

Promoting Science, Technology, Engineering and Mathematics

Scottish Charity No. SCO10349

WELCOME TO

SCOTLAND'S DIGITAL SCIENCE FESTIVAL 2024



1-8 November 2024

As the nights draw in and the weather is dreich, you can still enjoy the wonder of TechFest without setting a foot outdoors.

Join like-minded people from around the world for the Scotland's Digital Science Festival and participate in a myriad of activities and presentations from the comfort of your own armchair.

ABOUT TECHFEST

TechFest is a charity in Aberdeen, providing STEM learning opportunities for people of all ages. With 40 years of experience, we engage with schools and the public across North East Scotland and beyond through interactive, project-based programmes, fostering life-long passion for STEM. Join our <u>mailing list</u>.

BOOKING INFO

All events are FREE to attend, except for the thrilling Locked Room game! Don't forget—registration is required for all events. Just click the 'Book Now' button next to your chosen event to secure your spot. All events will be hosted on Zoom, and we'll send you the link to join on the day of the event.

WAYS TO VIEW

It doesn't have to be just you and your laptop! There are so many fun ways to experience the events! Why not gather your family, friends, or even a date, get some snacks and turn it into an unforgettable night? Make it an evening full of wonder, laughter, and great company!











Promoting Science, Technology, Engineering and Mathematics

Scottish Charity No. SCO10349

AT A GLANCE

SCOTLAND'S DIGITAL SCIENCE FESTIVAL 2024

Powered by TECHFEST

NOVEMBER 1-8

1

An Eye Below Zero, a long term look at the poles by **Doug Allan** 2

Campaigning for change: banning disposable vapes by Laura Young 3

How to Robot-Proof Your Kids by **Dr Vivienne Ming** 4

Mini Brains in a Dish: How Organoids are Revolutionising Brain Research by **Dr Daniel Berg**

5 1 A

Macduff Marine Aquarium in your Classroom by Macduff Marine Aquarium 5

Why We All Need Sunshine? by **Dr Olga Runcie** 6

The Big Endangered Animals Virtual Quiz by Royal Zoological Society of Scotland 6

The Straight A's Brain by **Dr. Tharaka**

7

Pokémaths: The Maths of Pokémon by **Tom Rocks Maths** 7

Science Fiction vs Science Fact by Scot Derwingson-Peacock 8

Al IQ – LOL:
How Al Controls Your
Behaviour and Why It Works
by
Dr John N A Brown, PhD,
Dott Ric, PhD, SFHEA

8

Universilly Challenged

Quiz

by Jonny Berliner

and Simon Watt

AVAILABLE FOR SCHOOLS

AVAILABLE FOR PUBLIC

THE ONLINE ESCAPE ROOM SPECIAL OFFER AVAILABLE 1 - 8 NOVEMBER ONLY!

See page 5 for more information.

Promoting Science, Technology, Engineering and Mathematics

Scottish Charity No. SCO10349



An Eye Below Zero, a Long Term Look at the Poles

by Doug Allan

X G

Available for family audiences

Fri, 1 November | 18:30

45 years of polar experience have given Doug Allan a unique perspective on both the Arctic and Antarctic. He'll be telling exciting and inspiring stories about the winter he spent with Emperor penguins, and his face to face encounters with polar bears.

But Doug has also witnessed how the warming of the poles is affecting the animals. He'll explore the innovative and imaginative steps and solutions that we can adopt to take on the challenge.

We can still turn the tide.





Campaigning for change: banning disposable vapes

by Laura Young

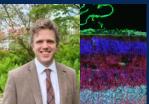


Available for 12+

Sat, 2 November | 19:00

Can grassroots activism really create meaningful change? Absolutely!

Join <u>Laura Young</u> who proved this theory true. Laura is the founder of the campaign to ban disposable vapes, which has prompted legislative change across the UK. She will share her campaign journey, top tips & key takeaways at this online talk!



