



Final Activity Report



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SCIENCE AND SOCIETY BEYOND FP6 - "BEST OF" SCIENCE EVENTS 2006

FINAL ACTIVITY REPORT

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List of participants:

COUNTRY	SHORT	NAME
Austria	EUSCEA	European Science Events Association
Belgium	ECSITE	European Collaborative for Science, Industry and Technology Exhibitions
France	EUSJA	European Union of Science Journalists' Associations

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1 PROJECT EXECUTION

1.1 PUBLISHABLE FINAL ACTIVITY REPORT

The project **WONDERS** is the first "European Science Festival" with the "Carousel of Science", and exchange between national, regional and local science festivals, with science cafés, with internet pledges to show concern for the climate change, with web discussions and with launch and finals events, where the "best of the best" science communication events were elected.

WONDERS is organised by three contractors in the field of science communication: the association for European science festivals - EUSCEA - as coordinator, the European association for science museums - ECSITE - and the European union of science journalists - EUSJA. The core of the project is managed by 21 "Carousel Partner" organisations from 18 countries with their 15 languages. These Partner organisations range from universities (e.g. Warsaw, Strasbourg), research councils (e.g. Barcelona, Oslo) to museums (Jerusalem, Mechelen), communities (Madrid), governmental agencies (Portugal) and associations (London, Switzerland). All Partners are members of EUSCEA.

From the proposal summary page and A1 Form:

The project "FIRST EUROPEAN SCIENCE FESTIVAL 2006", under the title **WONDERS**, uses the strengths, experiences and capacities of existing major European networks and institutions in the field of *Science Communication Events* like science weeks, science festivals, science days, science centres and museums and the European science journalists to stimulate Europeans for greater awareness for science, technology and the humanities and dialogues between science and society.

Activities of **WONDERS** will last for the whole year 2006 in nearly all of Europe, mainly with the "**CAROUSEL OF SCIENCE**", which is an inter-European exchange of the best *Science Communication Activities* between 21 partner cities and countries. Each partner organisation receives and sends three *Science Communication Activities* and selects the best one - to be sent to the **FINALS**.

During the whole year a special Survey "*Click for the Climate*", acronym **CLICLIM**, for all persons in Europe is organised and marketed by all partners.

Special "*Science Cafés*" create a direct dialogue between science and society and are moderated and reported by European science journalists.

WONDERS is launched and finalised at special events:

A **LAUNCH** Event in Vienna, during the EU presidency of Austria on March 30 and 31, 2006, and a major **FINALS** Event with the best *Activities* of the **CAROUSEL** of Science, taking place in Vantaa, during the EU presidency of Finland, in December 2006.

WONDERS will motivate European science communicators to work together with the idea to continue this cooperation in coming years.



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A. Launch Event in Vienna, Austria



The project **WONDERS** as the **first European Science Festival** started – after preparations – end of March 2006 with a big Launch Event in Vienna, Austria, where science communicators and science journalists from 18 countries were present to experience the start of **WONDERS**.

The representative of the head of state, Ms. Margit Fischer¹, wife of the **Federal President of Austria**, and the representative, Mr. Anton Dobart², of the **Federal Ministry for Education, Science and Culture** emphasised the importance of **WONDERS** for Europe and connected this project with the **EU presidency of Austria** in this first half year of 2006.

B. The Carousel of Science



The **Carousel of Science** is an exchange of science presentations from one to the next science festival throughout the year 2006. The total of all exchanges travelled 31.860 kilometres, which is nearly 80 % of the circumference of the earth.

The **Carousel of Science** started with one pilot "Carousel" in the middle of March 2006, when about 20 presenters from the area around Freiburg, Germany, came to Newcastle-upon-Tyne in the middle of England to present their special science communication. They built a mini factory, where volunteers from the audience could manufacture their own "blue light". Modern CSI techniques were demonstrated in a session called "How a hair of a cat and how insects can solve crimes". And the third session extracted the DNA from the public and put them into a necklace to wear around the neck.

