


EDI
NBU
RGH

SCIENCE FESTIVAL

2024

 EDINBURGH
SCIENCE

Shaping
the Future

30 March–14 April

BOOKING HOTLINE: 0131 553 0320

ONLINE BOOKING: sciencefestival.co.uk



Thanks to our 2024 Festival supporters

Principal Funding Partners

Baillie Gifford™



Edina Trust

◆ **EDINBURGH** ◆
THE CITY OF EDINBURGH COUNCIL



Major Funding Partners



HITACHI
Inspire the Next



BUILD
THE CHANGE



Funding Partners

ARUP



Edinburgh Napier UNIVERSITY  School of Computing, Engineering & the Built Environment



lumo



seebyte



VATTENFALL 

Venue and Programming Partners



SUMMERHALL



Shaping the Future

The Edinburgh Science Festival is for everyone – especially you! Whether you visit with your family or friends, we have over 150 inspiring events between Saturday 30 March and Sunday 14 April for you to enjoy, many of them entirely free.

This year we explore the theme Shaping the Future, showcasing some of the cutting-edge science and technology that can help us create a future that is sustainable, accessible for all and exciting.

What future do we choose? Where will we be as individuals, as a community, as a planet in 10 or 50 years' time? We explore these questions across our programme. In our *Growing Home* exhibition we will look at the new world of high-tech biomaterials that may be the sustainable solution to how we make things.

We reveal how Artificial Intelligence could make our lives easier. Dinosaurs, robots, space exploration and tech will also feature – we've got a bit of everything! Across many of your favourite Edinburgh venues we dig into what the future holds through workshops, shows, exhibitions, films, trails and talks.

Come and join us, discover something new, do something surprising for the first time. How will you shape the future?

We look forward to seeing you soon,



Dr Simon Gage

How to Explore the Festival

Edinburgh Science Festival 2024 takes place in around 30 venues across the city, including the City Art Centre, Dynamic Earth, Edinburgh Zoo, National Museum of Scotland, Royal Botanic Garden Edinburgh, Summerhall and The University of Edinburgh.

To help find the perfect event for you, we've separated this programme into four sections:

Science for Families [pages 6–23]

From hands-on workshops, interactive activities and explosive science shows, we have everything you need for the perfect family day out this Easter.

Science for Adults [pages 24–34]

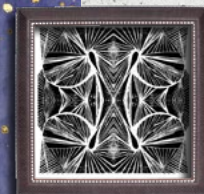
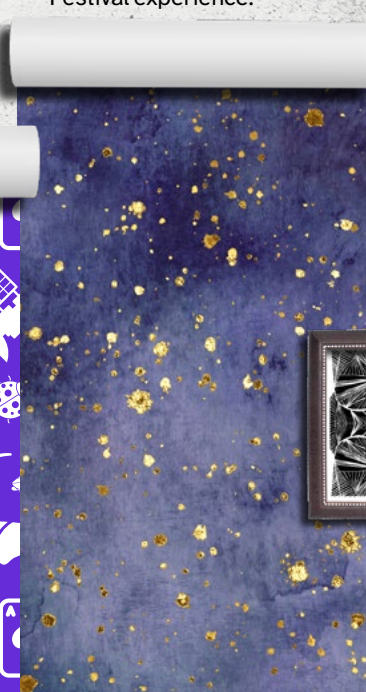
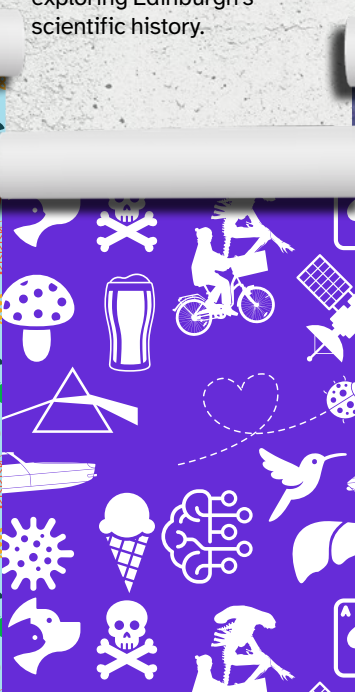
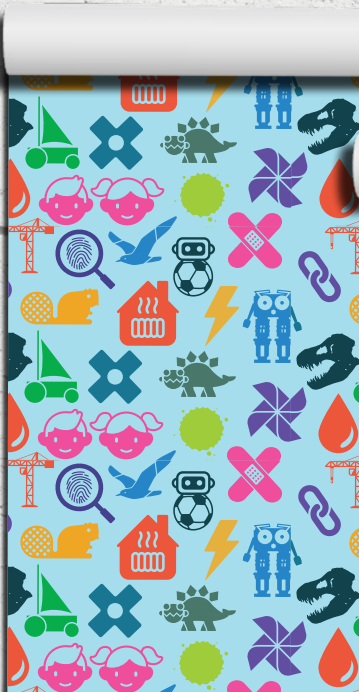
Be inspired by talks and discussions delving into everything from the most intriguing physics principles to the sex lives of insects, get creative in science art workshops and join tours exploring Edinburgh's scientific history.

