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<http://www.nordicscience.org>



## NEXT STOP: ICELAND!

Welcome to the NSCF annual conference  
23. - 25. September 2004  
hosted by Reykjavik Park and Zoo.

The NSCF annual conference 2004 will be completely different! It will take the form of a hard working field trip on "Science in landscape". One big workshop with fantastic experiences of the science around us, from the natural world to the man made world, from the big to the small.

We succeeded in getting Stephen Pizzey, one of the most experienced science centre gurus in the world to be the main organizer of the conference and Stephen Pizzey will also be our coach and main communicator all the way during the conference.



Inside this Newsletter you will find the official invitation from Tómas Guðjónsson and his staff at Reykjavik Park and Zoo. You can also read about the program for the conference and how to register. For the sake of the hotel reservations we ask you kindly to register as soon as possible.

The conference is also different in the way that this year the conference fee covers also hotel accommodation besides full board, coffee breaks and bus transportation all the way through the conference.



**FJÖLSKYLDU- OG  
HÚSDÝRAGARÐURINN**



**NSCF Conference**



# Adventure in Iceland

**23.-25. September 2004**

## Dear NSCF friends!

We would like to welcome you to NSCF Conference “Adventure in Iceland” from the 23<sup>th</sup> – 25<sup>th</sup> September 2004. This Conference will be like a field trip back to the basics. During these three days we will enjoy the nature and landscape of southwest Iceland.

Our conference guide Mr. Stephen Pizzey from London is one of the most experienced science centre gurus in the world. His company “Science Projects” in U.K. is in the front line, specialized in designing and building of hands-on interactive exhibits.

Stephen Pizzey himself is very much aware of his surroundings. In his work “Science in Landscape” he focuses on the topic of making the public aware of the science around them, from the natural world to the engineering wonders, from the big to the small.

This will also be the main topic of our conference in Iceland. After having an introduction and a drawing lesson, we will go on several observation tours, working in groups, focusing our minds on the science we study in the landscape. Hopefully we will be inspired to design our own exhibits. During the field trip we will also meet local Icelandic experts and scientists.

## Flights from other Nordic countries:

Please book your flights yourself!

On the 23<sup>th</sup> of September most of the flights from Scandinavia arrive in the afternoon. We will pick up the participants up at the airport.

Arrival at **Keflavik airport** :

from **Copenhagen** at 15:10

from **Stockholm** at 15:20

from **Oslo** at 15:25

## Conference Registration:

Complete the registration form carefully and return it to Fjölskyldu-og husdyragardur by Email not later than 31<sup>st</sup> May 2004. The registration form is located at our homepage [www.mu.is](http://www.mu.is). Please click on the NSCF logo.

Registration fee is **422 EUR** per person. It covers all meals, coffee, bus trips and accommodation for three nights. The registration fee must be paid to the following account no later than 1<sup>st</sup> of July. If paid later than that the registration fee will be **522 EUR** per person. See further Information on registration form.

## Payment only through bank account:

KB- Bank Iceland

IBAN NUMBER: IS150313260018505802982069

SWIFT BUIS-IS-RE

Purpose of Payment: (names)

## For further information contact:

E-mail: [postur@husdyragardur.is](mailto:postur@husdyragardur.is)

Homepage: [www.mu.is](http://www.mu.is)



# Conference Programme

## Thursday, September 23th

Arrival at Keflavik airport: from Copenhagen at 15:10, from Stockholm at 15:20, from Oslo at 15:25

- 16:30 Bus from airport with all the participants. If someone has arrived early the bus will depart from “Fjölskyldu- og húsdýragardurinn” in Reykjavik at 15:30.
- 17:30 Icebreaker at the Blue Lagoon and the transport to Hotel Selfoss.
- 20:00 Dinner in Selfoss which is a town with about 4.000 inhabitants, situated on an old seafloor at the southern coast of Iceland.
- 21:00 Drawing lesson at Hotel Selfoss where we will stay for the first two nights. The first evening will be used to prepare our field trips for example by having a drawing lesson so we can make the best of what we will see.



## Friday, September 24th

- 09:00 “Science in Landscape”. Short introduction by Stephen Pizzey about Science in landscape and how to organize the workshop groups and tasks. After the introduction we will start our field trip to selected destinations where we will study the science in landscape. This field trip will take all day but do not worry, we will not stay inside the bus all the time.
- 10:30 Bus to Geysir area.
- 12:30 Lunch.
- 13:30 Gullfoss - the Golden Waterfall.
- 15:00 Glacier Langjökull.
- 19:00 Dinner at Hotel Selfoss.



