November 2013

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### **Dear NSCF** Members!

I will start my Chairmanship with a deep passion for Science Centre collaboration. This is the first time for Estonia to take the lead in an upstanding

organization like NSCF. I will try to be as active as possible to promote deeper collaboration between Baltics and Nordic Countries. We are more similar to each other than we might think.

Science Centre AHHAA has always valued international partnerships and we have gained a lot from it. I do hope that through networking we can become wise and learn from each others' mistakes instead of making all the mistakes ourselves. The timing for collaboration could not be better. Every day more and more attractions, "apps" and leisure-centres are competing for our visitors' valuable time. We have to be more innovative and more original to keep being the Nr 1 place to spend leisure or schooltime. I do believe that this is possible - since all the science centre and science museum people I have met during my ten years of experience in this field are simply the best!

In NSCF there is an easy way to make new friends and see the magnificent work of your colleagues from abroad. It is called the NSCF Scholarship. Everyone is invited to apply. All you need to do is send an e-mail with your application.

I also want to thank Inspiria Science Centre for organizing an informative conference in October 2013 in Norway. For those who were not able to come-information about the conference is presented in the Newsletter.

So... please take a nice cup of coffee and a few minutes to sit down and enjoy the news from the field!

Pilvi Kolk Science Centre AHHAA Estonia

#### **NSCF** conference 2013

by Ramona H. Zachariassen, Inspiria Science Centre, Norway

21 participants from 13 different science centres, representing Estonia, Finland, Denmark, Sweden, Iceland and Norway met at INSPIRIA in Sarpsborg Norway for this year's NSCF conference. The conference was set with "Inspiring the next generation - science centres and school collaborations" as the theme.



Inspiria

The conference started after nice welcome words from the board chair, Mr Sampo Puoskari with an introduction to how INSPIRIA science centre runs the school collaboration. INSPIRIA has an integrated approach to the educational system including all pupils in the county, teacher courses and arena for teacher students as well. This was followed by a guided tour and test of a school program run by the centre.

The rest of the day was used for presentations from each of the science centres attending with examples for their school collaboration as well as other good examples for the different activities. The day ended with the first discussion between the participants, with a lot of discussion about how do we avoid taking over the teachers role, but enhancing the teachers chances for success in addition to the main focus too create interest in science education and science themes by ensuring excitement in the young visitors. Interesting viewpoints were addressed and a good discussion took place.



Fredrikstad

At 4 pm, the whole group lined up for bus ride to the old fortified town in Fredrikstad. We took a small boat trip from the main-land to the area and were greeted and guided by an actor dressed in Middle-Age costume with great humour and knowledge.



Guided tour

Back at the centre a quick tour in the Planetarium with examples of use of the modern Uniview program was demonstrated to close the social program "From saga to science".

#### **NSCF** conference 2013

by Ramona H. Zachariassen, Inspiria Science Centre, Norway



Dinner

In the evening a nice conference dinner started with a small inspiration-show about random numbers, tie-knots and examples of use of maths in a Tivoli setting, by Roger Antonsen from University of Oslo. He also gave us a small "before desert show" with juggling balls. Everyone was very impressed and certainly entertained.

The second day started with the showing of a film "Big Bang and other small mysteries", which is produced for INSPIRIA by a famous artist and followed by a nice short performance by a young dance group. A fresh start for the second day!



Science show

The participants from the last centres completed the presentations before a general discussion concluded the day prior to the NSCF annual meeting 2013.

The discussions of these days showed different views and practices on school collaborations as well as different views on how integrated centres should be with the educational system. It was expressed by several participants that the learning was good given the different views and maybe we in the future we should dare to explore even more differences and expose errors in addition to showing all our positive examples.



Learning in Inspiria

On the annual meeting, it was decided that the next conference takes place at Borås Sweden. We all look NAVET in forward next year's conference!