Science Nights Out [pages 35–37]

Enjoy science in a relaxed environment with friends at our Science Nights Out, our coolest adults-only events that combine science, art, hands-on activities and music in the ultimate Festival experience.

Science and Art [pages 38–42]

These exhibitions blend science and art through breathtaking photography and thought-provoking artworks, exploring themes from space sustainability to the diversity of the natural world.



Festival Information

How to Book

Online

sciencefestival.co.uk

If you experience any issues while attempting to make an online booking, please email the Box Office at boxoffice@scifest.co.uk

Phone

0131 553 0320

Thursday 15 February–Friday 29 March
9.30am–5pm (Monday–Friday)

Saturday 30 March–Sunday 14 April

9.30am–6pm (Monday–Saturday)

11am–4pm (Sunday)

In Person

During the Festival, you can visit our Box Office counters at the National Museum of Scotland and the City Art Centre. Please note the Box Office at the National Museum of Scotland is cashless.

Ticketing Information

Early Bird

Save £2 per ticket on our talk and discussion events [pg.25–34] at the National Museum of Scotland and The Bayes Centre if booked before Sunday 3 March. Call the Box Office or book online using the code **EARLYBIRD24**.

Groups

We welcome groups and discounts may be available depending on the event and the size of the party. Please call the Box Office on **0131 553 0320** to discuss your needs.

Concessions

Unless otherwise stated, concessions are available to pensioners, the unemployed and disabled persons, with a complimentary ticket available for personal assistants, which can be booked by phoning our Box Office on **0131 553 0320** or emailing boxoffice@scifest.co.uk

Refunds












All Science Festival tickets are non-refundable, except in the event of a cancellation.

Support Edinburgh Science

Please consider adding a donation to your purchase and help us deliver science related activities to community groups and schools around Scotland.

Venue Facilities

On each venue page you'll find the following symbols which indicate the facilities available:

-  Wheelchair access throughout
-  Sensory Backpacks
-  Elevator
-  Ramp access
-  Level access throughout
-  Accessible toilet
-  Changing places toilet
-  Lowered counters
-  Access aware staff
-  Hearing loop
-  Exhibition transcripts
-  Assistant dogs welcome
-  Low lighting
-  Cafe
-  Bar
-  Packed lunch area
-  Water available
-  Cloakroom
-  Buggy park
-  Baby changing
-  Parking
-  Mobility scooters and wheelchairs available to book in advance

Find full venue details, including addresses, at sciencefestival.co.uk/venues.

For any questions regarding accessibility, please call the Box Office on **0131 553 0320** or email boxoffice@scifest.co.uk

Accessibility

If you have specific access requirements or need to book a wheelchair space, please call our Box Office on **0131 553 0320** or email boxoffice@scifest.co.uk
For information about accessibility provisions across the Festival, visit sciencefestival.co.uk/accessibility

R Relaxed Sessions

These sessions are open to all but designed for those who prefer smaller crowds, less noise and gentler lighting. For more details on each specific session, please visit our website.

P.21 POUNDS AND PENCE – THE SCIENCE IN YOUR POCKET: COINS
MON 8 APR | 11AM & 2PM | MUSEUM ON THE MOUND

P.22 POUNDS AND PENCE – THE SCIENCE IN YOUR POCKET: BANKNOTES
MON 8 APR | 11AM & 2PM | MUSEUM ON THE MOUND

P.11 GROWING HOME RELAXED OPENING SESSION
TUE 9 APR | 9AM | NATIONAL MUSEUM OF SCOTLAND

At the City Art Centre, we have sensory backpacks available free of charge from the ticketing desk on the ground floor, and a Quiet Space on the fourth floor where you can take a break from the excitement. Although particularly designed for those with sensory needs, these resources are available to everyone.

