

TECHFEST

digital

ALL FROM THE COMFORT
OF YOUR OWN HOME

FESTIVAL

PROGRAMME

ABERDEEN & NORTH-EAST SCOTLAND'S
FESTIVAL OF **SCIENCE, TECHNOLOGY,
ENGINEERING & MATHEMATICS**

THUR 5 NOV > WED 25 NOV



JOINT PRINCIPAL SPONSORS



techfest.org.uk

Scottish Charity No. SC010349

WELCOME TO TECHFEST 2020



Shell and bp are proud, as Joint Principal Sponsors, to welcome you to TechFest 2020 as we celebrate the 27th annual festival of Science, Technology, Engineering and Mathematics (STEM).

We are delighted to support the public programme of fascinating events, which allow audiences to explore science, technology, engineering and maths. The varied programme encourages visitors to get involved in STEM activities throughout the North-east of Scotland through the exciting variety of shows, presentations and workshops on offer.

By supporting TechFest 2020 we aim to provide both enjoyment for the public and inspiration for the next generation of scientists and engineers. We look forward to another successful festival.

Emeka Emembolu
Senior Vice President
North Sea, bp

Steve Phimister
Upstream Director U.K. & Ireland
Shell U.K. Limited

ON THE COVER

The front cover illustrations of this year's TechFest Public Programme has been designed and developed by Heidi Gardner.

Heidi works as a Research Fellow at the Health Services Research Unit at the University of Aberdeen, and she also owns a small creative business called Science On A Postcard.

Through Science On A Postcard she designs and produces colourful products with a science twist, with the aim of sparking conversations, smashing stereotypes and demonstrating diversity. Heidi has been involved with TechFest in some way since she moved to Aberdeen in 2010 - both as a member of the public attending events, and a researcher working to share her own work with the public.

scienceonapostcard.com

JOIN OUR MAILING LIST

To receive the Festival programme and other TechFest information, please click [here](#).

AGE RANGE ...

Our events cater for all age ranges, including family and adult only. Each event will clearly state the recommended suitable age range.

HOW TO BOOK TICKETS

More details of all the events and how to book are on the TechFest website.
www.techfest.org.uk

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Scottish Charity No. SC010349

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Kirsty Duncan, Gabi Blazyte
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lisathompson.design

All details of events in this programme are correct at time of going to print. TechFest reserves the right to alter or cancel programme information without prior notice. Any changes will be posted on the TechFest website. The views of presenters and their own and are not necessarily endorsed by TechFest, their sponsors or supporters.

SCIENCE
ON A
POSTCARD

AT A GLANCE



JOINT PRINCIPAL SPONSORS



THUR 5 NOV

• MACDUFF MARINE AQUARIUM LIVE DIVE SHOW. **TIME:** 14:00

FRI 6 NOV

• DEEP SEA RESEARCH TALKS. **TIME:** 19:00

SAT 7 NOV

• PERSPECTRICKS SCIENCE MAGIC SHOW. **TIME:** 10:00

SUN 8 NOV

• SOUND@ TECHFEST DAY. **TIME:** 10:30 - 17:30
• THE CRITTER KEEPER (LIVE SHOW). **TIME:** 11:00

MON 9 NOV

• STEM AMBASSADOR SESSION (LIVE TALK). **TIME:** 17:30
• SEEING THROUGH FOSSILS. **TIME:** 19:00

TUE 10 NOV

• MEDICAL ANTHROPOLOGY (LIVE TALK). **TIME:** 19:00

WED 11 NOV

• WHY LIMES DON'T CURE SCURVY (LIVE TALK). **TIME:** 19:00

THUR 12 NOV

• SLEEP BETTER, BE SMARTER & LIVE LONGER (LIVE TALK). **TIME:** 19:00

SAT 14 NOV

• TECHFEST ACTIVITY WEEKEND GOES DIGITAL.