## Welcome everybody!

Tómas Óskar Guðjónsson, Director  
[tomas@husdyragardur.is](mailto:tomas@husdyragardur.is)  
Fjölskyldu- og húsdýragardurinn,  
Reykjavik



## Saturday, September 25th

- 09:00 Bus to Ljósafossvirkjun. Hydro power-station in the river Sog. At Ljósifoss the waterfall was the first to be harnessed and was constructed in the 1930s.
  - 10:00 Thingvellir where the Icelandic Parliament - the first parliament in the world - was founded. In the landscape of Thingvellir the boundaries between Eurasian and North American plate are visible on the surface.
  - 11:00 Nesjavellir geothermal power plant.
  - 13:00 Lunch in Fjölskyldu- og húsdýragardurinn.
  - 14:00 Exhibit workshop – conclusion, Stephen Pizzey at Grand Hotel Reykjavik where we will present our ideas about how to use science in landscape in our work.
  - 17:00 NSCF general meeting.
  - 20:00 Farewell dinner at Grand Hotel Reykjavik.
- We stay overnight at Grand Hotel Reykjavik.

## Sunday, September 26th

Departure – information how to get to the airport at Grand hotel desk.

And of course we will eat, relax and have a whole lot of fun along with interesting lectures from Stephen Pizzey and local Icelandic scientists.

## Web-sites for further information:

Blue Lagoon: [www.bluelagoon.is](http://www.bluelagoon.is)

Fjölskyldu- og húsdýragardurinn:  
[www.mu.is](http://www.mu.is)

Grand Hotel Reykjavik: [www.grand.is](http://www.grand.is)

Geysir area: [www.south.is/geysir.html](http://www.south.is/geysir.html)

Hotel Selfoss: [www.ka.is/is/hotelsselfoss](http://www.ka.is/is/hotelsselfoss)

Iceland: [www.icetourist.is](http://www.icetourist.is),

[www.tourist.reykjavik.is](http://www.tourist.reykjavik.is), [www.iceland.is](http://www.iceland.is)

Nesjavellir: [www.or.is](http://www.or.is)

Thingvellir: [www.thingvellir.is](http://www.thingvellir.is)



# Stephen Pizzey - our conference guru!

**In brief:** Stephen Pizzey is a pioneer in the movement that has transformed the way museums interpret science, creating hands-on, entertaining exhibitions for visitors of all ages. In 2000 the National Endowment for Science, Technology and the Arts, called NESTA awarded him a NESTA fellowship of GBP 66,800 for the purpose of exploring the science evident in the natural environment, such as national parks and rivers.

■ NESTA award presentation.

## Hands-on science

Stephen has made it his life's work to inspire people of all ages to find out about the science that surrounds them. Having studied physics, he has sought to complement traditional science education. His aim is to expand its scope beyond classroom lectures and complicated equations, to reveal the little explored mechanics of the world. Stephen wants to make people more curious, for them to ask more questions. He says: "Science is in some ways less complex than you'd imagine, and should be accessible to all."

## A founding father of interactive science

Stephen is one of the founders of Britain's interactive science movement. During his years at the Science Museum, he transformed the way science was interpreted, to make the experience of engaging with science both entertaining and memorable. In 1987 he set up a charitable company, Science Projects, which creates exhibitions for museums and visitors' centres around the world. Its success is founded on developing vibrant, colourful and people-friendly spaces, where the visitor absorbs scientific knowledge almost without realising! Stephen also pioneered travelling exhibitions such as the *Discovery Dome*, a fully-interactive science centre in a series of tented pavilions set up in parks and public spaces all over the UK,

and the *Exploring Science* exhibitions which travel overseas, highlighting themes as diverse as *Medieval Machines*, *Risk*, and *Senses*.

## Helping people to appreciate science

"Science is all around us. My job is to help people to see it and appreciate it," says Stephen. His travelling science centre was aimed at helping communities which were not within commuting distance of the big museums. He adds: "Everyone has childhood memories of being in a tent and I am convinced that this turned the visit into more of an adventure."

## Making a difference worldwide

He has built an international reputation in the field of 'hands-on science', or bringing science to life. Dr Sidharth, director of the B.M. Birla Science Centre, India, said: "...I want the wonderful atmosphere in your *Discovery Dome* in my new centre – please come over and work with us...", starting of a lasting friendship and association. The *Discovery Dome* was also the inspiration for *Science Carnival* in the US and Stephen worked with the Pacific Science Centre, Seattle to help create it. In 1999 Science Projects developed the exhibits for the Children's Discovery Centre in Sharjah, one of the United Arab Emirates. It is packed with playful activities, from a harbour with water and boats to a climbing wall and sports area.



