#### December, 2015



# NEWSLETTER

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## Seasons greetings!

Christmas is getting closer and our science museums and centres are starting to fill up with the holiday spirit, and hopefully with more visitors as well. Our annual conference was by far one of the best conferences I have ever seen. I am happy that many of you participated. We were able to see spectacular new museums and experience various events and speakers. I hereby warmly thank our host Niels Norgaard for organizing it! Hopefully even more of you will participate in next year's conference in Tietomaa, Finland.

In this Newsletter you will find the last article from this year's` NSCF scholar Camilla Larsen about her trip to Experimentarium. NSCF scholarship is a unique way to travel to science centres and museums and learn how our international colleagues are working. The deadline to 2016 scholarship is in January, read the conditions for applying from this Newsletter.

NSCF Award for outstanding services for NSCF is given out bi-annually. The first NSCF Award was given to Mr Nils Hornstrup from Experimentarium. He was the founder and one of the NSCF. This year's NSCF Award was nominated to PhD Per Edvin Persson, who has been the Chairman of NSCF for many years. He is also the former director of Heureka and he has also been the president of ECSITE and ASTC. His contribution to our society is highly valued among all of us.

Wishing you white Christmas,



Pilvi Kolk Chairman of NSCF, Science Centre AHHAA, Estonia

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# **NSCF** News

## NSCF annual conference 2015 at the Økolariet in Denmark

By Pilvi Kolk



This year's NSCF conference was spectacular in many ways. The program offered interesting keynote speakers from various fields and we visited many different and exciting places. Above all– the delicious and sometimes even scary food from our host.

We started the conference with a speech from this year NSCF award winner PhD Per-Edvin Persson followed by a workshop. In the evening we visited Spinderihallerne and the museum inside. It was surprising to see different historical artifacts combined in an interactive way.

The evening went on with the visit to a prison museum "Faengslet", where we were surprised by the way the prisoners used to live for many years. The cells of single convicts were often heart-warming and helped to follow the story of the building. This place was full of history and the use of modern technology made it alive.



Our prison "break" also included one of the scariest dinners in my life, where we were offered all kinds of living food to eat. Mealworms and ants included. This futuristic dinner was prepared to us by our host Økolariet to illustrate some of their programmes for the audience. Insects are one great solution to the world's food problem when the climate change will not allow us to use so much land for farming anymore. All this creepy-crawly food was served by famous Danish entertainers "Café Kolbert". This combined serious subjects in a funny way for all of us.





Worms in a meal or mealworms?

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We started the second conference day with professional sessions where we discussed how to interact better with our visitors. Some of us had the possibility to play with Økolariet's interactive game about world's recourses which even impressed one of our keynote speakers PhD Bart Knols.

In the evening we visited a brand new experience centre Kongernes in Jelling. This was another surprise and definitely a place worth to visit. The centre was opened in June 2015 and was full of new exhibits, many of them presented in a way never seen before. The Vikings were brought alive thanks to modern digital sensory experience. We could literally feel their presence in the centre.

In the evening we listened to our second keynote speaker who gave a talk about worlds deadliest creatures mosquitoes! The funny ways science can help people to survive are often unexpected. Our conference ended in the 5th of November with short presentations from our museums and science centres. We found out what is new in the field and many of us could get new ideas for future exhibitions. The new board members for the next two years' period were presented and welcomed.

I sincerely thank our host Økolariet and Mr Niels Nørgaard for this wonderful conference and hope to see you all in Tietomaa next year!





#### **NSCF Scholarship!**

If you found the stories of our this year's scholarship winners interesting, why not apply for the NSCF Scholarship too?

To apply, please send the motivation letter (1 A4 page), describing where and why you wish to go (among our member centres). Estimated budget and a support letter from your own organization's director are also needed. Scholarship is  $1000 \in$  for one year. The Board can decide to split it among several applicants, if it is possible.