SUN 15 NOV

• TECHFEST ACTIVITY WEEKEND GOES DIGITAL.
• THE CRITTER KEEPER LIVE SHOW. **TIME:** 11:00

MON 16 NOV

• FIRST AID LIVE LESSON. **TIME:** 19:00

TUE 17 NOV

• EMBRYOS! HOW TO MAKE A HUMAN (PRE-RECORDED TALK & LIVE Q&A). **TIME:** 19:00

WED 18 NOV

• THE WORLD IN 2040 - TAKE A TIME MACHINE TO THE FUTURE. **TIME:** 19:00
• THE 7 MILLION DOLLAR MATHS EQUATIONS. **TIME:** 19:00

THUR 19 NOV

• WAMBERTO VASCONCELOS - ALGORITHMS (LIVE TALK). **TIME:** 19:00

FRI 20 NOV

• UNIVERSILLY CHALLENGED. **TIME:** 19:00

SUN 22 NOV

• POLAR EXPLORER STEM TALK WITH DOUG ALLAN. **TIME:** 19:00

MON 23 NOV

• TURN UP TECH: HOW LOCAL ORGANISATIONS ARE EVOLVING. **TIME:** 19:00

TUE 24 NOV

• EQUESTRIANISM EXCELLENCE (LIVE TALK). **TIME:** 19:00

WED 25 NOV

• CREATING A STEM CAREER THAT WORKS FOR YOU. **TIME:** 19:00



$E=mc^2$

PUBLIC PROGRAMME

The energy industry depends on advances in science, technology, engineering and maths. Investing in science is key for us to be able to provide the world with the energy it needs in a sustainable way.

TechFest offers something for everyone in STEM - it promotes young children's natural curiosity as well as offers opportunities for secondary pupils to gain an insight into subjects for future studies or careers.

We are proud to play our part in inspiring the next generation of scientists and engineers with TechFest to improve the world in which we live. We call them our 'Heroes of Tomorrow'.

Arne Gurtner / Senior Vice President
UK & Ireland Offshore Equinor

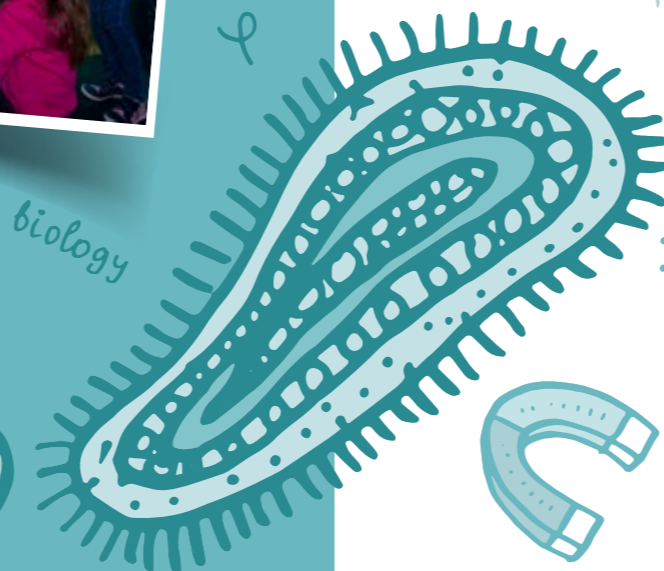
DIVE BACK IN WITH MACDUFF MARINE AQUARIUM

[LIVE DIVE SHOW]

Join Macduff Marine Aquarium to take part in a live dive show event. The divers will be in the main kelp reef tank feeding the fish, sharks and rays and there will be a marine master on hand to tell you all about the habitat, the animals you will see and answer any questions you might have. It's going to be Fin-tastic!

PRESENTED BY: MACDUFF MARINE AQUARIUM
AGE RANGE: ALL AGES
DATE: THUR 5 NOV
TIME: 14:00 - 14:30
Facebook icon Instagram icon macduffmarineaquarium
www.macduff-aquarium.org.uk

[Click here to read more!](#)



DEEP SEA RESEARCH - A TRIO OF LINKED TALKS



© Newcastle University/
World Wildlife Fund

super cool

DEEP-SEA BEASTIES

The bottom of the sea might sound like a dark, cold and lonely place but there are animals that love to live there. Amphipods are incredible creatures that are found at every depth of the ocean - they are the deepest living animals in the world. We investigate what makes these animals so special and how they can survive in conditions of the deep sea.

PRESENTED BY: HEATHER RITCHIE, JAMSTEC
AGE RANGE: ALL AGES
DATE: FRI 6 NOV **TIME:** 19:00
Twitter icon @hevritchie

[Click here to read more!](#)

EURYTHENES PLASTICUS: THE NEWEST FACE OF MARINE PLASTIC POLLUTION CRISIS

6000 metres beneath the surface of the Mariana Trench, Pacific Ocean is very remote. However, this remoteness does not shield organisms from anthropogenic pollution. A new scavenging amphipod, *Eurythenes plasticus*, was described in March 2020. We named it 'plasticus' as because one individual was found to have a piece of microplastic in its hindgut. We hope that *Eurythenes plasticus* helps people connect their actions on land with impacts to life the ultra-deep ocean