Mini Brains in a Dish: How Organoids are Revolutionising Brain Research

by Dr Daniel Berg



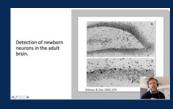
Available for 12+

Mon, 4 November | 19:00

The human brain is an incredible result of evolution, filled with complexity and wonder. Join neuroscientist Daniel Berg as he explores how the brain develops, what can sometimes go wrong, and how new breakthroughs with brain organoids—tiny, lab-grown models—are helping us unlock its mysteries. Discover how these advances are paving the way for deeper understanding and potential new treatments in the fascinating field of neuroscience.

BOOK NOW >>

TECHFEST RECOMMENDS!



We first met Dr. Berg in 2021 during our Digital Science Festival, where he delivered an engaging talk titled *How to Grow New Brain Cells*. The talk was published on our YouTube channel and has received over 45k views! Watch the talk.



How to Robot-Proof Your Kids

by Dr Vivienne Ming



https://www.thehumantrust.org https://www.socos.org

Available for 16+

Sun, 3 November | 19:00

Al makes many promises about making life easier. Companies are selling Al to read your emails and then write your responses. But at a time when all of the world's knowledge is free in your pocket, your value is your unique voice. From augmented intelligence to neuroprosthetics, Dr. Ming will explore how we can use Al not to make life easier but to make ourselves better.



Why We All Need Sunshine?

by Dr Olga Runcie

Available for 16+

Tue, 5 November | 19:00

Have you ever wondered why we feel happier and less hungry on sunny days? Do you know what "Vitamin D Winter" is and how long it lasts? Are you aware of why sunshine, or the lack of it, affects our energy levels? In this talk by Dr Olga Runcie, consultant psychiatrist and sleep specialist, you'll discover the surprising ways sunlight influences both our physical and mental well-being.

We'll explore the science behind sunlight, including its role in vitamin D production, mood regulation, and circadian rhythms. We'll also examine the connection between sunlight and conditions such as ADHD, Multiple Sclerosis blood pressure, and mood.

You will gain practical tips on how to safely enjoy the benefits of sunshine in order to improve your health. This talk is perfect for anyone interested in understanding the vital connection between sunlight and human health.

BOOK NOW >>



Promoting Science, Technology, Engineering and Mathematics

Scottish Charity No. SCO10349



The Straight A's Brain by Dr. Tharaka

Available for 8 - 16+

Wed, 6 November | 19:00

Kids and teens are often taught what to learn, but now how to learn.

What would it be like if your kid could memorise superhuman quantities of information? Or study for exams and not forget what they revised? Is it possible to improve focus and concentration? How should they look after their brain health? Is it possible to develop a brain that could learn in a way that could ace those school exams?

Join Aberdeen based Dr T, TV Psychiatrist, for a practical online workshop that will leave you and your child amazed at your own memory power, equip you with brain health tips and powerful study hacks that will give any learner the academic

Aimed at kids and teens (aged 8-16), this webinar is designed for parents to attend too! It gives everyone a chance to learn and walk away with some practical top tips - and for parents to support their youngsters to learn smarter than ever before!

BOOK NOW >>



Science Fiction vs Science Fact

by Scot Derwingson-Peacock

Available for family audiences

Thur, 7 November | 19:00

Join us for a trip through the cosmos as we compare what we know with what we dream of. Hollywood sound designer, astrophysics alumnus and lifelong space enthusiast, Scot Derwingson-Peacock, will pilot our starship to strange new worlds and maybe even some very old ones to discover if what we see on the big screen really is possible. Some of the answers may surprise you!