¹ In the first picture, the eighth person from the left, in a black dress, in the foreground

² In the picture, the 16th person from the left, with a red tie and black suit, in the foreground



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At the same time, a special **science café** was organised in Manchester by the local Association of British Science Writers. Many exiting themes were discussed like: "What is the mechanism for viruses to infect across species, e.g. bird flu?", "Is it safe to eat chicken?", "Why do women live longer than men?" or "Since every individual's DNA is unique, what does it mean when scientists talk about decoding the DNA of an entire species?".



The next event was the Science Festival in Madrid, mid April, where Slovenian scientist, students and presenters brought three different issues with them into the big fair hall called Parque Ferial Juan Carlos I.: "Is the sea still breathing?", "Chemistry of a book" and "Having fun with experiments". The National Institute of Biology, the University of Ljubljana and the Jožef Stefan Institute guaranteed for the scientific quality of these presentations. Even the Slovenian ambassador came to the opening of **WONDERS** in Madrid and gave a special reception.



The Luxemburg Museum for Natural History hosted in April a group of Danish physics presenters, which have formed a special association: the EuroPhysicsFun. Typically for the Danes, they brought a LEGO robot game to the Luxemburgian contest for robots, where robots are tuned very sophisticatedly to hit a target – or each other.

The "Unexpected in Physics" was brought from the Dutch delegation to Göteborg in Sweden. About 20 different experiments showed that physics is everywhere and surprising. Even high-tech and the future were guest: "Hydrogen, fuel of the future" – with the practice of busses in Amsterdam, which already use hydrogen to drive alongside but to try also to avoid falling into the "grachten" of Amsterdam.



In the heat of the summer: Even the great event of ESOF (European Science Open Forum) at Munich, Germany, couldn't do without **WONDERS** in July: A special delegation from the Louis Pasteur University in Strasbourg, France, showed how to follow White Storks during their flight from Europe deep into Africa. But, also the "dead" things fascinated in "Minerals and Meteorites". At the same time, a huge bus full of elaborate experiments came all the way from the middle of Belgium, from Mechelen, where one of the most advanced science centre lies: "Technopolis".



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Bern in Switzerland followed Munich with very special guests: From the Bloomfield Science Museum in Jerusalem, Israel, came "Dr. Molecula" and also an "Acrobat Clown". A real actor showed how science can be interpreted with drama! And "The sunrise at Mars" was a special show for the whole family featuring a conversation between an astronomer at NASA and a child...

WONDERS is also shared by the new EU members states. The very young science festival in Lithuania, in their capital Vilnius and in the neighbouring city of Kaunas, greeted guest presenters from Switzerland! Their science festival, in Lithuanian "Mokslo festivalis" (=science festival) ran under the headline "Spaceship earth". And therefore, the Swiss delegation presented the "Whistle-blowers", a session about those exceptional persons, who help us surviving on our planet by blowing the whistle in time to make us alert. Another show with the name "HUGO in sounds" made the DNA sing: yes, music composed alongside the DNA-string.

The next Carousel city was Helsinki in Finland, where the Polish delegation from Wrocław brought their "home-made DNA", where every volunteer could learn how to extract the DNA from tomatoes – under the guidance of PhD students from the Institute of Biochemistry and Molecular Biology – and all questions, even the most difficult ones, were answered. Scientists from the same institute answered the surprising question "Do you really know what you eat?" and showed that "Life is impossible without enzymes!".



In Wrocław, the Silesian capital in Poland, a special science café was held together with one of the biggest Polish newspapers, "Gazeta Wyborcza". The theme was: "The Hopes and Concerns of Today - cancer, allergy, biomanipulations" and lasted for several hours.

Of course, also this city Wrocław with wonderful architecture from renaissance times, hosted presenters: from Genoa, Italy. The Italians

brought a "CircoScienza" to Poland, where circus artists bring "movement" to physics and chemistry with elegant acrobatic performances. But, as we all know, Italians are fond of food and beverages, and therefore, they told about the secrets of pasta and coffee in the lively demonstration "Physics surprises in the kitchen". The third presentation was called "In vino veritas" – and of course, the scientific background on how to produce wine was the main topic.

