

ABERDEEN & ABERDEENSHIRE
EVENTS GUIDE

british
science
week

13-22 MAR
2015

THIS MARCH DISCOVER
SCIENCE

Neon

Sodium

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Holliston

British Science Week 2015

Aberdeen and Aberdeenshire Events Guide



British Science Week is the UK's annual celebration of science, technology, engineering and maths, led by the British Science Association. This March, the Aberdeen Branch of the British Science Association, with support from the University of Aberdeen, is delighted to bring you an exciting programme of talks, workshops and hands-on activities. Most are free and all will inspire you to think, question and discuss!

www.britishecienceassociation.org/aberdeen

www.britishecienceweek.org

 www.facebook.com/britishecienceassociationaberdeen

BSW Aberdeen Coordinator: **Mandy Tulloch** M: **07929 465680** E: aberdeenbranch@britishecienceassociation.org

The British Science Association is a charity registered in Scotland, No. SC039236.

Friday 13 March

Bring Your Own Brain

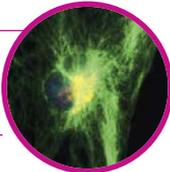
Shining a light on the function of the brain

6pm, Suttie Centre, Foresterhill Health Campus, Aberdeen, AB25 5ZD

Free admission, no booking required. E: peru@abdn.ac.uk

Speakers: **Professor Peter McCaffery, Dr Perry Barrett, Dr Jasna Martinovic and Kevin McKenzie (University of Aberdeen)**

Join medical scientists as they illuminate how the brain senses light in the surrounding environment and how light lets us understand the workings of the brain. This event is in celebration of UNESCO International Year of Light.



Saturday 14 March

Science for everyone

10am - 3pm, Robert Gordon University, Riverside East Building, Garthdee Road, Aberdeen, AB10 7QQ

Free admission, no booking required. More information:
Dr James Njuguna, T: **01224 262304** or E: j.njuguna@rgu.ac.uk

Ever wanted to operate an underwater robot or find out what Formula One chassis are made from? Take a tour of the University's newest and largest building and meet researchers from the School of Engineering, including those from the nanotechnology and composite material groups. Designers from Gray's School of Art will also showcase their *Design in Action* concept that brings artists together with local food companies to develop new ideas.



Saturday 14 March

Family Forest School Event

10am - 12 noon or 1pm - 3pm
Campmill School, Murtle Estate, Bieldside, Aberdeen, AB15 9EP

Free admission, but booking required. **Julia Mackay**, T: **01330 811576** or E: deesideforestschoools@btinternet.com

Join us for some fun, family outdoor activities. Explore the woodlands, find freshwater mini-beasts, cook on an open fire and make your own woodland creatures.



Sunday 15 March

Owls and other creatures of the night!

Haddo House & Country Park, Methlick, Ellon, Aberdeenshire, AB41 7EQ

1pm - 3pm Owl Display

Discover more about the amazing world of owls and meet some of the wonderful birds from the Owl and the Pussycat Centre. You can even mingle with Errol and Hedwig, the owls used in *Harry Potter* and *the Philosopher's Stone*. Donations to Owl and the Pussycat Centre.

Free admission, no booking required.

1pm - 3pm Owl and Bat Bushcraft

Get inspired by our visiting owl and bird of prey display and turn yourself into a creature of the night with an owl or bat mask made using woven willow and leaves!

£2 per craft, no booking required.

6pm - 7.30pm Creatures of the Night

Discover a secret night-time world at Haddo. Head out into the park after sunset to find out how nocturnal animals find their way around. Follow glow-in-the-dark signs, use UV light to find creatures hiding in the woods and have a go at echolocation. You might be lucky enough to see an owl, a fox or a bat!