## Science in the community

Science Projects has achieved success not just through innovation, but by engaging the community. It provides flexible employment and makes time to train guides and exhibition workers in country parks and visitors' centres. The organisation also runs two permanent exhibitions at 'Inspire' in Norwich, built inside a medieval church, and the Herstmonceux Science Centre, on the site of the Royal Observatory building near Hailsham. The aim is to bring the site back to life both as an operational observatory and as a centre for informal learning, complete with an outdoor Science Discovery Park. Work on restoring the historic telescopes and domes is well advanced thanks to a recent Heritage Lottery Award. Inside these buildings are novel experiments such as Dunemaker, where you can make a sandstorm and watch the dunes form from the shifting sands, or visitors can take part in a demonstration of how an aircraft's wings can fly steadily in a blustery sky.

## Exploring the landscape

"I have explored science in our everyday lives. During my fellowship, I want to show the cyclical nature of our natural landscape, from the forces that make the tides flow to the positioning of the sun at dawn and the track of shadows across the landscape by day." "The missing part of science education is getting people to see the science around them, in their own landscape. I'm interested in drawing attention to things that are already there, such as reflections, sunsets, and tides."

# Science is out there!

■ Stephen Pizzey, May 2004

I must confess to being both nervous and excited about the Nordic Science Centres *Adventure in Iceland* both for the chance to explore that fantastic landscape and for the opportunity to try something new for the conference.

Preparing the idea for the conference reminded me of the time, many years ago when as a young boy, my friends and I explored some overgrown derelict buildings and structures near a set of 10 canal locks at Foxton in Leicestershire where I lived. It was a great adventure as we forced our way through bushes and brambles. We discovered what seemed to be a long ramp and what must have been an engine house – its purpose was a mystery. Slowly we realised, here in the quiet countryside was once a great machine to drag the canal boats up the slope to avoid using the locks. It was our own amazing discovery, like finding Machu Pichu or Angkor Watt in the middle of England.



This is what a visit to a science centre should be – a voyage of discovery and exploration and above all a great personal adventure. Tell that to the evaluators.

## Discovery Dome

As adventures go, it would be difficult to beat the fun and games with the 'Discovery Dome', an idea I had for a travelling science centre housed in tents. There was great interest in science centres in the UK at the time in the 1980's – great interest but not much money. The problem for everyone was raising the funds for buildings and my thinking was why bother with a building, why not use a



tent. The Phänomena exhibition in Zurich had shown how exciting this could be and the good thing about a tent is that you can try out different locations. *Science Projects* was then established as a

non profit organisation to attract funding and to design and built the exhibition. The exhibits were simple and there were also demonstrations and workshops on different themes such as flight and water. The exhibition was housed in interlocking hexagonal tents which could be quickly assembled and taken down. Local staff were recruited

and at one location one of the explainers brought in a real glider and set it up outside the tent to show visitors how it was flown. Some of the explainers, particularly the students in Scotland for some reason became great performers, using wit and humour to enliven the demonstrations – audiences were told that the secret of flying was to "dive at the ground and miss", for example. The human component is a vital part of the science centre experience in my view. We even had two explainers fall in love and 'run away with the circus' staying with us as we moved from town to town until

the parents found out. The young man was a 'robotic dancer' who tended to startle the visitors from time to time with his spontaneous performances.

### Travelling exhibitions

The Discovery Dome toured for seven years and during that time the production workshop expanded and our travelling exhibitions service grew as a direct result of the tour. It also led to a long standing link to with India following a visit by Dr Sidharth who was setting up a science centre in Hyderabad. He visited the exhibition declaring he wanted the atmosphere of the Dome in his science centre. When I went to visit him and his staff who were all sitting around with notebooks I asked him to place an advertisement in the newspaper saying 'Hands-On Science Exhibiton' at their workshop in two weeks time. Being polite to his visitor he instructed his secretary and then asked where was the exhibition was coming from. I replied we are going to build it. "Oh my God, we have no time to lose!" he

### SchoolWorks

The Discovery Dome was an enormous success, attracting over 100,000 visitors in its first year. It led to teachers basing classroom projects on many of the topics covered and requests to borrow some of the exhibits. From this interest, a set of specially designed, curriculum-based exhibits available for hire to schools and started operation in 1989. Meanwhile, we initiated an exhibition which was intended to form the basis for a permanent science centre in Glasgow for the 1990 City of Culture celebrations. It was around this time that we planned *Exploring Science*, a travelling exhibition which eventually took us across the Middle East and on to Ethiopia. Even the poorest countries still have workshops in the back streets and so training local staff to make exhibits draws on the existing culture of repair and manufacture on a small scale. Sadly we lost touch with our new-found colleagues in Ethiopia when civil war broke out with Eritrea.

