October, 2016



N E W S L E T T E R

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Playful news

The autumn has began with lots of sun and colourful leaves dropping everywhere. This also means that the schoolyear has started and for more than ten years now, The Researchers' Night has been celebrated all over Europe. I know that many of our members are part of this mega-project. Estonian Researchers' Night was visited by more than 50 000 people. That's a lot of science fans! And more people who are interested join the program every year. I believe that we all have something to do with this growing interest.

In this Newsletter you will find the playful program of our annual conference and there are some surprises to be expected in this year! Take your hiking boots—and also high heels with you as the dinner is in the mood of the 1920's ;)

In the last issue of the Newsletter we introduced University of Tartu's project call for partners. I hope that some of you matched. In this issue we introduce a small Estonian exhibition production company called Exporabbit. Maybe some of you are looking for talented and experienced exhibition builders?

And last but not least— do not forget to apply for the NSCF scholarship. The deadline is in January, yet now is a good time to plan your visit and make a choice among our members!

Pilvi Kolk

Chairman of NSCF, Science Centre AHHAA, Estonia

Public Science Theatre Show at Tartu Town Hall Square

NSCF Board 2015-2017:

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NSCF News

Let's play! - NSCF Conference

12—14.10.2016 in Tietomaa Science Centre, Oulu Finland

Program:

Wednesday 12.10.

- 12:00 NSCF Board meeting
- 13:00 **Conference opening** Jonna-Marleena Härö, Director, Museum and Science Centre Luuppi
- 13:30 Life is a Game Dr. Tony Manninen, CEO, LudoCraft Ltd
- 14:30 Coffee Break
- 15:00 Using virtual reality to create speech and language therapy game Peili Vision
- 17:00 **Oulu City Reception** Dresscode: smart casual
- 19:00 Get together event in Tietomaa
 Wine and snacks, drama presentation of the
 Myllytulli area.
 Volunteer extreme activity: descent from the
 Tietomaa Tower by rope. Trainer shoes required
 for those participating

Thursday 13.10.

- 8:30 Tour to Museum and Science Centre Luuppi: Northern Ostrobothnia Regional Museum
- 9:15 Art Museum
- 10:00 Coffee Break
- 10:30 LeaForum

Innovative learning and interaction research at the University of Oulu: LeaForum – infrastructure. *University of Oulu*

- 12:00 Lunch
- 13:00 Game Lab & Fingersoft

Visit to new Oulu Game Campus and introduction of Game Lab and Fingersoft. Anna Salomaa and Pasi Jokinen

- 14:30 Coffee break
- 15:00 EduDigi-project (Heureka & Tietomaa).The project aims to find answers to the question how game technology could be applied in teaching and learning.

Leenu Juurola and Tuomas Olkku, Heureka

15:30 EXPORABBIT – partner for your storytelling Annemarie Rammo and Erika Saks, EXPORABBIT

- 16:00 What's new in your science centre? Participant organizations
- 19:00 **Conference Dinner** Roleplay dinner in the theme of the 1920's!

Friday 14.10:

9:00 Hands on mobile game development workshop Bring your own smart devices – smart phones, tablets or laptops. Jani Vallirinne, Suomen Koodikoulu

- 10:00 Coffee Break
- 10:30 Art and Science

Approaches in biological arts and emerging art forms Antti Tenetz, Regional Bioartist, Finnish Art Promotion Centre

11:00 Joint exhibition projects brain storming and closing the conference

Tapio Koivu, Director, Heureka Jonna-Marleena Härö, Director, Museum and Science Centre Luuppi

12:00 Lunch

Attendance fee: 280 €.

Register here! <u>https://player.myzef.com/oulu/ajax/?q=4516-</u> <u>f5860a22</u>

More information: Sampo Puoskari, sampo.puoskari@ouka.fi, +358 44 7031 342

Accommodation in Oulu: http://www.visitoulu.fi/en/accommodation/

The nearest hotels are Lasaretti and Lapland Hotel Oulu, though they are not the cheapest ones. **Note that some of the hotels on this website are located outside Oulu!**





NSCF Commercial News

Quality visitor experience with simple solutions!