£5 per person, booking required.
T: **01651 851041** E: haddo@visithaddo.com



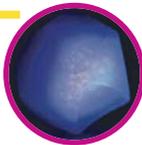
Saturday 14 & Sunday 15 March

Dreams of Matter: Aerogel

Aberdeen Science Centre, Satrosphere, The Tramsheds, 179 Constitution Street, Aberdeen, AB24 5TU

T: **01224 640340** www.satrosphere.net

See the fascinating Aerogel material up-close and learn about its unique and remarkable optical properties. Visual artist Nedyalka Panova will describe her artistic approach to the material and talk about her collaboration with the Synthetic Optics Group at the University of St Andrews. This event is in celebration of UNESCO International Year of Light.



Sunday 15 March

Aberdeen Skeptics in the Pub

Dying: what you need to know

4pm, Cellar 35, 35 Rosemount Viaduct, Aberdeen, AB25 1NQ
Age 18+. This venue is situated down stairs.

Free admission, no booking required. www.aberdeen.skepticsinthepub.org

Speaker: **Dr Margaret McCartney** (GP and public health blogger)

We are dying older but we are also dying with more diseases, on more medication. Most people want to die at home, but few do. An informal talk about the myths and reality of healthcare at the end of life.



Monday 16 March

Café MED Lupus: the Wolf within

6pm, Suttie Centre, Foresterhill Health Campus, Aberdeen, AB25 5ZD

Free admission, no booking required. www.engagingaberdeen.co.uk

Speakers: **Dr Neil Basu** (Senior Clinical Lecturer, University of Aberdeen) and **Dr Nick Fluck** (Medical Director for NHS Grampian)

Systemic Lupus Erythematosus is one of the most diverse and unpredictable of medical conditions. The challenges that patients, clinicians and researchers encounter will be identified and potential solutions explored. Join us for a free, informal discussion where everyone is welcome.
Organised by the University of Aberdeen.



Monday 16 March

The Domesticated Self: How the Social Development of the Species & the Individual Change Our Brains

6.30pm, King's College Conference Centre, University of Aberdeen,
Old Aberdeen, AB24 3FX

Free admission, but booking required. www.abdn.ac.uk/events/6662

Speaker: **Professor Bruce Hood** (Professor of Developmental Psychology in Society at Bristol University and author)

This University of Aberdeen Anderson Lecture will argue that humans have become self-domesticated, uncovering the illusion of self and how this is formed over our lifetimes. All welcome to attend the drinks reception which follows.



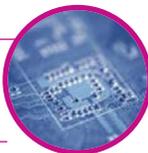
Tuesday 17 March

Public perception of nanosafety - what do you need to know?

6.30pm - 7.30pm, Robert Gordon University,
Riverside East Building, Garthdee Road, Aberdeen, AB10 7QQ

Free admission, no booking required. More information -
Dr James Njuguna, T: 01224 262304 or E: j.njuguna@rgu.ac.uk

Nanotechnology has a wide range of applications in many fields including medicine, agriculture, construction and oil and gas production. But is it safe? Join experts from the School of Engineering to find out more and hear how their research is establishing new European Union safety standards.



Wednesday 18 March

Café Scientifique Fungi: the good, the bad and the essential

7pm, Waterstones Union Bridge, Aberdeen, AB11 6BG

Free admission, no booking required. www.engagingaberdeen.co.uk

Speaker: **Dr Andy Taylor** (The James Hutton Institute)

Love them or hate them, fungi are integral to our lives as nature's recyclers, plant saviours and sometimes killers, pharmacists, bakers and brewers. Join us for a free, informal discussion where everyone is welcome.
Organised by the University of Aberdeen.



From Thursday 19 March

Wellcome Image Awards

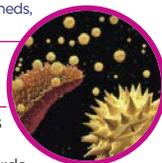
Aberdeen Science Centre, Satrosphere, The Tramsheds,
179 Constitution Street, Aberdeen, AB24 5TU

10am - 5pm daily. T: 01224 640340
www.satrosphere.net

Entry to exhibition included in Satrosphere entry price.