operational again met with a mixed response. Trusts which had funded my previous ideas called me an idiot for taking on such a venture and were not prepared to support it whereas a national newspaper described it as "a labour of love unfolding in the Sussex countryside". After a while I tended to agree with my previous supporters. As I explored each of the six observatory domes there was yet another historic telescope silently pleading to be restored as the leaking roof looked on. You will be pleased to hear that the telescopes are now restored and leaks repaired. We built an outdoor Discovery Park in the grounds of the Observatory with money from one of our projects in the middle east and it looks as though we will have some money from the Millennium Fund although sometimes I wonder which millennium. (after that wisecrack we may not get any!)

### Science in Landscape

Recently, I was fortunate enough to be awarded a grant from the National Endowment for Science Technology and the Arts (NESTA) in the UK to take my ideas about science in the landscape further and I will be exploring these at the conference. I began by studying what could be observed from just one fixed location, in this case by the River Thames in London where I have a houseboat. Sunset and sunrise positions were photographed over the year and also the growth of trees and plants across the river. The river is tidal at this location and I recorded the flow patterns in the river at different states of the tide.



replied and we all put down the notebooks and got to work. I remember I suggested an exhibit to show how to draw an ellipse in sand with a stick and some string. His reaction to that was swift and to the point; " People aren't going to travel from the villages to mess around with sticks in the dust, they want palaces and wonders!"

### The Observatory Science Centre

Ten years ago we managed to take over the telescopes and domes of the former home of the Royal Greenwich Observatory. The telescopes were moved there in the 1950's to escape the light pollution of London and was closed down in 1990. Our attempts to rescue the telescopes and make the Observatory

All this ever changing everyday scene was brought about by the simple cosmic dance of the Earth, Moon and Sun. It has been an amazing opportunity to be encouraged to pursue such a personal interest and it is now impossible for me to travel anywhere without noticing something new, from reflections under bridges to the elegance of water towers



in France which are pure mathematical shapes. They are wonderful sculptures in the landscape about pressure and



volume. As a result of this grant I arrange a visit to my colleague in India to discuss outdoor exhibits which involved tracking shadows from the sun. On the way to a suggested hill site location I overheard him explaining something to a local dignitary, the only words I understood were “....London.....Pizzey-Guru.....Science Projects.....” and may have imagined “...mad man...”.

My next science-in-landscape project is to analyse the sounds of the landscape, wind through trees, waves crashing on shingle and whatever suggests itself. In the course of this work I developed a huge respect for those early geologists and fossil hunters who revealed the story of our planet and the life upon it from the most hidden of clues.

Yes, the science is certainly out there for those that seek it.

■ Stephen Pizzey 14 May 2004.

### Note:

The name Discovery Dome was a tribute to the 1951 Dome of Discovery at the Festival of Britain. This fabulous science exhibition was arguably the world's first modern science centre and yet was soon torn down by the incoming Conservative government who did not want this populist achievement of the previous socialist government televised during the coronation of Elizabeth II.

### Some web sites for interest:

Science Projects information: [www.science-projects.org](http://www.science-projects.org)

The Observatory: [www.the-observatory.org](http://www.the-observatory.org)

The 1951 Dome of Discovery: [www.packer34.freeserve.co.uk/dome.htm](http://www.packer34.freeserve.co.uk/dome.htm)

## News from ECSITE

■ Asger Høeg, Vicepresident of Ecsite



### ECSITE annual conference in Barcelona

The biggest annual event is the ECSITE conference. Last year Deutsches Museum in Munich hosted the event for 580 participants. This year the conference takes place in the recently opened Museu de la Ciència in Barcelona. Jorge Wagensberg will hopefully be able to welcome 700 people to a 3 day exciting conference, i.e. lasting from 4th till 6th November, 2004. As most people will be aware, the efforts to build a new science centre in Barcelona started three years ago. Now everybody can come to Barcelona and witness the synthesis of 20 years of experience expressed through the new exhibitions.

A completely new element will be part of the ECSITE conference, i.e. the so-called “Key Dialogues”, where an exciting topic is being put up for debate. For each of these there will be two “high level speakers” with each their opposite view point. The three topics for Key Dialogues are: Global versus Local, Cutting edge science and a critical evaluation of the new Museu de la Ciència. Please enter the [www.ecsite.net](http://www.ecsite.net).