PRESENTED BY: JOHANNA WESTON, NEWCASTLE UNIVERSITY
AGE RANGE: ALL AGES
DATE: FRI 6 NOV **TIME:** 19:00
www.plasticus.school/en

[Click here to read more!](#)

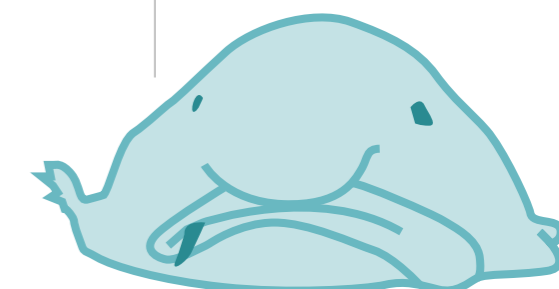
NO MONSTERS DOWN HERE - DEEP-SEA FISH ARE COOL NOT SCARY

The poor blobfish gets bullied online. Does it deserve to be voted the world's ugliest animal? Are stories about horrible/alien/monsters in the deep-sea fair, or are they just scary stories we like to tell each other?

Dr Thom, advocate of deep-sea fish, is going to show you how interesting and even cute these animals are.

PRESENTED BY: DR THOMAS LINLEY, ARMATUS OCEANIC
AGE RANGE: ALL AGES
DATE: FRI 6 NOV **TIME:** 19:00
Twitter icon @alllittlefishes

[Click here to read more!](#)



PERSPECTRICKS

Science Magician, Matt Pritchard, will be sharing a host of amazing optical illusions, impossibilities, and ambiguous objects that he has made using household objects. Join him for this session where he will demonstrate the tricks and then explain the science behind them. Then you can go away equipped to make your own magic.

PRESENTED BY: DR MATT PRITCHARD
AGE RANGE: ALL AGES
DATE: SAT 7 NOV **TIME:** 10:00
Twitter icon Instagram icon @sciencemagician
YouTube icon sciencemagicshows

[Click here to read more!](#)



GARIOCH HERITAGE CENTRE

This year TechFest have teamed up with Garioch Heritage Centre in Inverurie to bring you a series of short presentations on some of the fascinating artefacts they have in their collection.

AGE RANGE: ALL AGES **DATE:** SAT 7 NOV **TIME:** 14:00
 gariochheritage  gariochherticen

WELCOME TO GARIOCH HERITAGE CENTRE -
A JOURNEY THROUGH THE HERITAGE
& HISTORY OF THE GARIOCH

This session will provide an introduction to The Garioch Heritage Centre, the history of the building, and its collection of artefacts.

PRESENTED BY:
MARC FALCONER

[Click here to read more!](#)

FILM? WHAT'S THAT? EXPLORING CAMERAS
& PROJECTION THROUGH THE YEARS

This session will take a look at film projectors and film cameras which provided the entertainment of the past. How long did it take to get an instant photograph in the 60s?

PRESENTED BY:
GARIOCH HERITAGE CENTRE

[Click here to read more!](#)

CYLINDERS & DISKS, EXPLORING
AUDIO THROUGH THE AGES

This session explore audio systems from wax cylinders to phonographs and beyond. What did entertainment sound like in time gone by?

PRESENTED BY:
GARIOCH HERITAGE CENTRE

[Click here to read more!](#)

WHAT ARE LOCO WORKS? TRAINS
& ENGINEERING IN THE NORTH
EAST OF SCOTLAND





This session will look back at the engineering carried out at Inverurie Loco Works, from the layout of the site to memories of those who worked there. Come with us as we journey back to

the golden age of steam.

PRESENTED BY:
GARIOCH HERITAGE CENTRE

[Click here to read more!](#)

SOUND @ TECHFEST

TechFest is delighted to be once again collaborating with **sound**, Scotland's festival of new music.
  sound scotland   soundfestival
www.sound-scotland.co.uk

SOUND@HOME

Join us for two linked online composition workshops for adults that will work though the sound@home materials developed by composer Duncan Chapman for sound during the 2020 pandemic lockdown. Learn how to listen to and develop the sounds from your own back garden, or turn the view from your window into music, and more, under the expert guidance of Duncan.

You will need: Device to log onto

zoom session, recording device (like a mobile phone) pencil, pen and paper and instrument if you play one - but this is not essential.