BOOK NOW >>



AI IQ - LOL:

How Al Controls Your Behaviour and Why It Works

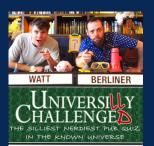
by Dr John N A Brown, PhD, Dott Ric, PhD, SFHEA

Available for 10+

Fri, 8 November | 18:30

John NA Brown has solved problems for Google, Amazon, LinkedIn, Facebook, and YouTube and has been working on Al for nearly 10 years. At this talk on AI IQ - LOL: How Computer Scientists Use Social Media and Smartphones to Control Your Behaviour and Why It Works, John will explain why AI isn't really all that smart, and why a lot of smart people think that it is. Then he'll help you see for yourselves how your smartphones and computers are designed to make you feel clever but act without thinking. He'll finish with a 30-minute Ask Me Anything session.

BOOK NOW >>



UniverSilly Challenged Quiz

by Jonny Berliner and Simon Watt

Available for 18+ only.

Fri, 8 November | 20:00

Science troubadour, Jonny Berliner ("Seriously funny"-Scotsman) and Ugly Animal wrangler, Simon Watt ("All the wit and passion of the best comics"- Chortle) invite you to the only Anarchonerd pub quiz in UniverSilly Challenged Quiz. Niche prizes to be won and full marks for foolishness. Paxman would hate it.

BOOK NOW >>



Murder at the Museum - Online Escape Room

by The Locked Door Escape Games

Cost: £2 per game – 75% discount on usual price of £8 for the duration of 1-8 November. Purchased tickets during 1 - 8 November can be used at any time, including after 8 November. Tickets are valid for 12 months.





An online co-operative puzzle game for two teams (2 - 6 players). Everyone will need to Work Together to play this game.

World-famous archaeologist Gustavo Jenson has been found dead at The Granite City Museum. Foul play is suspected so Detective Sullivan has been called in to solve the mystery and discover who the murderer is but she can't do it alone; your team must solve a variety of puzzles in order to crack the case!

Kids are welcome to join in with their family but it's tricky enough that it's best played by older kids and adults.

TECHFEST'S SCHOOL CONTENT





Macduff Marine Aquarium in your Classroom

by Macduff Marine Aquarium



Available for primary schools Tue, 5 November | 13:30

Bring Macduff Marine Aquarium into your classroom with a live, fun and interactive presentation about the marine life of the Moray Firth! Discover the amazing diversity of our native species while hearing how these creatures and their habitats are affected by human impacts. Pupils will have the opportunity to ask the Marine Master all their fishy questions in a live Q and A session at the end of the show.















by Royal Zoological Society of Scotland

Available to Upper Primary Aged Learners (P4-7) but open to others

Wed, 6 November | 13:15

Our team game-based session challenges learners to explore the issues affecting wildlife and habitats across the globe as the explore the work of our wildlife conservation charity.

BOOK NOW >>



Pokémaths: The Maths of Pokémon

by Tom Rocks Maths

Available for 14+ students

Thur, 7 November | 11:00







How many Pikachu's does it take to power a lightbulb? How much does a Charizard eat? And why does the world of Pokémon seem to ignore the basic laws of physics? Dr Tom Crawford looks at the maths one of the world's favourite video games.



Check out the full Scotland's Digital Science Festival programme for more events. Some evening events suitable for young ages!

UPCOMING TECHFEST EVENTS



Our beloved '24 Days of STEM' advent calendar returns this year! The calendar offers exciting activities designed for all interests and skill levels. Participants will develop science, design, and coding skills while enjoying festive surprises. Suitable for primary ages.

Suitable for schools and the public!







SCOTLAND'S DIGITAL SCIENC Powered by TECHFEST



MEET THE TEAM BEHIND SCOTLAND'S DIGITAL SCIENCE FESTIVAL



Wendy Findlay



Sarah Chew



Martha Gavan



Jenny Taylor



Yashka Smith



Julia Chew



Yvonne McLellan



Eve Nebbiolo



Kirsty Cranna



Gabija Blazyte

JOIN TECHFEST MAILING LIST TODAY!



DON'T FORGET TO FOLLOW TECHFEST