Deadline: 22 January 2016 Send to: pilvi.kolk@ahhaa.ee



#### **NSCF** News

# The NSCF Annual Scholarship – at Experimentarium

By Camilla Larsen. VilVite, Bergen Science Centre

I have been working at VilVite since 2006. I started as the leader of the experimental club; "Forskerfabrikken", at VilVite and as the head of the summer science school; "SommerViten". I am still responsible for the summer science school and the experimental club. I am also responsible for the special events in our centre. I am responsible for developing activities and programs for our leisure guests.



As a project manager of the leisure offers at VilVite, I wanted to gain experience and connect with other Nordic science centres for inspiration, experiencing new activities and learning about summer activities. I contacted "Experimentarium", they welcomed me and I started to plan my trip.

Unfortunately, there must have been a mistake, because when I arrived at "Experimentarium", nobody knew I was coming and my contact person did not answer my phone calls or my e-mails. I tried to make the best of the situation. The experiences and ideas gained during my training period were a bit limited.

#### Summer program:

I attended Experimentarium as a guest and especially looked forward to see their summer program: They offered demonstrations in laser cutting, squid dissection, heart/lung dissection, cod dissection, crab feeding and CPR/first aid council/demonstration.





At the moment, Experimentarium is building a new science centre, and have therefore moved to a temporary exhibition area. At the moment they are hosting an exhibition called PULS. It is an excellent exhibition. Families, groups and teambuilders can join up as a team and try out different pulse rising challenges. Lots of fun!

#### **Outside:**

If the weather is nice and warm, Experimentarium also offers some activities outside. They have a sand area, a water area, a crab tank and many places to relax in the sun. Fun for the smaller kids!

We hope to visit their renovated building at 2017.



#### NEWSLETTER

# News from members

# Burping cows or how to explain climate change to school children

#### By Adina Faiman Tallinn Energy Discovery Centre

From 26th October to 1st November, Virtual Physics Festival was held in Energy Discovery Centre. The aim of the festival was to present new technologies to a larger audience and to demonstrate how to use them in some natural science topics.



The festival kicked off with with the introduction of two new climate change related workshops to schoolchildren of different ages. The workshops were developed within the TIKAS project in cooperation with the Finnish Ministry of Culture and Education, Heureka Science Centre, the University of Helsinki, the Arctic Centre in FInland, Finnish Science Days organizers and KILT OÜ.



One of the workshops was based on augmented reality technology. With the help of a tablet, couple of wooden cubes and a special application, children could see how greenhouse gases are produced. Using an interactive tool the kids could experiment with different parameters, such as the amount of trees or factories, to apprehend how human activity can influence the emission of greenhouse gases. Laughter was brought in by sound effects that imitated cows burping and farting. Despite the "below-the-belt" humour, children learned an important fact: cows and other ruminents produce an important greenhouse gas – methane. The feedback both from children and teachers was very positive and confirmed once again that the use of the new technologies and game-like educational materials motivates students to take on even difficult topics.

During the weekend the centre was filled with people of different ages, who had the possibility to try out new workshops, but also participate in numerous demonstrations. Using a thermographic camera, visitors could observe how the temperature of some body parts changes after eating ice cream. Or how it is possible to transform every image into sound by using a computer program and what is the explanation behind it. 3D printer demonstration allowed a larger audience to see how this gadget works and what it can be used for.

Overall the Virtual Physics Festival was very well recieved by the visitors as well by the local media.



Paula from Finland conducting the workshop

Augmented reality workshop

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# News from members

# Magic carpet of Technology tales – a new operational model for early childhood technological education

Marianna Karttunen from the Museum of Technology, Finland

The Magic Carpet of Technology Tales is an operational model for technological education designed for museum educators and early educators. It is a part of The Pienten Paja (Kids, Museum and Technology program), a development project that the Museum of Technology in Finland has put it into practice in 2012–2015.

The operational model introduces a workshop called The Magic carpet of Technology tales. The workshop focuses on technological education in a museum environment and is designed for children aged six to eight. Furthermore, the operational model describes the workshop's evolution, different applications and ideas behind it.