#### <u>Økolariet</u>, <u>Denmark</u> by Ole Due

In Week 42 we celebrated Økolariets 10th anniversary as a science center in Denmark. Happy guests who enjoyed some of the many special activities we offered the children, young people and adults, marked the whole week. Such as: Build a Robot/Rocket workshop/Kite building/Spider workshop/Lego workshop/Nature tours/Quiz/Mining and hunting.





Anniversary party

# New exhibition on mental health: Heureka Goes Crazy!

#### Heureka, Finland

by Heli Seppälä

The first-ever science centre exhibition on mental health, Heureka Goes Crazy, was opened at Heureka on 12 October 2013. The aim of the exhibition is to dispel prejudices associated with mental health problems and to encourage people to take care of their own well-being. Heureka aims to start a public discussion on mental health as both a personal and social issue.



Exhibition

In the exhibition, visitors can test simulations of mental disorders and feed their troubles into the worry shredder. The exhibition also encourages visitors to fool around a little and surprise themselves—to take care of their own mental health and well-being. Furthermore, visitors can take part in touching and comforting accounts of people suffering from mental health disorders, or look at the history of insanity.

Experts from various fields have given their input in the planning of the exhibition. In addition to scientific experts, sufferers of mental health disorders have made a valuable contribution. *Heureka Goes Crazy* runs at Heureka from 12 October 2013 to 21 September 2014.



#### **Energy Discovery Centre, Estonia**

by Liisa-Riin Stalde

Energy Discovery Centre is renovating a 100-year-old power plant building, which will be opened as science discovery centre in Tallinn in summer 2014. In the renovated centre there will be a planetarium, science theatre room, physics classrooms, seminar rooms and a birthday room. The exhibition will cover subjects of energy, classical natural sciences and physical sciences.

From 1. – 6. October Energy Discovery Centre administrated the European Commission's exhibition European Space Expo, which was visited in Tallinn by 33 000 people.



Space Expo

In September we started Nordplus program supported project for "open learning environment teaching for teachers" in cooperation with universities of Tallinn, Helsinki and Latvia.

11th of November will be the opening time of another Nordplus funded project "Discover the Art of Math!" in Tekniska Museet, Stockholm, Sweden,. It is a traveling exhibition that will come to Stockholm from Trollhättan Innovatum research centre, will travel to Science center Z(in)oo in Latvia, Cesis, and ends up in Energy Discovery Centre in May 2014. The aim of the project children's motivation to learn in is to study an open learning environment.



Math art

On 12th November we will open the exhibition "A frog to Voltmeter" where historical tests with electricity explain the developments that helped to work out modern technology.

Energy Discovery Centre's interactive science exhibition "From light to electricity" is opened until June 2014 in the Freedom Square of Tallinn.



#### Experimentarium, Denmark

By Asger Høeg

Experimentarium has raised 43 million Euros to renovate and expand the old building on Tuborg Havnevej 7 in Hellerup, Copenhagen. The building covers 17.000 m2 today. In December 2015 – when we will inaugurate the "new" building - it will cover 30.000 m2 - including the active roof of 6.400 m2. The project includes two new exhibitions arenas of which one is open-air. a Learning Centre, an Innovation Centre, a Conference Centre with a Flexscene with 400 seats, 8 flexible classrooms, a larger Café, a larger Gift Shop, a Botanical Roof Garden, a Pop-Up Café on the roof, 1.300 m2 solar cells and an Exercise Arena on the roof.



New building

Eperimentarium leaves the old building on 22 January 2014 and we open our Interim exhibition centre - **Experimentarium City** - on Christiansholms Ø on 6 February 2014 with the special exhibition Winter Sport.

Experimentarium City will be opened to the public until the end of 2015.



Christiansholms  $\emptyset$  is right in the heart of Copenhagen. Experimentarium rents building no. 2 on the map

Right now, Experimentarium presents "Dinosaurs – Follow the Path" and "Inventions – An Idea can change the World".

Due to a very hot and dry summer, Experimentarium lacks of fewer visitors than expected. This year we expect 295.000 visitors.

On 27 September 2013, the Minister of Culture, Marianne Jelved inaugurated the new cultural institution in Gentofte Community, Garderhøjfortet.