In the middle of September, the "Octopus Car" came from Luxemburg to the Polish capital Warsaw. There you could build your own rocket car, a robot dog or even become a football star. During the "Robot workshop" the Polish kids and their parents learned how to build and



Valeria Zurlo

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programme their own robot. But, to look not only into the future, a deep look into the evolution of earth fascinated with spectacular experiments with a lot of fire and sound.

A Spanish delegation travelled all the way from Barcelona to Oslo, Norway. Of course, issues around the famous architect of Gaudí was in their luggage: "Gaudí Art and Science" was the title of this presentation, where arcs can be constructed, history experienced and gravity defied. Another session was "Playing with our senses: Smelling". And to get a sense for the ancient past, our Catalan friends showed the Norwegian audience how to cave paintings according to the stone-age artists.



Also from far away came the guests to Copenhagen, Denmark: The Portuguese presenters from Lisbon excited with "A murder at the museum", where the young detectives could follow footprints, collect hair and disarm bombs – and finally disguise the murderer. That "Science is good for your health" seemed naturally to all Danish visitors after this workshop. But "The kitchen as a laboratory" was something else, where the kids really could take home their products to please their parents ;-))

The start of the Carousel of Science in Israel was overshadowed by the summer war in Lebanon. But, the team from Denmark brought delight, fun and interest in physics to the Bloomfield Science Museum in Jerusalem. They formed a "human chain": dozens of kids held hands to form an electric cable between the amplifier and the loudspeaker. When all hands were held, the music was heard, even while kissing the cheek – or slapping the face. The Danes also brought with them a "Suitcase of Physics" with many simple but interesting physics experiments. At the end of the presentations, this "suitcase" was handed over to the director of the museum, Ms. Maya Halevy, for future motivation of their young and old visitors.



The English delegation brought special towers, "spaghetti towers" to France. The best show for the visitors in Strasbourg, France, was the project "Create a Tree", where all could learn, what makes a tree look like as it is and why.

Particle physics came from Madrid, Spain, into the Science Days of Rust, Germany (near Freiburg, close to the French border), which took place again in the famous family entertainment venue, the "Europapark". The difference of noise and music including the mathematics of musical instruments drew crowds of German visitors to the Spanish stands. The "best" show were the "Surprises of physics" with exotic experiments about pressure, mechanics, gravity, and the staging of an old steam tractor.

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A special **science café** drew crowds and media attention to Rust, Germany. The title was "Quantum Physics" with professors from the Freiburg university and a science journalist. The themes ranged from quantum computers to atomic lasers. To report about the "cosy" atmosphere of the discussion, typical for the Rhine river area, the main media article in the biggest newspaper of Freiburg titled: "Talk Shop with a Glass of Wine" (see picture on the right).

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BADISCHE ZEITUNG

Fachsimpeln bei einem Glas Wein

Erstmals in Rust: Science-Café zur „Quantenphysik“

Im Rahmen des ersten europäischen Science Festivals Wonders, an dem die Science Days in diesem Jahr teilnehmen, veranstaltet der Förderverein Science und Technologies erstmals in Rust ein Science-Café. Thema der Veranstaltung ist die Quantenphysik.

INFOBOX

SCIENCE-CAFÉ ZUM THEMA QUANTENPHYSIK
Vortrag und Gespräch mit Prof. Dr. Matthias Weidemüller, Physikalisches Institut der Universität Freiburg, und Wolfgang Scheuenmann, Wissenschaftsjournalist von der Doko GmbH, moderiert.

Bei einem Glas Wein oder einer Tasse Kaffee können interessierte Besucher der Science Days sich in der gemütlichen Atmosphäre des Traumpalastes des Europa-Parks mit Matthias Weidemüller, Professor am Physikalisches Institut der Universität Freiburg, über den aktuellen Forschungsstand im Bereich der Quantenphysik unterhalten. Nach einer kurzen Einführung in das Thema wird das Gespräch mit dem Physiker von Wolfgang Scheuenmann, Wissenschaftsjournalist von der Doko GmbH, moderiert.