PRESENTED BY: DUNCAN CHAPMAN, SOUND FESTIVAL
AGE RANGE: ALL AGES
DATE: SUN 8 NOV
TIME: 10:30 - 11:30, 16:30 - 17:30
BOOKING DEADLINE: WED 5 NOV
E: participate@sound-scotland.co.uk

[Click here to read more!](#)

LOCKDOWN COMPOSING

Pete Stollery will lead a discussion about two recent Lockdown Composing projects devised by sound festival where composers created music to be performed live by musicians over the Zoom video conferencing platform. The discussion will cover how the pieces were created, how the performers felt about performing live over Zoom, how it felt to be an audience member and

how live performance even over Zoom can help with the mental health and well-being of composer, performer and listener.

PRESENTED BY: PETE STOLLERY, SOUND FESTIVAL
AGE RANGE: ALL AGES
DATE: SUN 8 NOV **TIME:** 13:00 - 14:00

[Click here to read more!](#)

COVID-19 SOUND MAP

Pete Stollery will present a guided tour of his COVID-19 Sound Map which has been capturing the changes in the sounds around us during lockdown. Pete will also show how to create your own sound map using Google Earth Web and some basic html coding. Participants will need to have

access to a laptop (PC or Mac) with Google Chrome browser installed.

PRESENTED BY: PETE STOLLERY, SOUND FESTIVAL
AGE RANGE: ALL AGES
DATE: SUN 8 NOV **TIME:** 15:00 - 16:00

[Click here to read more!](#)

THE CRITTER
KEEPER, EXOTIC
ANIMAL WORKSHOP





The Critter Keeper joins us for a virtual session, with his amazing Critter Crew, learn some fun & exciting facts about some amazing animals from around the world. Using live animal demonstrations, they won't fail to amaze you.

PRESENTED BY: THE CRITTER KEEPER
AGE RANGE: ALL AGES
DATE: SUN 8 NOV **TIME:** 11:00
 thecritterkeeperaberdeen

[Click here to read more!](#)

STEM AMBASSADOR INFORMATION SESSION
WITH ABERDEEN SCIENCE CENTRE

STEM Ambassadors are volunteers who want to inspire young people and show them the opportunities available in STEM. The North Scotland Hub, co-ordinated by Aberdeen Science Centre, will give you information about the programme and how you can get involved. This session is ideal for potential new volunteers, teachers (primary and secondary) and community group leaders.

PRESENTED BY: DEBBIE MATHERS, ABERDEEN SCIENCE CENTRE
AGE RANGE: FROM 17+ AGE
DATE: MON 9 NOV **TIME:** 17:30 **CAPACITY:** 60
 @northscotstem  @aberdeensci
 @STEM Ambassadors in Scotland
 Aberdeen Science Centre


[Click here to read more!](#)

MEDICAL ANTHROPOLOGY: HUMAN
EVOLUTION ACCORDING TO BRAIN
SIZE FROM PRIMATES TO THE
MODERN DAY HUMAN

Medical Anthropology is a subfield of anthropology and part of the social sciences that draws upon social, cultural, biological, and linguistic anthropology to better understand those factors which can influence health and well-being. Anthropologists conventionally conduct extensive field research to contextualise human behaviour and specific beliefs and values.

This talk is aimed at promoting understanding of the social sciences and anthropology as a whole and will hopefully

promote understanding of how anthropology is even linked to the modern day way of living and how it plays an important role in our everyday living and showing how important periods of history have helped us to adapt to a modern way of living.

PRESENTED BY: JENNY HAIGH
AGE RANGE: ADULTS
DATE: TUE 10 NOV **TIME:** 19:00
 @stemtutor2

[Click here to read more!](#)

WHY LIMES DON'T CURE SCURVY,
& EVERYTHING ELSE DOES

Of all the slang names for the British, none is more iconic than 'Limey'. While the term provokes majestic images of the Golden Age of Sail, scurvy cost countless sailors and seamen their lives. It was once not unheard of for nine out of every ten members of a ship's crew to have succumbed to scurvy by the time it returned to port. It is often said that results of James Lind's work on the HMS Salisbury in 1747 led to a cure and saved innumerable lives. Yet, 100 years later, in Cherry-Garrard's account of Robert Falcon Scott's 1911 expedition to the South Pole, he writes: "There was little scurvy in Nelson's days; but the reason is not clear, since, according to modern research, lime-juice only helps to prevent it". So what happened, how

is it that scientific research showed limes didn't cure scurvy when once they were a miracle cure

PRESENTED BY: ANDREW HOLDING, UNIVERSITY OF YORK
AGE RANGE: FROM 16+ AGE
DATE: WED 11 NOV **TIME:** 19:00
  @andrewholding

[Click here to read more!](#)



ACTIVITY WEEKEND GOES DIGITAL

TechFest offers people of all ages the opportunity to gain hands-on experience with science and technology. It fires the imagination by allowing young people the chance to try things out themselves and to ask questions directly of experts, opening up the world of science and technology to all and inspire a future in an ever-evolving space. It is a hugely successful event for Aberdeen and one which RockRose Energy is proud to support.