Experimentarium has developed the exhibition in the fortress and Experimentarium runs the institution. We expect around 30.000 visitors per year.

Experimentarium's largest projects in the pipeline are:

**PULS** – a research and exhibitions project.

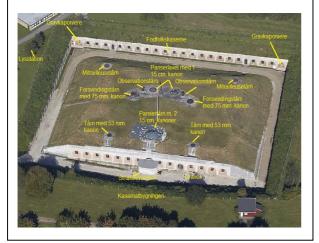
**Innovatorium** – an exhibition on innovative thinking and doing.

Light and colours - a classical science centre exhibition.

"On the Track" - an exhibition about the unfair world comparing our life with people who live in Africa.

Xciters Digital – a follow up on our Xciters project from 2004 - 2012 on how schoolchildren learn how to teach their schoolmates. Xciters Digital includes high-speed cameras in the communication process.

**Lundbeckfond Lectures** – opinion driven lectures for 250 people on Tuesday evening on very interesting subjects such as evil, depression, atoms, alcohol, cancer, allergy and DNA-findings from our ancestors.



#### Reykjavik Park and Zoo, *Island*

by Thorkell Heidarsson

During October the Norwegian Science circus has been on visit in Iceland. Ivar Nakken, Magne Hognestad og Unn Iren Thorsen from Jærmuseets Science Circus have participated in school visits and teaching along with staff from Reykjavik Park- and zoo (Husdyragarðurinn).



This is the second visit from Jæren to Iceland in two years. Earlier this autumn four employees from Husdyragardurinn and The Reykjavik school management office visited Jæren. Both visits are part of a cooperation project between Jærmuseet and Husdyragardurinn supported the by Norwegian-Icelandic cultural fund. During their visit to Iceland Ivar & co. have beeing courses to teachers as well as visiting several schools where they have started by performing their science show before running science courses and related activities for pupils. Both parties hope that the project will strengthen the bonds between those institutions in Norway and Iceland and be valuable for the science teaching community in both countries.



# 100% Energy at Jærmuseet/Vitenfabrikken, Norway

by John Arne Frafjord

On Friday 14 June, Vitenfabrikken «the science factory in Sandnes, Norway, opened the exhibition 100% Energy, the largest exhibition since the opening of Vitenfabrikken in 2008. 100% Energy consists of ten new installations, and is an extension to the energy division in the main exhibition «Abel's Sketchbook».



Teslacoil

The aim of the exhibition is to give our visitors a basic understanding of what energy is. By showing the efficiency of hydropower, a steam engine, and solar panels and so on, one can say something about the pursuit of utilizing increasingly more energy – energy efficiency.

Some of the installations are related to the energy resources we have locally at Vitenfabrikken, like water from the roof and sunlight. The visitors can (with the help of the water from the roof) charge their own mobile phones at Vitenfabrikken.

The staff at Vitenfabrikken develop the exhibition. The main target group are children at secondary and high schools and students from Sandnes Highschool was included early in the planning process to give ideas on the subject of energy and Environment. Their dreams became a movie.

One of the main attractions in the exhibition is a Teslacoil (as seen on the picture), which is the first one in Norway available to public. At the Teslacoil, the visitors can try to catch light-arches loaded with 500 000 volt! Every Saturday and Sunday there is an open demonstration twice a day, during the week it is open for school classes. During the schools' summer holidays, the Teslacoil will be part of Vitenfabrikken's brand new energy show.

The exhibition "100% Energy" is the first part of Jærmuseet's three-year commitment to the subjects' energy and environment. Part 2 opens at Vitengarden "The science farm" in spring 2014, and the third and last part will open at Vitenfabrikken late 2014. The project is budgeted at 9 million NOK and Statoil is the main sponsor of the project.

#### Tekniikan museo, Finland

by Johanna Vähäpesola

The Museum of Technology is currently working on an extensive project, where the aim is to redo all permanent exhibitions by the year 2017. The 3 000 something square meters are going to be covered by three large thematic exhibitions, space for changing exhibitions as well as workshops, reception etc. The first exhibition is about ICT and innovation and it is going to be opened in spring 2015. In spring 2016 an educational project on kids, museums and technology will materialize as a children's exhibition.