Allgemein wird angenommen, dass quantenphysikalische Phänomene nur in der Welt der kleinsten Teilchen zu finden sind. Durch die spektakuläre Entwicklung experimenteller Techniken und des theoretischen Verständnisses ist es heutzutage möglich, quantenphysikalische Erscheinungen in makroskopischen Systemen direkt zu beobachten. Überlegungen, die bislang als Gedankenexperimente galten, sind mittlerweile in die Realität umgesetzt worden. So kann man beispielsweise mit einzelnen Elektronen, Atomen und sogar Photonen experimentieren oder merkwürdige Quantenüberlagerungen für das bloße Auge sichtbar machen. Allein in den vergangenen zehn Jahren gab es auf diesem faszinierenden Forschungsgebiet mehr als zehn Nobelpreise. „Wir stehen der Quantenwelt heutzutage nicht mehr als außen stehende Beobachter gegenüber, sondern können als Quanten-Ingenieure quantenphysikalische Gesetzmäßigkeiten in vielfältiger Weise für Anwendungen nutzen, zum Beispiel als Quantencomputer oder Atomlasers“, so Matthias Weidemüller.



Führt im Science-Café in das spannende Thema „Quantenphysik“ ein: Matthias Weidemüller von der Uni Freiburg

FOTO: PRIVAT

Ljubljana, the capital of Slovenia, was visited from the Swedish presenters from Göteborg. The visitors could build the 200 million year old super continent Pangea from jigsaw puzzles and shift the continents around – to develop volcanoes and earthquakes: "Earth Fun". Then came a professor, laid down on a bed of nails – "Professor on Nails" -, put a lot of concrete on himself and was smashed to pieces by a large steel hammer – not the professor, but the concrete stones on his belly. And all this was explained by the strange, but also somewhat familiar properties of matter. The most votes for the "best" was received by "bubbles, blood and a box", where frozen bubbles and blood cells were floating in a transparent box.



A special tent in the Science Park of Amsterdam, the Netherlands, had visitors from far away: The Lithuanian presenters travelled more than thousand kilometres from Vilnius and Kaunas with their bus, full of scientific surprises for their Dutch audience. The first show "Dinosaur Albert and the virtual brain" brought a computer dialogue and a flaming tube dancing to the sound of music. High voltage pulses and sport measurements were the highlights of the presentation called "Recipes for chimeras and ultimate self-control". The "Magic science box" was elected as the best show with DNA extraction and a workshop on neurobiology.

The great "Festival della Scienza" in Genoa, Italy, hosted the guests from Oslo, Norway, with the **Descartes** award winning presentation and exhibition of "MarEco – Marine Exhibition", which was also selected the best by the Italian audience. The show is about the expedition to the mid-Atlantic ridge, where new spe-



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cies were discovered. An artist accompanied the ship. His drawings were also on display. Another presentation of culture was "Henrik Ibsen in Italy", a report told from two "stand-up scientists" (like stand-up comedians) about the relation of Ibsen with Italy. "Science in the streets" did not take place just in the streets, but in one of the greatest houses of Genoa, in the Portici Palazzo Ducale, the Doge's Palace, with a lot of hands-on experiments.

The end of October gave the Finnish the opportunity in Belgium: they are famous for their special competitions, but also for their love of music and songs. Therefore, the guests from Vantaa, Finland, showed the "Virtual Air Guitar", developed for the Finnish Science Centre Heureka. And the guests in the Belgium city of Ghent were enthusiastically throwing their hands in the air to produce guitar sounds. With "Sense the Scent", the Finnish motivated the Belgium audience to know more about their noses. And as the "best" show, the people of Ghent elected "Viksu – science competition for senior secondary students".



Three shows amazed the people in Barcelona, Spain, and the first one was named like this: "Amaze yourself!". The presenters from Warsaw, Poland, showed that balls can roll up-hill! Also, the surprises were great in the "Optical surprises" with demonstrations of the "mechanics" of sun-light, which seems to go through a non-transparent ball. The favourite show was "Physical sand-pit" with physics ex-

periments, simple enough to enjoy four year olds but also their grannies.