### Science Centre Academy

Technopolis and ECSITE will each year hold a so-called Science Centre Academy,

where new or future science centre executives during the course of three days may learn (nearly) everything about how to establish, finance, arrange and market your new science centre. The undersigned will be one of the teachers. This year the Science Centre Academy will be held from the 2nd till 4th July, 2004. Please enter the [www.technopolis.be](http://www.technopolis.be).

### National divisions

The ECSITE has accepted that there be national divisions of the ECSITE in the major European countries. Consequently an ECSITE-UK has been established, featuring Melanie Quin, as an executive and Colin Johnson as the first chairman. Members of the ECSITE-UK are members of ECSITE. A normal fee is paid to the ECSITE, which will pass on 30% of that to the ECSITE-UK. When forming the ECSITE-UK, the ECSITE had a lot of new members. The first and most important task for ECSITE-UK has been to achieve recognition from the government of the fact that the science centres urgently need operational subsidy. Two years efforts were successfully rewarded, when the British government on 16th March, 2004 informed that 5 science centres would receive a total of 2 million GBP as operational subsidy. Also an ECSITE-D and an ECSITE-NL have been established.

ECSITE continued.....

### **New ECSITE projects coming up!**

ECSITE has two major projects coming up. One of these projects is PENCIL, which comprises no less than 14 partners. PENCIL has been worked out by the ECSITE manager Walter Staveloz. The project deals with developing new teaching ways and methods in the schools in the European countries. The budget for PENCIL, which has been approved by the EU commission, is 4,5 Million EUR.

The other project is the ECSITE suggestion for celebrating the European Natural Science Week 2005. In this case the budget is 2,6 Million EUR. The ECSITE has this week handed in it's proposal to the EU. It is extremely exciting to learn, whether the project will be preferred by the EU commission.

Finally I should like to mention the fact that together with among others ASTC, the ECSITE has drawn out a report "Impact of Science Centres", which summarizes the existing investigations of the effect of science centres on society of which they are part. The report and also other useful information may be downloaded from the ECSITE website [www.ecsite.net](http://www.ecsite.net).

Yours sincerely Asger Høeg  
Executive Director of Experimentarium,  
Vicepresident of ECSITE  
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# **NSCF's fremtid: Der skal nyt blod til foreningen!**

■ Nils Hornstrup, formand

**I forgående Newsletter skrev jeg en opfordring til at diskutere foreningens fremtid. Der har overhovedet ikke været nogen reaktion på mit indlæg. Det gentages derfor nedenfor.**

Ifølge vore vedtægter ledes Nordisk Science Center Forbund af en styrelse bestående af 5 medlemmer, et medlem fra hvert medlemsland, Danmark, Finland, Island, Norge og Sverige. Styrelsens medlemmer vælges på det officielle forvaltningsmøde, som afholdes hvert andet år. Forvaltningsmødet vælger blandt disse en formand/ordførere. I vedtægterne hedder det desuden, at formandskabet bør cirkulere mellem medlemslandene mindst hver anden virksomhedsperiode, altså mindst hvert 4 år.

Bestyrelsen har nu bestået af de samme personer igennem mange forvaltningsperioder og jeg har været formand i sammenlagt 6 år, først en 4-årig periode fra 1991-1995 og dernæst igen fra 2001. Jeg er jo heller ikke nogen årsunge længere, jeg nærmer mig de 61 med raske skridt.

I forberedelsen af forvaltningsmødet i Oulu forsøgte styrelsens medlemmer at finde nye egnede kandidater til styrelsen, men det lykkedes ikke. Man havde for travlt med andre gøremål, "ikke lige nu", "måske senere" osv.

Vi drøftede dette i styrelsen og enedes om alle at stille op endnu en gang, og derfor fortsætter vi nu endnu en periode, men det ændrer ikke ved ønsket og behovet for fornyelse.

Der må der gøres noget! Der skal nyt blod i foreningen, nye initiativer og ikke mindst skal vi også have kvinder ind i styrelsen. Derfor opfordrer jeg alle 43 medlems-institutioner alvorligt at overveje om ikke de vil kunne bidrage til en fornyelse - og fornyelse - af vores udmærkede sammenslutning ved at stille op og yde noget af deres arbejdskraft til foreningens gode formål.

Kære kollega, tænk over det og meld dig til mig snarest muligt. Vi kunne eventuelt benytte dette Newsletter til en debat om foreningens fremtid og en præsentation af nye kandidater og på den måde gennemføre en bredere valgprocedure, hvor alle medlemmer får sine meninger hørt.