Peter Mann / Managing Director / RockRose Energy

The Activity Weekend is many people's favourite part of TechFest so this year we have made it digital! We have two days filled with content from some amazing STEM sources as well as competitions with prizes you won't want to miss. Activities include Colour Detectives with Aberdeen Science Centre, Amazing Soap Bubbles with Philip Noble, Wobble NanoJelly Experiment with Really Small Science and much more. We really do have something for everyone coming your way and we can't wait to virtually spend the weekend with you!

DATE: 14 & 15 NOV

10 COOL FACTS ABOUT STARS

Did you know that we are all made of star dust? Imagine that! Watch this short video which shares some surprising, but cool facts about stars. Why they look different colours, how many stars there are and even how the light from the stars actually travels through time. Who would have thought that the tiny specs of light we see in the sky at night could be so amazing!

PRESENTED BY: EMERSON
AGE RANGE: FAMILY

[Click here to read more!](#)

MY WORLD OF WORK LIVE:

SPINNING WATER

In this fun activity, you will learn about Newton's Laws of Motion and learn about job roles that use this type of physics. You can find accompanying worksheets at www.myworldofwork.co.uk/live

**PRESENTED BY: SKILLS
DEVELOPMENT SCOTLAND**

AGE RANGE: FAMILY
 **@mywowscotland**

[Click here to read more!](#)

INVISIBILITY

In this activity you will learn about light, how it travels through different mediums and the science of light refraction. You will also learn how this science is being used in the world of work. You can find accompanying worksheets at www.myworldofwork.co.uk/live

**PRESENTED BY: SKILLS
DEVELOPMENT SCOTLAND**

AGE RANGE: FAMILY
 @mywowscotland

[Click here to read more!](#)

CORNFLOUR GOO

In this hands-on, messy experiment you will learn about non-Newtonian fluids, understand how and where they are used in everyday life and learn more about the job roles connected to them. You can find accompanying worksheets at www.myworldofwork.co.uk/live

PRESENTED BY: SKILLS
DEVELOPMENT SCOTLAND

AGE RANGE: FAMILY
 [@mywowscotland](#)

[Click here to read more!](#)

Skills
Development
Scotland

COMPETITIONS

WIN

stem



AGES 4-12

Design your own dinosaur! When designing your dino we want you to think about this:

- What is it called? We all know about the T-rex and the triceratops but what is your dinosaur called?
- What does it eat?
- Does it have any special features?

You can design your dinosaur any way you want, by pen and paper, lego, plasticine or anything else you can think of! The prize for our favourite design will be a full set of Ben Garrod's books!

Supported by **BLACKWELL'S**
FOR LEARNING · FOR LIFE

AGES 7-12

Stop-Motion Video Challenge- Can you create a story using stop-motion? Follow the link on our website for instructions from RZSS!

PRIZE: Your class will win a virtual tour of Edinburgh Zoo plus Q&A with the keepers!

AGES 12-18

TechFest needs a new mascot! We want you to design one for us-our favourite design will be used for our digital projects and featured on our website. This is great exposure for any budding graphic designers and will be an impressive addition to your UCAS or job applications!

To enter any of our 2020 Competitions head to our website for more details!
The deadline for all competition entries is November 25th 2020.

www.techfest.org.uk

INTRODUCING ONE OF OUR SPONSORS

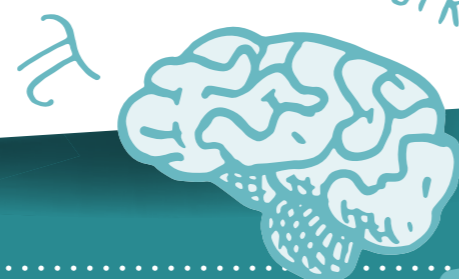
The Data Lab is Scotland's innovation centre for data and AI. We help Scotland maximise value from data and lead the world to a data-powered future. Through hubs in Edinburgh, Glasgow, Aberdeen and Inverness, we foster innovation through collaboration, build skills and grow talent, and champion Scotland's data science community.

www.thedatalab.com



$$E=mc^2$$

$$\pi R^2$$



SLEEP BETTER, BE SMARTER & LIVE LONGER

Sleep is an active complex physiological state with highly organized pattern of brain activities. During sleep our bodies are engaged in important housekeeping functions to repair the damage and to reestablish optimal waking performance. Healthy sleep has a positive impact on physical and psychological wellbeing. By taking care of your sleep you are helping yourself to achieve your optimum health and to prevent many chronic diseases. In this workshop you will learn how to improve your sleep quality.