The last Carousel event was staged in Lisbon, Portugal, with the shows "Earthquake – self made", "Think! – Mental games" and "Cycling at the speed of light" from Germany. This last show was selected as the "best": sitting and cycling on a bike, you could see how the streets and houses are deformed, when you cycle nearly at the speed of light: houses bend towards you, streets get narrow etc. The earthquakes were made by hammering on a big ball, which showed how the waves of such earthquakes travel around the globe.



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So, all presentations, all shows, all hosts and guests completed their tasks without any one failing to do as planned. Every one could learn from the other about how to communicate even the strangest findings of science, how others organise their shows, which nuts and bolts were used. And in many cases, new mutual projects were planned, based on these practical experiences of working together.

C. CliClim – Click for the Climate

When the **WONDERS** project was designed, the Project Management Team decided that a mass participation activity would complement the Carousel of Science and add to the publicity opportunities. By taking part in an activity which spanned Europe, more attention could be drawn to the events in the different countries, and to the totality of the project. The BA (British Association for the Advancement of Science), a member of EUSCEA, has considerable experience in this area and so took up the challenge of making a mass participation activity designed for the UK National Science Week work in all of the participating organisations of **WONDERS**.

The information gathered gave the website visitors an immediate figure for the carbon dioxide saving they have pledged, based on ten days of performing the action. A counter on the website showed how many pledges had been made. It was hoped that when many countries had taken part in the activity the following information could be found:

- What changes are people happy to make to their lifestyle to reduce carbon emissions?
- What differences are there across Europe with the pledges people make?
- What should government promote as the next most likely successful carbon reduction strategy?
- What are people doing already?

All of the partner organisations taking part in **WONDERS** were asked to promote the mass participation activity in their country.



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Below is a list of the basic 15 pledges, and the carbon dioxide savings associated with them:

Pledge number and description

- 1 not to go to school or work by car - I'll walk, cycle or take public transport instead (4,485g)
- 2 to recycle my empty aluminium cans (3,600g)
- 3 to take short 5 minute showers (or share a bath!) (3,557g)
- 4 to fit 3 low energy light bulbs (1,442g)
- 5 to switch off my TV, hi-fi and DVD at the button rather than leaving them on stand-by (577g)
- 6 to have a TV-free evening (119g)
- 7 to unplug my phone charger when I'm not using it (1,000g)
- 8 to turn the thermostat down by 1°C and put on a jumper if it gets cold (4,808g)
- 9 to do all my washing on the 40°C cycle (988 g)
- 10 to dry my clothes on a line or clothes horse, not in a tumble dryer (7,500g)
- 11 to sign up to a green energy supplier (44,920g)
- 12 to buy seasonal fruit and veg grown only in the local country (9,000g)
- 13 to drink local wines instead of imported wines (400g)
- 14 to offset one return air flight by planting a tree (1,000,000g)
- 15 to replace one domestic plane journey with a train journey (528,000g)

How "Click for the Climate" worked across Europe

A simple system was devised in order for all of the countries engaged in the **WONDERS** project to take part in "Click for the Climate". A document of text was produced for translation and the participants were guided in seeking celebrity pledges. The translated text was placed into the website and the reconfiguration work was done by the company "Dogstar" and all of the translated websites ran on the BA's server, directed from the different country's websites. In this way, data collected by the BA could be circulated to the individual partners at the end of their event.

Partners were asked to:

- Translate the text document into their home language and send the translation to the BA.
- Provide their event logo and preferred colour scheme for the website
- Obtain celebrity pledges
- Decide on any questions which were inappropriate for their country or audience – all were urged to use as many as possible.
- Find links to appropriate websites in their own language for the background information about each pledge.
- Set up a link to the translated web pages from their own science week / festival website
- Promote the activity by getting schools, businesses, colleagues etc to take part, and by issuing press releases and getting as much media attention as possible.

After the BA's experience with the website in March 2006, it was found that enterprising pledgers could cause rude words to appear in the "thank you for pledging" box, so the later events were asked to provide a list of words which could be screened out.

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Operation

In the early part of the year, the Carousel operation was very new, and some of the first partners did not manage to use “Click for the Climate” completely. As the year progressed, the system worked well, with different challenges arising in different countries.