View some of the most impressive images from the world of science, selected as winners of the 2015 Wellcome Image Awards. Which is your favourite? Wellcome Images is the world's leading resource in medical imagery, giving a fascinating insight into medical history, biomedical science and clinical medicine.

wellcome
images



Thursday 19 March

Director's Cut with *Horizon* Series Producer, Zoe Heron

6pm, Elphinstone Hall,
University of Aberdeen, Old Aberdeen, AB24 3FX

Free admission, but booking required. www.abdn.ac.uk/events/6739

For over 50 years, *Horizon* has been the BBC's flagship science series, opening up new vistas for understanding the world around us. In this special edition of the Director's Cut, Zoe Heron, *Horizon*'s Series Producer, will explore highlights and innovative programmes from the series with interviewer Professor Alan Marcus.



Thursday 19 March

The River Dee and its Wildlife

7.30pm, Zoology Lecture Theatre, Zoology Building,
Tillydrone Avenue, Aberdeen, AB24 2TZ

Free admission, no booking required.
www.abdn.ac.uk/biodiversity/network

Speaker: **Joanna Dick** (Dee Catchment Outreach Officer)

Find out more about one of our wonderful local rivers and its fascinating biodiversity as part of the Scottish Wildlife Trust's monthly talk series. Aberdeen Biodiversity Centre and the University of Aberdeen Zoology Museum (both situated in the Zoology Building) will be open from 6.30pm for viewing before the talk.



Thursday 19 March

Let's Get Quizzical

8pm, Cellar 35, 35 Rosemount Viaduct, Aberdeen, AB25 1NQ
Age 18+. This venue is situated down stairs.

Free admission, no booking required.

Do you like science, pubs and quizzes? Revel in all three (plus prizes!) with the University of Aberdeen Science Journalism Society.



Throughout British Science Week

Crafting Kingdoms The Rise of the Northern Picts

King's Museum, Old Town House, High Street, Old Aberdeen, AB24 3EN

**Free admission, no booking required. Open Tuesday - Saturday:
11.30pm - 4.30pm T: 01224 274330.**

Old treasures, new finds and fresh perspectives on the Picts of Northern Scotland. Drawing on recent fieldwork from the University of Aberdeen's Archaeology Department, this exhibition explores the origins of the Pictish kingdoms of Northern Scotland. Objects on show for the first time include a recently unearthed Pictish silver hoard discovered at Gaulcross and new finds from the excavations at Rhynie.

Saturday 21 March

FAMILY DISCOVERY DAY

satrosphere centre
science

Charity no: SC014922

10am - 4pm, Aberdeen Science Centre, Satrosphere, The Tramsheds, 179 Constitution Street, Aberdeen, AB24 5TU
Travel details and map available at www.satrosphere.net or T: 01224 640340

£1 entry, under 3s FREE.

British Science Association Aberdeen Branch invites you to meet a worm, experiment, be a King of the Forest, see amazing microscopic images, make a 3D selfie, build with K'Nex, investigate science super powers, dissect owl pellets, get nautical, chat with scientists and much more! A day of fun for all the family not to be missed!



ACTIVITIES FOR SCHOOLS



Aberdeenshire Science

Aberdeenshire Ranger Service | Nursery - S6

16 - 20 March | Free | Venue: locations throughout Aberdeenshire

Please visit the Ranger Service webpages for more information on the service and to find contact details for your area ranger www.aberdeenshire.gov.uk/rangerservice

Aberdeenshire Council Ranger Service are able to offer sessions for classes from Nursery to Secondary. We will discuss with the teacher the requirements of the class and agree a suitable site and programme of activities to meet those needs.

Aerodynamics

How does the shape of a vehicle affect the speed it will travel?