PRESENTED BY: DR OLGA RUNCIE, SOMNANCE LTD

AGE RANGE: ALL AGES

DATE: THUR 12 NOV **TIME:** 19:00

[Click here to read more!](#)



THE CRITTER KEEPER, EXOTIC ANIMAL WORKSHOP

The Critter Keeper joins us for a virtual session, with his amazing Critter Crew, learn some fun & exciting facts about some amazing animals from around the world. Using live animal demonstrations, they won't fail to amaze you.

PRESENTED BY: THE CRITTER KEEPER

AGE RANGE: ALL AGES

DATE: SUN 15 NOV **TIME:** 11:00

[f thecritterkeeperaberdeen](#)

[Click here to read more!](#)



FIRST AID LIVE LESSON WITH THE BRITISH RED CROSS

Are you interested in learning essential, life-saving first aid skills to help in an emergency? If so, our digital classroom might be for you! This is an interactive workshop, run by an experienced British Red Cross educator, where you will tackle four first aid skills and have the opportunity to ask questions. The aim is to build confidence so you can help someone in a first aid emergency, using everyday objects that you have around you.

PRESENTED BY: BRITISH RED CROSS

AGE RANGE: ALL AGES

DATE: MON 16 NOV **TIME:** 19:00

[Click here to read more!](#)



EMBRYOS! HOW TO MAKE A HUMAN

A lot happens from the time an egg is fertilised to when a baby is born. Join Amanda, a PhD student and STEM ambassador, to discover just what an embryo is, how they grow, and why chickens and fish can be used to help us learn more about human development!

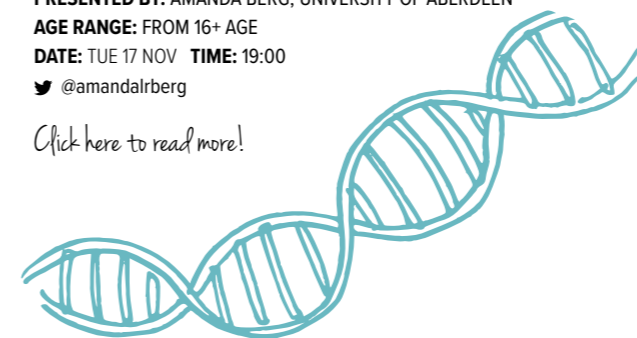
PRESENTED BY: AMANDA BERG, UNIVERSITY OF ABERDEEN

AGE RANGE: FROM 16+ AGE

DATE: TUE 17 NOV **TIME:** 19:00

[@amandalrberg](#)

[Click here to read more!](#)



THE 7 MILLION-DOLLAR MATHS EQUATIONS

The seven greatest unsolved problems in mathematics, each worth a cool \$1 million... In this session I'll introduce each of the puzzles in turn and try to give you a feel for the maths that you'll need to know if you're planning to take one of them on. Featuring an interactive voting system where the audience decides which topic to learn about next!

PRESENTED BY: TOM ROCKS MATHS

AGE RANGE: FROM 14+ AGE

DATE: WED 18 NOV **TIME:** 19:00

[@tomrocksmaths](#)

[Click here to read more!](#)

ALGORITHMS: WHAT YOU NEED TO KNOW ABOUT THEM

Algorithms are becoming ever present in our day-to-day life, whether recommending products or driving autonomous vehicles. What, exactly, is an algorithm? This presentation, which will be followed by questions from the audience, will provide a historic and technical perspective on algorithms, also addressing social and ethical issues.