The purpose of the workshop is to inspire children in the pre-primary and early primary education stages (preschool and first and second year elementary) to observe and understand technology as a part of their everyday life. Children in this age group can, by the means of progressive inquiry, practice finding themes connected to technology and discuss these themes from their own perspective and their own developmental phase. These themes include e.g. the essence of technology, stages of invention and changes that have taken place in technological environments. As a part of the project, researchers (Learning Futures research group in Department of Teacher Education in University of Helsinki), designers and early educators, all together, designed and modified the carpet and its functions. They also tested, assessed and, when necessary, redesigned them. This interdisciplinary method, which requires close cooperation, is a new way to produce workshops and activities for children in the museum setting.



This multi-voiced project team, with the help of rigorous evaluation and development work, integrated the voices and ideas of the children not only into the operational model but to the development of the museum as a learning environment and its operations in general. The operational model offers a child-centered approach to planning and carrying out workshop activities - an approach, which is based on everyday life and technology.

The project has been funded by the Finnish Ministry of Education and Culture.

Learn more about the model: <u>http://www.museoliitto.fi/index.php?k=12121</u>





# **News from members**

## Live happily for 100 years!

Sounds impossible? Not at all! On 1st December, Science Centre AHHAA opened a brand new exhibition "How to get to 100 and enjoy it?" that focuses on the challenges associated with the ageing of the population.

By the first decade of 21st century, Estonia had become one of the most rapidly ageing countries in Europe – meaning that the amount of elderly people among the general population is constantly growing. The new exhibition helps visitors better understand the needs of the ageing population and how to fulfil them in the best possible way.Despite the emphasis on aging-related issues, this



exhibition is actually most suitable for the young adults, tackling the questions that cross the minds of the twentyand thirtysomethings all over Europe. When should I have children? Is there a formula for healthy ageing? What about my career?



#### In the new exhibition you can

\* Get to know the various aspects and consequences of ageing, both in individual and societal level

\* Play interactive games, take quizzes, view photographs, read interviews and the latest research on demographic change

\* Play a game of Pacman, gaining "lives" for healthy lifestyles and right decisions

"How to get to 100 and enjoy it?" was created by Population Europe, the network of Europe's leading demographic research centres. The exhibition was brought to AHHAA in cooperation with Tallinn University. See the factsheet here.

#### The exhibition is open until 18th December

External rental information is available via e-mail exhibition@population-europe.eu.



# **Upcoming events**

# EAC16 - Eusea Annual Conference 2016

18-19. May 2016

The Eusea Annual Conference 2016 takes place at the AHHAA Science Centre in Tartu, Estonia. The programme will be published on this website in January.



ECSITE Annual Conference

9-11. June 2016

Graz, Austria

The "Colours of cooperation" theme not only resonates with Ecsite's network activities: we are sure that collaborations, co-creations and partnerships are at heart of your daily professional activities as well. You and your team will get inspiration, motivation, tips and tricks, do's and don'ts. You'll discover cutting-edge tools, gain new knowledge, and walk away with a refreshed look on your own practice. Use this conference as a springboard for personal development, for unexpected ideas, for future collaborations.

colours of cooperation

The conference is being co-hosted by three organisations: the FRida & freD Children's Museum, the Universalmuseum Joanneum and the association ScienceCentre-Network.

•24 February 2016: online programme is released + online registration opens

- •23 March: last day of the early bird rate
- •7-8 June 2016: pre-conference workshops
- •9-11 June 2016: main conference

# EuroScience Open Forum (ESOF) 2016 23-27 July, Manchester, UK

ESOF – EuroScience Open Forum – is the biennial pan-European meeting dedicated to scientific research and innovation. At ESOF meetings leading scientists, researchers, young researchers, business people, entrepreneurs and innovators, policy makers, science and technology communicators and the general public from all over Europe discuss new discoveries and debate the direction that research is taking in the sciences, humanities and social sciences. Registration is open!



# EuroScience Open Forum Manchester 2016

<u>More information</u> : http://www.esof.eu/about/ introduction-to-esof.html

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