North East Scotland College | www.nescol.ac.uk | P7, S1 - S4

17 and 18 March | 1pm - 3pm | Free

Venue: North East Scotland College, Aberdeen City Campus (Gallowgate)

Dr Douglas Fraser, Curriculum and Quality Manager - Science, North East Scotland College, T: 01224 612190, E: douglas.fraser@nescol.ac.uk

A laboratory workshop looking at the effect of aerodynamics on vehicle design. Pupils will construct models, and conduct tests in the physics laboratory to identify the designs with the best aerodynamic features. This workshop can also be combined with the College's Planetarium presentation. *Up to 30 pupils for combined planetarium/laboratory sessions or 15 pupils for laboratory only. Activity duration: 1 hour for laboratory only, 2 hours for planetarium/laboratory. All groups must be accompanied by a minimum of two members of school staff.*



Bugs that go bang!

North East Scotland College | www.nescol.ac.uk | P7, S1

18 and 19 March | 1pm - 3pm | Free

Venue: North East Scotland College, Aberdeen City Campus (Gallowgate)

Dr Douglas Fraser, Curriculum and Quality Manager - Science, North East Scotland College, T: 01224 612190, E: douglas.fraser@nescol.ac.uk

Pupils will use established techniques to illustrate how bacteria are all around us and how they respond to their environment. They will also investigate how to kill bacterial cells by causing them to explode. This workshop can also be combined with the College's Planetarium presentation. *40 for combined planetarium/laboratory sessions, 20 for laboratory only. 1 hour for laboratory only, 2 hours for planetarium/laboratory. All groups must be accompanied by a minimum of two members of school staff.*



Circles of stone, circles of fire Using Aberdeenshire's historic environment for outdoor learning

Forestry Commission Scotland | <http://scotland.forestry.gov.uk>

Teacher CPD event | Saturday 21 March | 10am to 3pm | Free

Venue: Bannachie Centre, Inverurie, Aberdeenshire, AB51 5HX

Workshop leader Brian Wilkinson
M: 07469 709661, E: heritagejourneyscotland@gmail.com

Aberdeenshire is home to a vast range of fascinating and easily accessible historic and prehistoric sites. Forestry Commission Scotland is launching a new pack for teachers to investigate Recumbent Stone Circles, mysterious prehistoric sites built 4000 years ago during the Bronze Age and unique to Northeast Scotland. This CPD workshop will introduce teachers to the resource and visit several Recumbent Stone Circles to discover first-hand the amazing learning potential of these ancient places. *We will be visiting up to three sites within easy driving distance of the Bannachie Centre. Participants will need their own transport. 12 spaces are available.*



Dig To Discover

Duthie Park Ranger Service | www.aberdeency.gov.uk | P4 - P7

16, 17, 18 March | 10.30am - 12 noon

19 March | 10.30am to 12 noon and 1pm to 2.30pm | Free

Venue: Duthie Park (meet at entrance to David Welch Winter Gardens)

DuthieParkRangerService@aberdeency.gov.uk

Working as teams of environmental scientists, pupils will work outside sampling the soil of Duthie Park to search for and identify worms. Their findings will be submitted to OPAL (Open Air Laboratories) and added to a nationwide database! *Up to 30 pupils.*



The Earth, the stars and alien life

North East Scotland College | www.nescol.ac.uk | P7 - S6

17, 18, 19, 20 March | 10am - 12 noon or 1pm - 3pm | Free

Venue: North East Scotland College, Aberdeen City Campus (Gallowgate)

Dr Douglas Fraser, Curriculum and Quality Manager - Science, North East Scotland College, T: 01224 612190, E: douglas.fraser@nescol.ac.uk

An enthralling presentation in the North East Scotland College Planetarium, the only permanent planetarium in NE Scotland, will give fascinating insights into Earth's place among the stars and the possibility of the existence of alien life. The presentation can also be combined with stimulating laboratory activities. (The presentation is only suitable for persons comfortable with very low light conditions.) *Up to 40 pupils for combined planetarium/lab session or 25 if planetarium only. 1 hour for planetarium only, 2 hours for planetarium/laboratory. All groups must be accompanied by a minimum of two members of school staff.*



