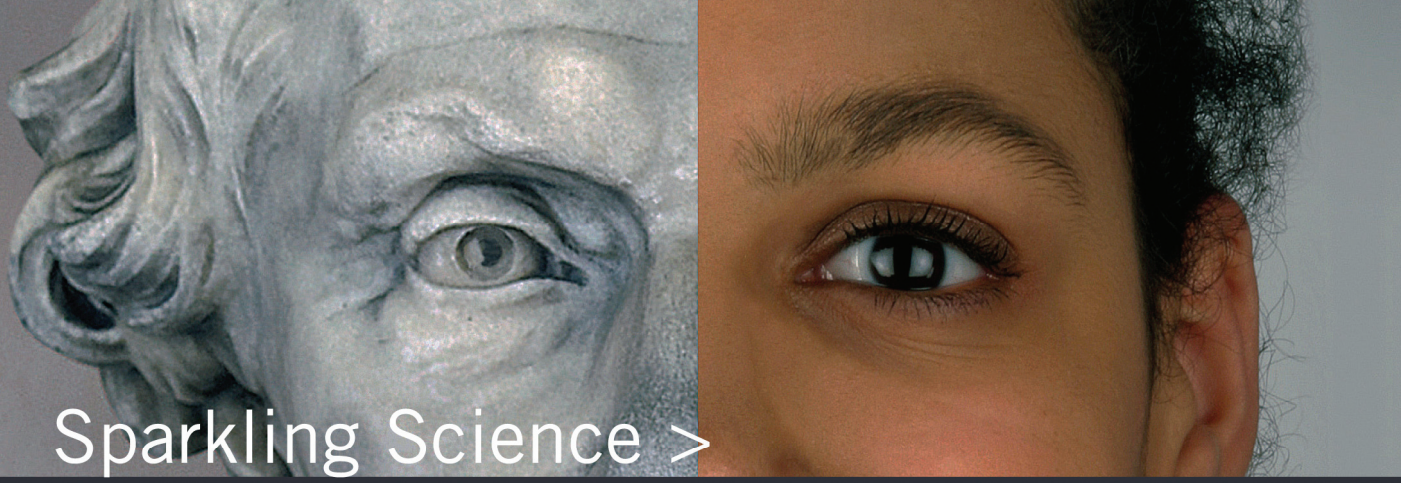
Students of the 11<sup>th</sup> and 12<sup>th</sup> grade (mentors) of a Viennese Secondary School will develop a cross-sectional study to collect valid baseline data regarding metabolism, physical fitness and coordination, food and beverage consumption in their younger 9<sup>th</sup> or 10<sup>th</sup> grade colleagues.

Based on the results and experiences of that cross-sectional study, a randomized controlled intervention study will be carried out. Students of the 9<sup>th</sup> and 10<sup>th</sup> forms will be assigned either to an intervention group (multivariate intervention in physical fitness, a healthy diet and alcohol and nicotine abstinence) or to a control group (without intervention, only information).

At the end of the study, the collected parameters (anthropometry, blood analysis, endothelial function, tests of motor skills, health awareness and amount of physical activity) will be evaluated and analyzed by students supported by scientists.

There will be a presentation of the results for students as well as parents in order to further younger students' interest in a healthier lifestyle. The results of the study will also be presented and discussed at professional conferences.





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BMWF<sup>a</sup>

Austrian Federal Ministry of Science  
and Research