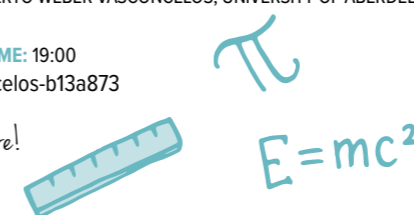
PRESENTED BY: WAMBERTO WEBER VASCONCELOS, UNIVERSITY OF ABERDEEN

AGE RANGE: ALL AGES

DATE: THUR 19 NOV **TIME:** 19:00

[wamberto-vasconcelos-b13a873](#)

[Click here to read more!](#)



THE WORLD IN 2040 – TAKE A TIME MACHINE TO THE FUTURE

What will the world look like in 2040? How are technologies and trends shaping our future? Join Robert Gordon University's Entrepreneurship and Innovation Group as we step in a time machine and imagine a day in the future. This thought-provoking prediction of what our world could look like seeks to inspire innovations of today. Open your mind to possibilities and potentially spark an entrepreneurial idea.

PRESENTED BY: EDWARD POLLOCK, ROBERT GORDON UNIVERSITY INNOVATION TEAM

AGE RANGE: FROM 16+ AGE

DATE: WED 18 NOV **TIME:** 19:00

[@rguinnovation](#)

[Click here to read more!](#)



UNIVERSILLY CHALLENGED

Everyone's favourite anachroner, pun-based pub quiz has had a pandemic-proof upgrade. You can now play along online with wacky rounds of brain teasing trivia, comedy questions, a silly song or two and you can still pick up points for pedantry. Join in to find out if you will be the Universilly Challenged champion.

PRESENTED BY: SIMON WATT & JONNY BERLINER

AGE RANGE: FROM 16+ AGE

DATE: FRI 20 NOV **TIME:** 19:00

[Click here to read more!](#)



KEYNOTE SPEAKER

POLAR EXPLORER STEM TALK

Not quite your usual STEM talk! This one has...

SCARY ANIMALS
TITANIC ICEBERGS
EXCITING ADVENTURES
MAGICAL ENCOUNTERS

How do you get close to leopard seals underwater without being eaten? Do your eyeballs freeze at minus 50? Why is it difficult to film polar bears munching penguins? What's a snoticle? And biggest question of all - what's happening at the North Pole that's affecting all the animals that live there?

Join Doug for all the answers!

PRESENTED BY: DOUG ALLAN, TV WILDLIFE CAMERAMAN
AGE RANGE: ALL AGES
DATE: SUN 22 NOV **TIME:** 19:00
f Doug Allan Camera **🐦** #dougallancamera

[Click here to read more!](#)



Doug Allan



JOINT PRINCIPAL SPONSORS



TURN UP TECH: HOW LOCAL ORGANISATIONS ARE EVOLVING

Technology has played a big role in helping many charities evolve to cope with the current circumstances and continue to be able to provide the important services they offer. Join us to listen to a few Aberdeen charities, including Charlie House and Befriend A Child, share how this evolution has worked for them and what they are working on right now.

HANDS ON CARE IN THE AGE OF ISOLATION, HOW WE EMBRACED TECH TO FILL A SEEMINGLY IMPOSSIBLE GAP

As a charity that supports children with complex disabilities and life limiting conditions by bringing people together for hands on learning through inclusive activities and shared experiences, the restrictions on movement introduced in response to COVID and additional shielding restrictions for our service users could have forced us to abandon our mission. In this short session we will explain how we took our traditionally hands on service model and moved it online to great effect.



PRESENTED BY: CHARLIE HOUSE **AGE RANGE:** ALL AGES
DATE: MON 23 NOV **TIME:** 19:00 **f** **🐦** charliehousehq

[Click here to read more!](#)

EQUESTRIANISM EXCELLENCE: UNDERSTANDING EQUITATION SCIENCE - THE CARE & TRAINING OF THE COMPETITION HORSE & LINKS TO STEM LEARNING

This talk looks at equitation science, which is defined as the application of scientific methods, to assess objectively the care and training of the competition horse, and how this promotes an evidence based understanding of both horse and rider interactions when it comes to identifying the correct level of care and training techniques that are required.

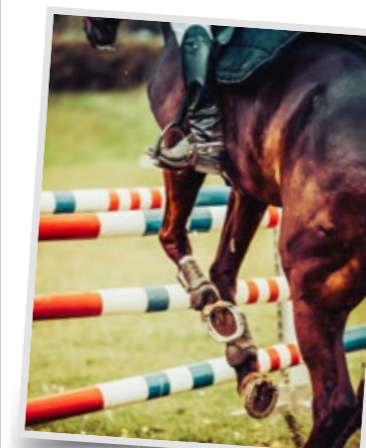
Therefore creating successful outcomes during high level competition, and how this is interlinked to the core values of the British Horse Society (BHS), which is taught through the high quality training programme of "The BHS Career Pathways - BHS Stage Exams" to many students across the UK, allowing successful progression and qualification through this very high quality and successful training programme.