Explosions and Implosions

North East Scotland College | www.nescol.ac.uk | P7 - S2

18 and 19 March | 10am - 12 noon or 1pm - 3pm | Free

Venue: North East Scotland College, Aberdeen City Campus (Gallowgate)

Dr Douglas Fraser, Curriculum and Quality Manager - Science, North East Scotland College, T: 01224 612190, E: douglas.fraser@nescol.ac.uk

A fun laboratory workshop where pupils will undertake a series of chemistry and physics related activities with explosive outcomes! This workshop can also be combined with the College's Planetarium presentation. *Up to 40 pupils for combined planetarium/laboratory sessions or 20 pupils for laboratory only. 1 hour for laboratory only, 2 hours for planetarium/laboratory. All groups must be accompanied by a minimum of two members of school staff.*

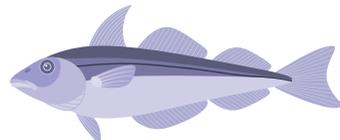
Fish as Food

Macduff Marine Aquarium | www.macduff-aquarium.org.uk | P4 - P7

16, 17, 18 March | 10am - 1.45pm

Venue: Macduff Marine Aquarium, Macduff AB44 1SL. T: 01261 833369

What does a haddock look like? Where does scampi live? How do you catch a lobster? Pupils will enjoy a tour of the aquarium discovering more about familiar seafood animals before heading to Macduff Harbour to learn more about the journey from sea to plate. *Up to 30 pupils. £2.45 per child. £5 per adult (1 free adult for every 10 children).*



The Aberdeen Branch of the British Science Association, with generous support from BP, is delighted to bring you an array of hands-on activities for schools. Please contact the individual organisations in each listing to book. Further resource ideas, experiments and competitions are available online at www.britishscienceweek.org/plan

Gunge Chemistry

North East Scotland College | www.nescol.ac.uk | P7 - S3

18 and 19 March | 10am - 12 noon or 1pm - 3pm | Free

Venue: North East Scotland College, Aberdeen City Campus (Gallowgate)

Dr Douglas Fraser, Curriculum and Quality Manager - Science, North East Scotland College, T: 01224 612190, E: douglas.fraser@nescol.ac.uk

Pupils will produce glue from milk and test the effectiveness of the glue. They will then make fluorescent "slime" to take away with them. This workshop can also be combined with the College's Planetarium presentation. *Up to 40 pupils for combined planetarium/lab session or 20 if lab only. 1 hour for laboratory only, 2 hours for planetarium/laboratory. All groups must be accompanied by a minimum of two members of school staff.*

King of the Forest

Aberdeen City Council Ranger Service | www.aberdeencity.gov.uk | P4 - P7

16 - 20 March | Free

Venue: outreach to Aberdeen City schools

Simon Whitworth, Aberdeen City Rangers, M: 07785 951 052, E: swhitworth@aberdeencity.gov.uk

Competing teams of pupils must grow the tallest, most majestic or fruitful tree using the resources every tree needs to grow, flower, produce seeds and defend itself against harmful creatures. In the end there can only be one King of the Forest!

Up to 35 children. Activity Duration: 60 minutes.



Make a DNA pendant

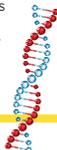
North East Scotland College | www.nescol.ac.uk | S3 - S6

17, 18, 19 March | 10am - 12 noon or 1pm - 3pm | Free

Venue: North East Scotland College, Aberdeen City Campus (Gallowgate)

Dr Douglas Fraser, Curriculum and Quality Manager - Science, North East Scotland College, T: 01224 612190, E: douglas.fraser@nescol.ac.uk