By Annemarie Rammo, Exporabbit Estonia

A small room can present a big challenge, especially if when it comes to educational exhibitions. What can one convey in a small space and how? A few elements every exhibitions, small or big, should include. Shared with you from the experiences of Exporabbit - a new, but experienced expomaker.

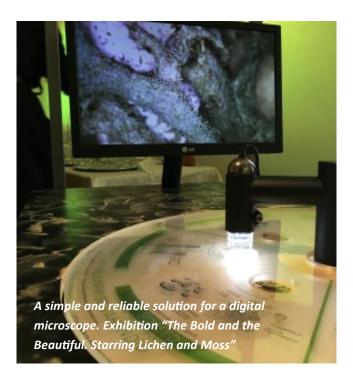
Stories are the natural way of understanding the world. Small exhibition spaces need to take advantage of that. A story makes the topic easy to follow and builds up interest for more.

Design is a feature that gets underestimated easily, but it can be a useful tool for drawing attention to the essential knowledge the visitor should take with them from the exhibition.





A room with a mood. Exhibition "Night Flyers"



Smart details are the highlight of any exhibition, this is nothing new. But the "wow"-effect can be achieved even with the simplest means.

Exporabbit - 11 years of experience in the creative field and a new direction in expo making, with award winning exhibitions in the Art Directors Club Estonia competitions in the past three years. We are inspired by nature, environment, energetics and people. We aim to create museum spaces where excellent design meets wellplanned visitor experience.

www.exporabbit.com



An UV-cannon shows the hidden side of lichen. Exhibition "The Bold and the Beautiful. Starring Lichen and Moss"



Sharing Media Stories

By Outi Putkonen, Museum of Technology/ Finland Museum Visitor Services Coordinator

The Museum of Technology has the privilege to announce that we have received funding from the Ministry of Education and Culture for a media educational project called Sharing Media Stories. The project launched in September 2016 and lasts until the end of 2017.



By Karoliina Leisti

The aim of the project is to produce an operational model for a workshop that is rooted in teen media culture, the typical ways for the youth to participate in and consume media.

The project's media educational content aims to improve media literacy and the development of a balanced and healthy relationship with media. The workshop will be developed in cooperation with local schools through pilot testing and the operational model will be published online at the end of 2017. The project challenges teens to share their own stories and gives them an opportunity to participate in museum exhibitions on a virtual level through augmented reality. The teenagers will create digital content for the new communications exhibition "Teledreams: A Connection Over Time And Place." The exhibition tells the history of crossing time and space by the means of electronic communications technology, giving the project a natural infrastructure and foundation. By contributing to the exhibition the teens can participate in creating a new and inspiring space and have a voice within the carefully curated exhibitions, which usually tell an official story defined by museum professionals. The media content generated by the youth is shared through social media and it is made available to the public within the exhibition.

The digital content documents the youth's relationship with media and therefore, it is valuable for the future generations. This media content will be recorded and documented and some of it will be added to the museum's collections permanently for the benefit of future generations.



By Museum of Technology



Økolariet, summer 2016

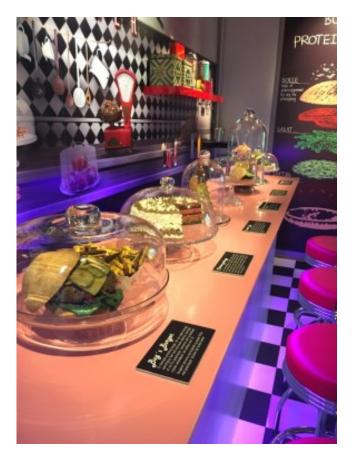
By Niels Norgaard, Denmark

The Danish summer weather has been very good for Økolariet this year. Rain, cold and grey weather make people come inside and a lot of them found their way to Økolariet. So far, we have had 50.000 visitors this year, and we're still counting.

Our new exhibition "Excuse me, there is a worm in my cake" has been very popular among our visitors. In short, this exhibition is about entomophagy - eating insects and how insects can be a very useful protein source for us in the future. Furthermore, we show how eating insects can help us fix some of the problems we are facing, due to the climate changes now and in the future.