In all cases, where plenty of promotion took place, there was a good response and the activity worked as a good vehicle. Conversely, when little promotion was done, the activity attracted little attention and didn’t fulfil it’s purpose.



Here you see on the left the British website and on the right the website translated into Swedish.

The results

The number of responses is shown on the chart below, and in the table

As can be seen, the number of responses varies widely between the countries taking part, dependant entirely on the effort put in to publicising the activity. The most popular pledge was number 5 “unplugging my mobile phone charger” and the least popular number 15 “replacing a plane journey with a train trip”.



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Pledge No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTAL
UK	1,263	1,829	1,931	1,359	2,861	2,108	3,111	2,027	1,193	1,355	842	1,549	972	1,316	802	24,518
Belgian	1	1	5	0	3	2	2	4	3	2	1	2	2	2	0	30
Danish	1,012	1,740	2,395	1,584	2,378	2,316	2,524	1,983	1,989	1,679	0	2,566	0	0	0	22,166
Dutch	81	74	82	74	85	79	83	78	78	81	65	73	83	51	54	1,121
Finnish	22	23	44	55	38	36	42	45	30	25	40	31	34	45	41	551
French	33	35	41	41	42	39	39	39	38	38	29	36	36	27	0	513
German	9	10	8	5	14	14	11	10	9	9	5	9	9	7	5	134
Italian	10	18	21	21	22	20	21	18	19	21	13	19	16	9	13	261
Lithuanian	60	38	60	56	46	56	65	53	50	66	34	55	52	47	50	788
Norwegian	10	13	19	12	14	20	24	15	11	13	7	15	22	13	0	208
Polish	69	50	66	59	59	73	74	55	57	76	0	64	0	0	52	754
Portuguese	11	20	20	21	22	19	21	21	20	20	0	18	0	16	17	246
Spanish	57	58	60	58	60	57	59	55	60	58	49	53	47	52	0	783
Swedish	41	32	101	87	99	101	100	80	68	66	46	103	113	90	62	1,189
Swiss	17	20	20	22	21	22	22	16	11	18	16	21	18	8	19	271
Warsaw	53	32	46	46	44	48	54	40	44	53	35	25	33	0	0	553
TOTAL	2,749	3,993	4,919	3,500	5,808	5,010	6,252	4,539	3,680	3,580	1,182	4,639	1,437	1,683	1,115	54,086

The Danish campaign was particularly successful as the publicity campaign culminated with exposure on the main weather report on TV for a number of nights.

In addition to the **WONDERS** participants taking part in "Click for the Climate", the Czech Republic also had the website translated for use by the British Council in Prague, which is currently running a Climate Change initiative.

Conclusion

The success of "Click for the Climate in WONDERS was patchy, in terms of the results it yielded and the usefulness of the project as a publicity vehicle. It was probably a little too complicated to be quickly and easily understood as a concept by all of the countries taking part. However, as a collaborative exercise it was a huge success – demonstrating that it is possible to produce an activity that can attract 54,000 responses in 16 different languages.

D. Science Café

EUSJA, the "European Union of Science Journalists' Associations" helped to enhance science cafés in nearly all Carousel countries. The science journalists were the moderators and were able to produce lively discussions among the participants.

Science Cafés are now state-of-the-art in all science communication events, and every time they are interesting. The atmosphere of the special places, the ease to sit together and discuss with an



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“expert” here and the audience there, is refreshing and enables the public to phrase questions, which they wouldn’t dare to do this in other, more academic places.