Pupils will use established techniques to extract a sample of their own DNA, which they will place in a pendant to wear and take away. This workshop can also be combined with the College's Planetarium presentation. *Up to 40 pupils for combined planetarium/laboratory sessions or 20 pupils for laboratory only. 1 hour for laboratory only, 2 hours for planetarium/laboratory. All groups must be accompanied by a minimum of two members of school staff.*



School of Engineering research

Robert Gordon University | www.rgu.ac.uk/research | P4 - S6

18 March | 10am - 3pm: tours on the hour | Free

Venue: Robert Gordon University, Riverside East Building, Garthdee Road, Aberdeen, AB10 7QQ

For ROV tour: Dr Graeme Dunbar, T: 01224 262415, E: g.r.dunbar@rgu.ac.uk. For materials lab tour: Dr James Njuguna, T: 01224 262304 or E: j.njuguna@rgu.ac.uk

Are you studying *materials* this year? Visit RGU's newest and biggest building and the School of Engineering. There are two tours on offer. 1 - find out about underwater robots and how remotely operated vehicles benefit the oil and gas industry. 2 - investigate nanotechnology and composite materials and find out how research here in Aberdeen is helping the world develop technology - from computer monitors to Formula One cars! *Activity duration: 1 hour. Attend one or both tours.*

Science Is For Everyone

Science Grrls Aberdeen | <http://sciencegrrl.co.uk/> | S1 - S6

19 March | 7pm to 9pm | Free

Venue: Marine Laboratory, Torry, Aberdeen, AB11 9DB

Booking: www.tinyurl.com/scienceforeveryone You can find out more about the Aberdeen Science Grrls by following them on twitter @sciencegrrls.

Thinking of studying Science but don't know exactly which? Not sure if a career in Engineering is for you? Love Maths, but not sure what to do with it? Aberdeen Science Grrl is hosting an evening of talks from women working in Science, Technology, Engineering and Maths careers. Come along and listen to their experiences and get an insight into some of the varied and interesting careers that STEM subjects can offer. There will be 6 speakers, covering a variety of subjects and an opportunity for questions and answers afterwards. *All welcome but this event is aimed primarily at girls aged 12-18.*

Social Media Snack Bar

dot.rural Digital Economy Hub | www.dotrural.ac.uk | P3 - S6

16 - 20 March | Free

Venue: outreach to city and shire schools

Dr Jennifer Holden, Training and Outreach Officer, RCUK Digital Economy Research, University of Aberdeen T: 01224 274238, E: j.a.holden@abd.n.ac.uk

Sharing information, socialising and spying are all things associated with social media but are they good or bad or in between? Up to 33 pupils. *Activity duration: 50 minutes - 75 minutes, variety of activities tailored to pupil age and interests.*

Whoooo Am I? All About Owls

RSPB | www.rspb.org.uk | P4 - P7

18 and 19 March | Cost: £75 per school visit

Venue: outreach to city and shire schools

Aileen Meek, RSPB, T: 01224 624824, E: aileen.meek@rspb.org.uk

Can owls see in the dark? Discover how owls live and what smart solutions they use to survive during day and night. Join us to investigate features of our four native species. Dissect pellets, fascinate over feathers and be amazed by all things owl! *Up to 30 pupils. Activity duration: 90 minutes.*



Fraserburgh Science Fair

North East Scotland College | www.nescol.ac.uk | P7, S1 - S2

16 March | 10.15am - 12.15pm or 1.15pm - 3.15pm | Free

Venue: Fraserburgh Campus, Henderson Road, Fraserburgh, AB43 9GA

Dr Leann Tait, Lecturer in Chemistry, North East Scotland College, T: 01224 612191, E: letait@nescol.ac.uk

Experience a day in the Broch and a whole host of science activities. Explore the world of plants, investigate aerodynamics and vehicle design, experience explosive and slimy chemistry, discover how bacteria respond to their environment, identify creepy crawlies using microscopes and make the perfect pool! *Up to 60 pupils. All groups must be accompanied by a minimum of two members of school staff.*

