

Science on the Move – A National School Classes Competition

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Abstract: SimplyScience.ch, the foundation and platform for the promotion of young talent in Natural Sciences and Technology with the generous support of Roche, is moving into the second round of the National School Classes Competition 'Science on the Move'. High school classes from all over Switzerland will battle it out in the lab and on stage for a top prize of a Science Week in San Francisco, California. The program promotes and requires the skills of a full class of high school students. May the best school class with the most scientific curiosity and enthusiasm and the most creative ideas win.

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What is the purpose of Science on the Move?

How do you get 600 high school students to dedicate themselves to tomato DNA, flower petal pigments and the respiration of yeast and stay highly motivated over several weeks? You launch a national 'Science on the Move' high school class competition. And that's exactly what the SimplyScience Foundation did for the first time in 2011.

The goal of the competition is to identify the class with the highest commitment and greatest fascination for natural sci-

ences and technology. The special laboratory competition enables the large-scale promotion of young talents in natural sciences and technology. Activities eliciting the enthusiasm of young people for these topics and motivating them to actively address natural science and technical issues are showcased. Interested and thirsting-for-knowledge adolescents will thus acquire critical capacities to one day become innovating professionals in the natural sciences, areas upon which the critically important Swiss chemical and pharmaceutical industry export sectors urgently depend. In parallel, the competition program also aims to raise the understanding and appreciation of 'Life Sciences' among the broader population as it shows people that natural sciences and technology can be very exciting and play a major role in everyday life.

This competition is organized by the SimplyScience Foundation (see box 1 below), an initiative of scienceindustries, the Swiss Chemistry, Pharma and Biotech Trade Association. The competition including prizes is generously sponsored by Roche.

Competition 2011

16- to 18-year old high school students from all over Switzerland were given the incentive to conduct, evaluate and document three natural science experiments as teams within the structural framework of a class. In accordance with the competition regulations, teachers were not allowed to offer any direct help – the experiments and their evaluation had to be carried out independently by the students. The original manuals of the three experiments are published on www.simplyscience.ch (Science on the Move).



Highly concentrated in the lab
(Image: SimplyScience.ch)

About the SimplyScience Foundation

The organizer of the 'Science on the Move' laboratory competition, the SimplyScience Foundation, operates the online platform www.simplyscience.ch. This is addressed to all Swiss children and adolescents between 8 and 18 years of age. Texts, images, videos, experiments and competitions establish a connection between natural science or technology topics and everyday life in an easy-to-understand manner.

The goal of the SimplyScience Foundation is to promote the motivation and understanding of adolescents for natural science and technology thus giving them inspiration for education and career opportunities in science and economics. Attractively presented information helps raise the acceptance of science and technology among the general public.

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Their results were corrected by a selected team of biology and chemistry instructors, and the top 10 high school classes were invited to Basel for a final presentation at Roche. At this 'Final Event', the junior researchers had the opportunity to emphatically convey their experiences in a short presentation staged by each finalist class. A highly regarded jury including experts from science and teaching rated the presentations, both in terms of content and their demonstrated commitment to natural sciences and technology. Finally, the scores from the experimental phase and those from the presentation were combined and the winning high school class was announced.



Final Event 2011, Roche, Basel (Image: Roche)

There were fantastic prizes: all high school students of the top 10 classes received an iPod and they were also invited to a Science Day at Roche. For the winning high school class, the SimplyScience Foundation organized a Science Week in San Francisco, California with sponsorship from Roche.



The winning class of the 2011 competition, 4C of the Bäumlhof High School (Basel), in San Francisco (Image: SimplyScience.ch)

The first round of the unique, national-level high school class competition was a huge success. The students enormously appreciated working in a team and enjoyed the experiments and both the preparation and execution of the presentations. It was a great opportunity for the classes to practice



The winning class of the 2011 competition, 4C of the Bäumlhof High School (Basel), at work (Image: SimplyScience.ch)

scientific methods in high school. Team spirit was nurtured by the group work and class cohesion required. At the same time, individual skills were used by assigning the various tasks to the best advantage.

And now, 'Science on the Move' is set for the second edition next year ...

Project Description of 'Science on the Move 2013'

Participation in the second edition of 'Science on the Move 2013' will again be open to all 10th and 11th grades of public high schools from all over Switzerland. The competition language is English. This gives the classes of all language regions of Switzerland the same challenge while additionally promoting the use and understanding of English as the international language of science. The competition is again divided into two phases. Phase One is the experimental phase where two experiments will be carried out and documented within the framework of the class. The first round features the processing of an experiment in the area of biology. The second round of Phase One is launched with the top 25 high school classes from round 1. In this stage, the classes will conduct an experiment in the area of biochemistry.

The top 10 classes from Phase One will then reach Phase Two: the presentation at the Final Event held at Roche in Basel.

The main prize is again a Science Week in San Francisco, California which will take place in September 2013 and feature a closely packed and varied program. This includes visits to high schools and universities, laboratories and companies and a tour of the Academy of Sciences in San Francisco. Of course, other highlights beyond the science and education focus, such as the Golden Gate Bridge and a guided visit of the town, are also included in the trip agenda.

In addition to the winning high school class, the other nine finalist classes will also receive fantastic prizes. The teachers of the top ten high school classes will also receive recognition for their support of the classes during the competition.

Application forms for the competition will be mailed to all public high schools of Switzerland in November 2012 and registration is possible until January 2013. All further information for the competition can then be found at www.simplyscience.ch. Any questions may be addressed to scienceonthemove@simplyscience.ch.

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Key data

Registration deadline:	January 2013
Experiments:	February to April 2013
Final event:	21 June 2013
Trip to San Francisco:	September 2013