By telling the story, we wanted to change people's minds about eating insects and make some recognizable food examples from already existing food habits in the West. This was the rise of Bug's Diner (exhibition version). Burgers, salads, ice cream and hot dogs were made to tell the story about how it is possible to make beef of insects instead of livestock, bread with insect flour and ice cream topped with honey roasted grasshoppers. And people embrace it very positively because it makes sense to them. Cricket mixed salad, Bug's Burger, Choco-Ant cake and Insect-Dog - what's not to like!

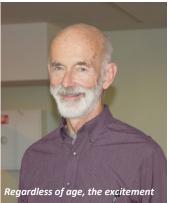






So – how would you build a car?

By Teele Tammeorg, Communications Manager at the Energy Discovery Centre in Tallinn



We're trying out new inventors' workshops at the Energy Discovery Centre, and the feedback has been brilliant. The idea is simple: *kids get to solve a problem on their own*.

Regardless of age, the excitement overbuilding a car was evident in all workshops conducted by Ed Sobey It's widely known that a lot of scientific discoveries were made by mistake. Whether it's a Petri dish mistakenly

left open, leading a scientist to discover Penicillin, or failure to develop really strong adhesive, leading to the invention of Post-it notes, mistakes can truly be good. But there's a catch – you'll need to learn from the experience.

At the beginning of September, the Energy Discovery Centre hosted creative learning workshops conducted by Ed Sobey, PhD, who has trained science teachers, science centres' staff and students in dozens of countries. The idea is simple: pupils, regardless of their age, have to find team mates and build a car that would move straight and as far as possible. When they have succeeded, they have to add an electric engine to the car. Then, make the engine run on solar power, and so on.

Sobey's method is original – he explains the challenge, but does not offer any solutions. In Tallinn, the pupils in Sobey's workshops were from grades 4 to 9. We also invited teachers from different schools and different disciplines to try it out during a special "teachers only" event at the Energy Discovery Centre.

"Five minutes after filing into the Energy Discovery Centre classroom, every student was fully engaged in solving a problem and learning science hands-on," Sobey says. "It didn't matter that the instructors did not speak their native language and didn't provide any directions on how to solve the problem. Students self-organized themselves into small teams and got to work."

So what would you use to build a fast car? Well, it's actually rather simple. A cardboard bottom will do just fine. Little plastic wheels, a propeller, electric wires, a switch, batteries, some tape... It doesn't have to be fancy. But it can be – in the end of the workshops we saw double deckers and even a car with a wagon. We also saw a lot of excitement when pupils put different car designs to the test.

To be honest, Sobey himself does very little at the workshops, and he's proud of it. What he does do is ask the pupils after every test what they saw the car do. Did it go straight? Why did the wheel come off? And if everything worked as it should – what is the one thing that could have been changed to make the car go faster?

"What does a child learn in this method? Of course they learn electric circuits and the laws of motion. And they learn how to solve problems, work in teams, and how to innovate. They practice their measurement skills. Most importantly they learn that learning is fun when they are solving problems and working in small teams," Sobey says. "This approach appeals as strongly to girls as it does to boys. Teams composed of girls were the best performers in Tallinn."

Thank goodness, no more of the old "but girls don't like cars" nonsense!

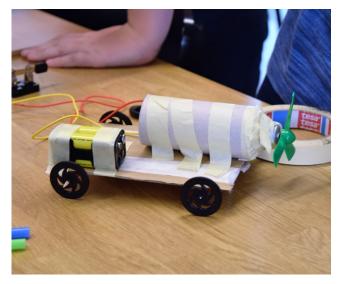
What surprised us at the Energy Discovery Centre was that the teachers were behaving pretty much the same way as their pupils. Whether they got the engine wrong at first, or hadn't managed to straighten out the propeller, thus making the car go slower, it was all about experimenting, making mistakes and correcting them. The result was the same: enthusiastic learning.





"The "innovate to learn" strategy of the workshops results from interviews with the world's greatest inventors and years of experience," Sobey says. "We have conducted these workshops in 30 countries. In each country, with each culture, the results are the same: students love learning through innovation. Even students who are failing in school love this approach. "Innovate to learn" works because, unlike the traditional classroom experience, it engages basic human nature of curiosity and tinkering. It puts students in charge of their learning and they enter into the state of "flow" where they perform optimally. This is how great inventors think and work."