■ Nils Hornstrup  
[nilsh@experimentarium.dk](mailto:nilsh@experimentarium.dk)



# Klimatgreppet - en solskenshistoria

## Medeltemperaturen på jorden stiger - vad är det som händer med klimatet egentligen? Hur berör det mig?

De här aktuella frågorna var utgångspunkt när Teknikens Hus i Luleå byggde utställningen *Klimatgreppet – en solskenshistoria*. Den öppnade 2 april och kommer att visas hela sommaren 2004.

Här får besökaren lära mer om bakgrunden till den förstärkta

växthuseffekten – västvärldens slöseri med fossila bränslen ger utsläpp och inom 100 år beräknas medeltemperaturen vid jordens yta att stiga med upp till 6 grader C. Det låter kanske inte mycket, men kan leda till torka och översvämningar, extrem värme och kyla. Men som utställningens namn antyder, det finns hopp!

Utställningen visar på enkla saker vi alla kan göra för att minska klimatpåverkan. Det är t ex att cykla och gå korta sträckor istället för att åka bil eller att byta ut alla vanliga glödlampor i hemmet mot lågenergilampor. Här kan också besökarna upptäcka nya energikällor och testa dem. Besökarna kan själva skapa vindenergi, vattenkraft eller göra sina egna träpellets till värmepannan.

I *Klimatgreppet – en solskenshistoria* kan man ta jorden genom en labyrinth där fallgroparna är bränslen som olja och kol, räddningen är de förnybara energislagen sol, vind och vatten. I en film med några får i huvudrollen ges förklaringar och lösningar till klimatfrågorna på ett humoristiskt sätt.

Här finns också en populär station där besökarna kan ta ställning i en rad frågor och genom att lägga stenar i höga rör lämna sina egna avtryck i utställningen.

Utställningen ska turnera i Sverige och Europa efter avslutat visning i Teknikens



Hus. Mer information: Teknikens Hus, Luleå, Olle Nordberg  
[olle.nordberg@teknikenshus.se](mailto:olle.nordberg@teknikenshus.se)



# TOM TITS FÖRSKOLA ÖPPNAT!

TomTits Experiment har öppnat en enskild förskola där barnens experimentlust och upptäckarglädje sätts i centrum.

Förskolan vänder sig till barn 1-5 år.

Fullt utbyggd bereder förskolan plats för cirka 60 barn. Förskolan ligger strategiskt placerad i ett angränsande och sammanlänkat hus till vår utställning.

I dagarna har Tom Tits förskola varit öppen i en månad och de första 30 barnen är inskolade och går på förskolan. Det har varit en intensiv period med många nya kontakter och aktiviteter. Vi har börjat med att utforma och anpassa våra pedagogiska miljöer för att kunna leva upp till våra ledord *Trygghet, Trivsel och Talang*.

Att ge trygghet, skapa trivsel och ta till vara talang för alla som deltar i verksamheten är en förutsättning för ge varje individ möjlighet att utvecklas. Det gäller såväl barn som föräldrar och de pedagoger som arbetar på förskolan.

Förskolans framväxt har varit ett samarbete mellan olika yrkeskompetenser som finns bland personalen på Tom Tits Experiment. Formgivning och scenografin har varit ett viktigt inslag i den pedagogiska processen. Just nu planeras för förskolans utemiljö som vi kallar "Äventyret". I lokalen pågår fortfarande en del små arbeten och under sommaren ska lokalen slutföras. Det är dock i sammanhanget viktigt att påpeka att lokalerna aldrig kommer att bli färdiga utan kommer att utvecklas och förändras i takt med vad verksamheten behöver. Lokalen är utformad för att skapa möten mellan människor och det finns stora gemensamma utrymmen för både lek och andra aktiviteter. De traditionella avdelningarna har ersatts med fyra hemvisten och en stor gemensam entréhall. En stor del av förskolans verksamhet kommer att förläggas utomhus dels på förskolans



egen gård, dels i Tom Tits parkanläggning och andra utemiljöer i vår närhet. Djur och växter kommer vara ett naturligt inslag i förskolans vardag.

Förskolan kommer att såväl fysiskt som med det pedagogiska innehållet att samverka med Tom Tits Experiments utställning och pedagogernas erfarenhet av det upplevelsebaserade lärandet med experimentet i fokus.

Tom Tits Experiment har sökt tillstånd från skolverket för att starta friskola med samma inriktning som på förskolan med naturvetenskap och teknik.

Tom Tits förskola följer Läroplanen för förskolan (LPFÖ-98) och Södertälje kommuns Utbildningsplan 2004. Föräldraavgiften är den samma som för kommunala förskolor, vi följer maxtaxan.