Science cafés with the participation of science journalists nominated by the contractor EUSJA were arranged in the following cities:

State	City	Date	Journalist/Moderator	Title theme
DE	Rahmen	Oct 14	Paul Janositz	A new quantum revolution
ES	Valencia	Nov 11	Manuel Toharia	Are GMO a good or a bad thing for mankind?”
ES	Barcelona	Dec 28	Merce Piqueras	Nutrition and Aesthetics, Nutrition and Health, and Nutrition, Ethics and Advertising
FI	Turku	Sept 29	Timo Niitemaa	Stem cell research; Big Bang cosmology; Climate change
FI	Vantaa	Dec 10	István Palugyai (at the Finals)	What is science and what is not?
FR	Strasbourg	Oct 9	Veronique Parasot	Women in Science
NL	The Hague	Oct 19	Pieter van der Wielen	Where will our future energy come from?
NO	Bergen	Sept 26	Emmy Gram Lauvanger	Ethical matters in science
PL	Wrocław	Sept 18	Pjotr Kossobudzki	Hopes and Concerns of today, concentrating on cancer, allergy and bio-manipulations
PL	Warsaw	Sept 18	Agnieszka Czajkowska-Masternak	Water as an unusual and amazing substance
SE	Göteborg	May 17	Jan-Oloc Johansson	Obesity – A Global Epidemic
SI	Ljubljana	Oct 17	Mojca Vizjak Pavšič	The boundaries of the influence of science on society
UK	Manchester	March 15	Ted Nield	What does DNA mean to us?

In all other cities with a Carousel event, science cafés with other, locally nominated science journalists took place.

E. Website

Publicly available information about the current state of the project can be derived from the **websites** www.wonders.at (with a click to “WONDERS 2006” – general public information) and www.euscea.at (for internal information).

By logging into these sites (with data known to all Carousel members), a content management system (CMS) contains all necessary data about the members, the events and even allows to send emails to all members and to share up- and downloaded documents.

F. EUSCOS, the strategy discussion

The discussion EUSCOS on a European science communication strategy brought about 50 entries into the blog website with various ideas from combining publishing with events, from matrix ideas for target groups.

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Many of these ideas were discussed in the workshop on "Future ideas for Science Events" at the Finals in Vantaa, Finland.

G. Finals in Vantaa, Finland

- Location of the event : Heureka, the Finnish Science Centre, Vantaa (Helsinki), Finland
- Date of the Event : 8, 9 and 10 December 2006.
- Public day : Saturday December 9, - For this occasion, Heureka decided to have an entrance free, open day at Heureka; public attendance : 1700 visitors
- Number of science communication experts : 134
- Number of science activities presented : 22
- Number of countries represented : 18
- Number of countries present by participants: 28



3. Dissemination

Media coverage:

- 3 tv-spots on the main Finnish tv-channel TV1,
- One big article with picture in the largest newspaper Helsingin Sanomat,
- Nationwide coverage of the event via the STT (Finland's news agency)
- Plus other media hits.
- One Press release

Dissemination – professional targets

- The ECSITE and the **WONDERS** websites posted the event for the professionals.
- The 385 ECSITE members received a direct e-mail with the programme and the full description of the event.



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Journalists

- 12 presidents / representatives from EUSJA national organisations attended the event, paid by the Wonders project.
- AT, Elisabeth J. Nöstlinger, Österreichischer Rundfunk, Vienna
- CH, Rosmarie Waldner, Zürich
- DE & CZ, Werner Hadorn, Büro Cortesi Biel
- DE, Dirk H. Lorenzen, Wissenschafts - Pressekonferenz, Bonn
- DE, Hanns-J. Neubert, ScienceCom
- DK, Lisbet Schönau
- HR, Blanka Jergovic
- HU, Istvan Palugyai, Budapest (PMT member)
- NL, Bruno van Wayneburg
- RU, Viola Egikova, Moskovskaya pravda, Moscow
- UK, London, Barbara Drillsma
- UK, Ted Niel, London

>> Selection of the "European Best of the Best" Science Communication Activities

Europe's best science shows were awarded at the **WONDERS**-Finals at Heureka, the Finnish Science Centre. The first **WONDERS** Finals Festival lasted for two days. 134 participants from Europe and Israel took part in it. They were both performers of **WONDERS** activities and science event professionals.

There were 22 European science communication activities competing for first prize. These activities were shown on Saturday, December 9 at the **WONDERS** Carousel Day. Some activities were shown once, some repeatedly during the day. There were 1700 "normal" visitors at the **WONDERS** Carousel Day, and a good media coverage within the main television companies and several radios. In addition to the Carousel activities, "Click for the Climate" was open to the public all day, and the Finnish participation grew up to 570 pledges.