The feedback from the initial workshops was so good that we at the Energy Discovery Centre decided to continue with them on our own. We call it Inventor's Workshop and have invited all Estonian schools to try it out this autumn/ winter season. The assignment can be tweaked according to a child's age – for example, kindergarten groups can build cars that have a balloon for an engine instead of an electrical engine. We're also putting together a kit for building a car at home because we've seen how hard it can be for a young inventor to part with his or her creation.



Mind you, even if it is a kit with preselected items, the young inventor always has the opportunity to add something. How about wings?

So - how would you build a car?





The Researchers' Night Festival in Estonia was bigger than ever!

Annika Vesselov, Science Centre AHHAA, Tartu, Estonia

The Researchers' Night is a Pan-European series of science events that always takes place on the last Friday of September. In Estonia, the RN is a culmination to a weeklong festival, where over 900 fun and engaging events took place all over the country from 26th to 30th September and brought together the finest assortment of events and over 50 000 science enthusiasts.

The main theme of the festival was "Science and Fiction", focusing on the rapid development of science, the discoveries and inventions that would've seemed completely impossible 100 years ago, but have now become a part of our everyday lives (or will be soon). For example, when do we start transplanting 3D-printed organs, will computers start thinking and speaking like humans or what are the possibilities of augmented reality devices. The week was filled with various fun activities for all ages, such as meet-ups with scientists, workshops, science cafés, outdoor cinema screenings, the Teddy Bear Hospital, science theatre shows, visits to the laboratories and industrial companies.





Alongside the public events, the festival kept a strong focus on education, engaging more schools than ever in the festival programme, and developing a special package for the teachers. The package includes a set of sciencerelated experiments, workshops and projects that teachers can easily carry out in a classroom during a lesson. There are over 50 different activities in the program.



The highlight and *grande finale* of the festival was the first FameLab in Baltic States. This fun and engaging science communication competition brought together 8 young researchers from Latvia and Estonia. In FameLab, the performers have just 3 minutes to win over the audience and judges with a scientifically sound, yet charismatic and engaging performances, explaining their research topic! Can we stop aging? Do animals have personalities? All-youcan-eat buffet of energy – these were just some of the topics that were covered in FameLab. You can also watch the whole event here: <u>www.teadlasteöö.ee/famelab</u>.

We can definitely say that the festival achieved its main goal to enhance public recognition of researchers and their work, offering an opportunity to discover, share experiences, inspire and spark interest in science. And of course, we'll be back next September with both the traditional, beloved events – and something completely new!





Upcoming events

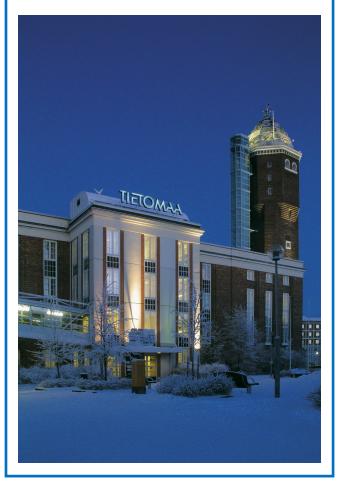
10 November will be celebrated as the "World Science Centre and Science Museum Day" (Questions to Asger Høeg, cell: +45 40 79 47 45 and mail: asgerhoeg26@gmail.com



NSCF Annual Conference "Let's play!"

Let's play! – NSCF Conference 12.-14.10.2016 in Tietomaa Science Centre, Oulu Finland.

Registration open: <u>https://player.myzef.com/oulu/</u> ajax/?q=4516-f5860a22



ECSITE Directors Forum

16-18. November

The 2016 Ecsite Directors Forum will be hosted by Parque de la Ciencias in Granada, Spain.

It will bring together the Senior Managers of Ecsite Full Members for 2.5 days of peer learning and networking on the theme "Unusual partners, strategic alliances". Check out the <u>programme</u> and <u>register</u> by 13 October.

http://www.ecsite.eu/activities-and-services/ecsiteevents/directors-forums/directors-forum-2016-unusualpartners



MUTECaktuell

10-12 November,

Leipzig, Germany

An International Trade Fair for Museum and Technology Exhibition organised by MUTEC. The specialised programme of supporting events focuses on the terrific and exciting challenges that museums and other cultural institutions, as well as archives and libraries currently deal with and will have to face in the future



More information: http://www.mutec.de/en/

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