## FENOMENALEN

Science Center på Gotland

Fenomenalen på Gotland är ett litet science center som startade 1989. Under årens lopp har Fenomenalen haft flera tillfälliga utställningar som handlat om allt från genteknik till tithålskirurgi och sjöfart.

Fenomenalen producerade och invigde under förra året utställningen Sport & Vetenskap. Här illustreras vetenskapliga förklaringar och begrepp med hjälp av sport. Man får t ex prova att vara domare i en fotbollsmatch, testa hur snabb du är i starten på en speedwaycykel, vad som händer när man dopar sig och andra saker relaterade till sport. I vår har utställningen varit uthyrd till Universeum i Göteborg, och skall till sommaren till Innovatum i Trollhättan. Utställningen vandrar vidare till hösten till Technicus, Härnösand och om möjligt sedan till Framtidsmuseet i Borlänge.

Utvecklingen av Sport & Vetenskap har skett i samarbete med Idrottshögskolan, Stockholm.



### Framtidsplaner

Nästa år står Fenomenalen inför en omorganisation. Projektering och utredning av en förstoring av nuvarande Fenomenalen och ett utökad samarbete med Gotlands högskola och gotländskt näringsliv pågår.

■ Jan Ryegård

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## Laboteket lukker, farvel til NSCF!

Från Laboteket/Progressum i Kiruna meddelas att verksamheten ligger nere tills vidare. Laboteket har blivit ett populärt besöksmål bland Kirunabor och turister. Under det gångna året har de haft mer än 10.000 besök. Men det kommunala bolaget Progressum som haft verksamheten har inte lyckats få fram pengar till fortsatt drift. Jag har själv varit med i Labotekets referensgrupp under ett par år, och där har också diskuterats ideer till hur verksamheten skall kunna drivas vidare.



Laboteket har varit ett 3-årigt utvecklingsprojekt, finansierat med EU-pengar. Projektet avslutades vid årsskiftet, och någon finansiering från kommunen eller näringslivet har man inte kunnat uppbåda. Laboteket ligger just nu i malpåse i samma lokal, som Progressum hyr åtminstone året ut. Några konkreta ideer om vad som händer med utställningen finns inte för närvarande. Kiruna Science Center invigdes den 16 augusti 2000. Ludmilla Janeck fick vid jul en bebis och, gissar jag, har fullt upp den närmaste tiden.

■ Jan Sjökvist, Xperiment Huset

### Nytt: AKVA siger farvel til NSCF

AKVA Upplevelsecentrum i Piteå har fått ny ägare, Pite Havsbad. Våra gamla kontakter finns inte kvar i verksamheten. Inget beslut om ev medlemskap i NSCF.

■ Nils Hornstrup

## Utvecklingen av science centers i Sverige

I en tidigare artikel har jag beskrivit villkoren för statsbidragen till svenska science centers. Här följer en sammanfattning av nuläget med svar på frågan: Vilka science centers får statsbidrag?

I år har riksdagen anvisat 22,8 miljoner kronor. Pengarna fördelas av Höskoleverket i samverkan med Skolverket och Statens kulturråd. 19 science centers har ansökt om bidrag. 13 av dessa har erhållit driftstöd, medan 2 har fått projektbidrag ( Balthazar i Skövde och Upptech i Jönköping). Tyvärr räcker inte pengarna för driftstöd till för att motsvara de förväntningar som mottagarna av statsbidrag haft. Anslagsramen har ökat med mindre än en miljon sedan förra året, medan flera science centers har kvalificerat sig för ökat driftbidrag och ett science center utökat listan över mottagare av driftbidrag (Dalenium i Stenstorp, Falköpings kommun). I år reduceras därför bidragen med 18%. Takbeloppet på bidragen är 5 miljoner och därför sker ytterligare recucering för centra med störst omsättning (Tom Tits och Universeum). Förra året var reduktionen 19%, men Höskoleverket och Skolutvecklingsmyndigheten tillsköt oväntat sammanlagt 4 miljoner kronor från andra projekt några månader senare.

Följande science centers får driftbidrag (kvalitetspoängen inom parentes. Maximalt antal poäng är 28.)