Smaller scale projects are of course in the making: in the spring 2014, an exhibition including an interactive game on the new pictograms for hazardous chemicals is going to be opened. The museum is also taking part in a project developing multi-sensory learning environments, the first pilot space will be set up in the spring 2014. In addition, a project on developing the use of iPads in museum education has just been launched.

#### Art and Science Inspiria, Norway

by Ramona H. Zacariassen

We dedicated a weekend to the subject "Art and science: Our sense of smell", where the famous scientist and artist Sissel Tolaas presented the art project she has completed for INSPIRIA after having won our open art competition. Tolaas has devoted more than 20 years of her life to the sense of smell. We invited our guests to challenge their senses and discover how their different senses work in workshops held by Sissel Tolaas herself.



Spooky Science

We are inviting families to celebrate Halloween at our science centre this year! They can listen to scary ghost stories in our planetarium, become archaeologists, solve a grave mystery along with authentic archaeologists, and watch our mad scientist's spooky science show.

#### Young scientists

We recently hosted a large event called "Researchers in sight" with students and teachers from local secondary schools. The goal was to create interest and motivation about a new elective subject in schools: "Research in practice". The message was: "Without research and innovation, the world will stop."

#### Aha, Electric Cars! AHHAA, Estonia

by Kai Kaljumäe



Starting from June 2013, Science Centre AHHAA is a home to the very first electric car demo centre in Estonia. Our brand new exhibits give a simple, but thorough overview of the differences between regular and electric cars. As a great bonus feature, visitors can enjoy a test drive on the streets of Tartu!



In the centre of our new exhibition is an interactive electric car simulator, where you can simulate a car ride by operating the steering wheel, pedals, gearbox and various switches. In the end, you can put your newly acquired theory into practice and take a ride in one of our electric cars! In addition, if you have an electric car of your own, you can use our charging station.

The demo centre will be open until 2015.





#### Aha, Red Herring! AHHAA, Estonia

by Kai Kaljumäe

The Baltic Sea is one of the biggest inland seas in the world, and an extraordinary living environment. But it is also extremely susceptible to damage caused by human activity, which, in turn, affects the food that we consume every day.



AHHAA's latest, food and environmentthemed exhibition lets you explore the unexpected and surprising sides of the Baltic Sea and follow the process of food production and consumption. Find out if fish are really mute, how to make ketchup and how easy (or hard) it is to burn off the kilocalories gained from a cheeseburger.

"Aha, Red Herring" was closed in the end of October 2013, but most of its exhibits will be available for rent from November. The exhibition consists of eleven interactive exhibits, accompanying information stands and columns. Read more:

http://www.ahhaa.ee/en/exhibitions-for-rent/



Children having fun

#### **NSCF** scholarship

Members of the NSCF can apply for a 1000euro scholarship from the board. The scholarship should be used for the travelling expenses when members visit other Nordic and Baltic science centres with professional goals.

Please send your application pilvi.kolk@ahhaa.ee (you should explain: where would you like to go and what is the goal of your visit)

#### **NSCF** website

New NSCF website can be found at www.nordicscience.net.

Every board member can update the pages. You can approach your own representative in website matters.

Please check from the web if the information about your organization and the contact person is correct. If there is a need for change - please let us know!

#### **Upcoming events:**

19-21. November 2013 ECSITE directors Forum in Lisbon

2014 January, NSCF Board meeting in Finland, Vantaa, Heureka

17-19. March 2014 Science Centre World Summit. Mechelen, Belgium

22-24. May 2014 ECSITE Annual Conference. Hague, Netherlands

7. October 2014 NSCF Explainer seminar

8-9. October 2014 NSCF Annual Conference. Sweden. Boras: Navet

#### **Next Newsletter:**

The next issue will be published in February 2014

Please send the news to pilvi.kolk@ahhaa.ee at latest 31.01.2014