These courses take place at BHS Approved Riding & Exam Centres all over the UK and what most people don't realise is that they are experiencing stem education throughout every part of the programme as each section

has various links to Stem which will be explained as we progress through this talk today

PRESENTED BY: JENNY HAIGH
AGE RANGE: ALL AGES
DATE: TUE 24 NOV **TIME:** 19:00
🐦 @stemtutor2

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CREATING A STEM CAREER THAT WORKS FOR YOU: ADVENTURES IN & OUT OF ACADEMIA

No matter what you've heard before, there is no 'right' way to navigate a career in STEM. In this talk, Heidi will take you through her career to date - from a Pharmacology undergraduate degree, to a PhD in Health Sciences, and now improving the way that clinical trials are designed. That's not it though, she also runs her own creative business too.

PRESENTED BY: HEIDI GARDNER, SCIENCE ON A POSTCARD & THE UNIVERSITY OF ABERDEEN
AGE RANGE: FROM 16+ AGE
DATE: WED 25 NOV **TIME:** 19:00
🐦 scienceona **🐦** heidigardner
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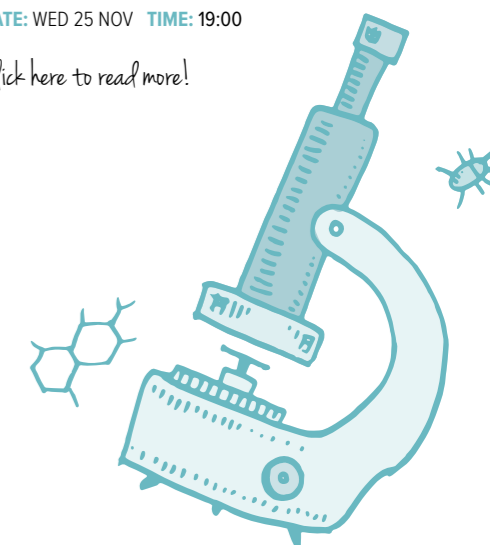
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SOPHTALKSSCIENCE

Sophie Arthur is a molecular biologist turned science communicator and digital media producer. She is passionate about making science accessible to everyone. In this talk, get insights into what a career in science communication is like and get tips on how you can communicate science yourself.

PRESENTED BY: SOPHIE ARTHUR
AGE RANGE: FROM 16+ AGE
DATE: WED 25 NOV **TIME:** 19:00

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Exercise in a Box



A free online tool from NCSC which helps organisations find out how resilient they are to cyber-attacks and practise their response in a safe environment. It is completely free, and you don't have to be an expert to use it. The service provides exercises, based around the main cyber threats, which your organisation can do in your own time, in a safe environment, as many times as you want. SBRC in collaboration with the Scottish Government will be facilitating sessions over the coming months to help organisations complete their first scenario.

AGE RANGE: ADULTS ONLY
 @SBRC_Scotland

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THE **CREST AWARDS** SCHEME IS THE BRITISH SCIENCE ASSOCIATIONS FLAGSHIP PROGRAMME FOR YOUNG PEOPLE, PROVIDING SCIENCE ENRICHMENT ACTIVITIES TO INSPIRE AND ENGAGE 5 –19 YEAR OLDS.

It is the only nationally recognised accreditation scheme for project work in science, technology, engineering and mathematics (STEM) subjects.

In addition to giving young people the opportunity to undertake hands-on science, CREST Awards are designed to help develop skills that are transferrable to other subjects, further education and future employment.

To find out more about CREST Awards and to see how you can get involved visit the TechFest website at www.techfestsetpoint.org.uk/crest or email marthagavan@techfest.org.uk

TECHFEST

TechFest is your Regional CREST Support Organisation for Scotland.
www.techfest.org.uk

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CAREER GUIDE



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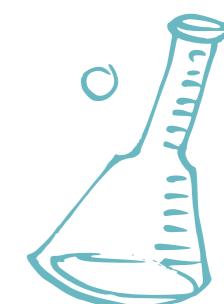
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- WHY LIMES DON'T CURE SCURVY AND EVERYTHING ELSE DOES
- SEEING THROUGH FOSSILS

STEM CAREERS & SCIENCE COMMUNICATION

- PERSPECTRICKS
- THE CRITTER KEEPER
- STEM AMBASSADORS
- SOPHTALKSSCIENCE
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