Dalenium, Stenstorp (17)	Navet, Borås (24)
Fenomenalen, Visby (21)	Teknikens Hus, Luleå (26)
Fenomenmagasinet, Linköping (21)	Technichus, Härnösand (22)
Framtidsmuseet, Borlänge (21)	Tom Tits Experiment, Södertälje (26)
Innovatum, Trollhättan (24)	Universeum, Gäteborg (22)
Kreativum, Karlshamn (24)	Xperiment Huset, Växjö (24)
Molekylverkstaden, Stenungsund (16)	

■ Jan Sjökvist, Xperiment Huset

## 343 dage til åbning af DANFOSS UNIVERSE



Danfoss Museum & Teknorama er indrettet i fødegården for Danfoss' grundlægger Mads Clausen i Nordborg på Als. Den nye oplevelsespark, Danfoss Universe, som Danfoss nu er ved at bygge, åbner 1. maj 2005. I næste NSCF Newsletter vil vi fortælle mere om denne nyeste store danske satsning.

Mere information på [www.danfoss-teknorama.com](http://www.danfoss-teknorama.com)

■ Nils Hornstrup



# Science center –bølgen skyller inn over Norge

## ■ Atle Kjærvik, Vitensenteret i Trondheim

Bedre finansiering bidrar nå til å befeste science center -pedagogikkens posisjon i Norge –15 år etter våre nordiske naboland. I år som i fjor kan de seks regjeringsutnevnte regionale sentrene dele til sammen NOK 10. mill. i drifts- og prosjektstøtte.

I tillegg til "de gamle" sentrene i Oslo (Teknisk Museum), Trondheim og på Jæren (åpnet i 2002) arbeides det nå på spreng med å etablere regionale sentre i Gjøvik, Bergen og Tromsø.

I Tromsø har universitetet (UiT) overtatt et relativt nytt planetariebygg etter et konkursrammet aksjeselskap. Bygget ruver i landskapet nært universitetet.

Planetariebygget er for lite til et skikkelig Science center. Til det trengs et nybygg. Når det kan komme på plass, er ennå uvisst.

**Innlandet Vitensenter i Gjøvik** ble etablert som aksjeselskap i februar. Selskapet vil drive Science center i et gammelt industribygg sentralt beliggende i Gjøvik. Utstillingen er under planlegging, bla. med vekt på tema som "Energi" og "Vann".

I sommer arrangerer Vitensenteret robotkonkurranse under paraplyen "First Lego League". Det vil også bli leir for "sommeringeniører". I tillegg planlegges det lærerkurs for bruk av modeller og utstilling under klassebesøk.



Stiftelsen som skal drive **Nordnorsk Vitensenter** er i ferd med å flytte inn. I vinterferien holdt prosjektleder Anne Bruvold Eksperimentklubb med tema "Sne" for ivrige skolebarn. Nordnorsk Vitensenter driver også prosjektene "Nordlys på nett", "Matematikkverksted" og "Himmelen over oss". Til sommeren er det Eksperimentklubb med tema "Lyd". Da vil det bli bygget en rekke modeller. Men

**Bergen Vitensenter** har nå formelt overtatt det gamle Kretsfengselet i Bergen. Det ligger meget sentralt i byen. Kommunen har nylig bidratt med midler til rehabilitering av bygningene. Eva Grimstad, som er administrerende direktør for stiftelsen, lover at senteret vil åpne for fullt i 2007.

I mellomtiden skal det bla. bygges det utstillingsmodeller. For tiden er ca.15 modeller med tema "Energi" under



planlegging. Senteret har også etablert et "Tekno-verksted" på en skole. Her skal det holdes lærerkurs i sommer.

### Flere sentre

I tillegg til de 6 regionale sentrene har "Nettverket av norske vitensentre" (NAV) ytterligere 4 medlemmer: Akvariet i Bergen, Norsk Oljemuseum, Østfold Vitensenter og Teknoteket/Science Cirkus.

Sistnevnte er i hovedsak et mobilt vitensenter. Science Cirkus har bla. vært utleid til et kjøpesenter i Trondheim. Norsk Oljemuseum er et eksempel på en annen trend i Norge; museer som i større grad ønsker å ta i bruk interaktive (hands on) modeller i utstillingen. Dette er i tråd med det statlige organet Norsk museumsutviklings politikk.

I Østfold har et lokale lærer-entusiaster i samarbeid med fylkeskommunen og Høgskolen tatt initiativet til å danne et vitensenter i Sarpsborg. Senteret har ennå ingen fast utstilling. Lærerne har i stedet satset på et "Elevlaboratorium" og driver en rekke aktiviteter som bla. "Oppfinnerleir", "Forskningsleir", barneselskap, lærerkurs og teambygging. Det arbeides også med å skape science centre en rekke andre steder i landet. På Lundamo utenfor Trondheim har bla. en lokal gründer tatt initiativet til et "Teknoland". Flymuseet i Bodø vil også benytte flere interaktive modeller i utstillingen.