Competition

Two projects were to be selected as the best : one by public vote, the other by the official Jury set up by the Wonders project. The Jury consisted of Finnish high school student Roosa Jokiahho, Leena Pakkanen from the Finnish Broadcasting Company and Gudrun Bachmann from the University of Iceland.



Dr. Molecula – public prize

Final Activity Report



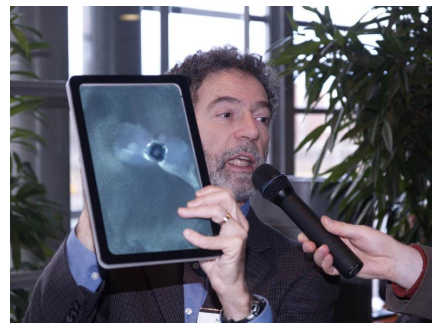
Blue Light – prize of the Jury

The public's favourite of the activities competing was a German project, the "**Blue Light**". It was a workshop, where people could assemble their own flash light.

The jury's choice was "**Dr. Molecula**", a science show of Ori Weyl from Israel.

Experts-professionals day

Sunday, December 10 was the **WONDERS** Finals Conference Day for all **WONDERS** participants, professional experts. There were workshops, a **Science Café** and information about evaluation tools and methods, and finally some information on the next, the **WONDERS 2007** project. In workshops the participants talked about best practices and suggestions of getting the most of **WONDERS** communication in at European level.



Professor Ilan Chabay (see right) spoke at the **Science Café** about Science Communication.

The presentation was open for the public, and there were 128 participants in the audience.

Informal gatherings for professionals in science communication

Informal gatherings made it possible to meet one another and exchange best practices. On Friday there was a pre-conference trip to the "Finnish Art Museum Amos Andersson", on Saturday a Night party took place at Heureka, and on Sunday there was a possibility to spend an evening at a Finnish sauna, with the information that the Finnish word "sauna" seems to be known in nearly all languages.

H. Evaluation

WONDERS was a complex project and the information gathering in order to assess its value is similarly complex.

The following sources contributed to this study:

- The reports of the individual participants to the project. These included experience of the Carousell and the participants' reports on the Science Cafés, Click for the Climate and EUSCOS.
- The work package leaders' reports on the individual components. Each member of the Project Management Team (PMT) was responsible for a component of the project, and each reported on that component. These reports give another view of the success or otherwise of the components in each country.



Final Activity Report

- Questionnaires. A suite of questionnaires was drafted at the outset of the project. This was circulated to all participants with a request to complete them and return them to the BA. The questionnaires covered the Carousel experience and the following points of view were examined:
 - The experience of the presenters of activities as they visited other countries
 - The experience of the organisers of the science festivals and science weeks as they received activities
 - The experience of the organisers of the science festivals and science weeks as they sent activities
 - Descriptions of the activities
 - How the activities were received by the audiences
- A team of student assistants at the Final event interviewed the attendees in order to gain a picture of the effect of the activities on members of the public.
- Also at the Final event, the participants took part in a managed workshop in which the experiences of **WONDERS** were discussed and conclusions reached.
- The Project Management Team (PMT), the EUSCEA board and members at the Annual Conference have had several meetings and conversations over the year – a number of issues have been highlighted at these.

This gave a variety of sources and formats of information from which conclusions could be drawn.

CONCLUSIONS

The major conclusions drawn from an analysis of the data gathered were:

- That the **WONDERS** project was a great success with a variety of benefits to the participants, organisers and visitors.
- That the most successful component by far was the "Carousel of Science" and that the other components were sometimes a distraction for the organisers.
- Most people mentioned communication as being key to successful participation in **WONDERS**.
- The language barrier was the major obstacle to success of the activities.

For the future these points are most important:

- Commonly acceptable safety and child protection standards
- A need to raise the profile of **WONDERS** in general
- Communication, and adaptation of activities to appeal to the foreign audience

For the evaluation of future WONDERS projects

- Operate evaluation via an online web form
- Do more surveying of what our audiences find attractive, although difficult and expensive