B BSL Interpreted

P.14 BAKINEERING
SUN 31 MAR | 2.30PM
NATIONAL MUSEUM OF SCOTLAND

P.39 SILENT ARCHIVE – BSL TOUR
SUN 7 APR | 2PM
ROYAL BOTANIC GARDEN EDINBURGH

P.29 THE SECRET PSYCHOLOGY OF MAGIC
MON 8 APR | 8PM | NATIONAL MUSEUM OF SCOTLAND

P.33 OUR ACCIDENTAL UNIVERSE
FRI 12 APR | 6PM | NATIONAL MUSEUM OF SCOTLAND

AD Audio Described

P.39 CONNECTING HISTORIES – DESCRIPTIVE TOUR
TUE 9 APR | 10AM
ROYAL BOTANIC GARDEN EDINBURGH



Science Festival Delegate Programme

Want to develop your public engagement skills? Enjoy exclusive training opportunities? Get a behind-the-scenes look at one of the world's leading Science Festivals? Then the *Edinburgh Science Delegate Programme* is for you!

Over three days (Tuesday 2–Thursday 4 April), we'll be running workshops, talks and offering a chance to find out more about our work. Delegates will meet senior members of the team and have the chance to network with other people who want to engage, inform and inspire through science and public engagement. Ticket price includes free and discounted entry to a broad range of Science Festival events, as well as guided tours around our signature venues and VIP access to our *Growing Home After Hours* event.

Want to know more? Visit sciencefestival.co.uk/delegate-programme or email delegates@scifest.co.uk

Programming for the Planet

Our planet is in crisis and the effects of climate change are being felt all over the world. Tackling it can often feel daunting and overwhelming, but we know that a better world is possible if we work together now to create it. That's why sustainability has always been – and remains – a key theme throughout our programme.

Here are some of this year's highlights:

Climate for Kids

P-19	PLANET PROTECTORS THU 4–MON 8 APR 10–4PM DYNAMIC EARTH
P-15	LEGO® BUILD THE CHANGE MON 8–SUN 14 APR 10AM–5PM NATIONAL MUSEUM OF SCOTLAND
P-20	CARBON CAPTURERS TUE 9 APR 10AM–4PM DYNAMIC EARTH
P-17	BUILD A BETTER CITY THU 11 APR 12PM–4 PM ROYAL BOTANIC GARDEN EDINBURGH

Climate for Adults

P-25	SCIENCE AND SOLUTIONS FOR A CLEAN OCEAN MON 1 APR 8PM NATIONAL MUSEUM OF SCOTLAND
P-29	CARBON CAPTURE AND STORAGE FOR A NET ZERO FUTURE MON 8 APR 7PM BAYES CENTRE
P-31	CLIMATE HOPE: BUILDING A BETTER FUTURE WED 10 APR 7PM DYNAMIC EARTH
P-33	AI FOR EARTH THU 11 APR 8PM NATIONAL MUSEUM OF SCOTLAND
P-34	EDINBURGH CONSERVATION FILM FESTIVAL SUN 14 APR 1PM NATIONAL MUSEUM OF SCOTLAND

Doing our Part

We work hard to be as sustainable as possible when running the Science Festival. Many of the materials, sets and artwork that you will see throughout the Festival are reused year-on-year to eliminate waste. Where we create new exhibitions, we use recycled materials or materials we know can be repurposed and this programme is printed on FSC accredited paper from a responsible source. We have implemented policies that discourage internal UK flights by both staff and our Festival guests, and we encourage travel by bike and bus throughout the Festival.



Do You Work for a Small Business?

Over 99% of the UK's business community is made up of small and medium-sized enterprises (SMEs), which makes them a vital and powerful force in our mission to build a cleaner, just and more sustainable future. Getting a business on the road to net zero is no mean feat, which is why we've created *The NetZeroToolkit*, a completely free online resource that supports businesses of all sizes to build effective sustainability strategies. Find out more at thenetzerotoolkit.org.

Bringing Together Leaders for Change

To make substantial progress in the fight against climate change, we need action from those in power. Since 2019, we've been running our *Climate Co-Labs* – round-table discussions that bring together politicians, business leaders and decision-makers to tackle complex climate problems head-on. Our *Co-Labs* spark collaboration, unlock potential solutions and drive change. This is a space where change-makers can create connections, find inspiration and crucially make climate change solutions into a reality.



Climate Funding Partners

Baillie Gifford™



Energy Makers

ACTIVITY | AGES 5+



CITY ART CENTRE

20 MINS | BOOKING REQUIRED

Get blown away by the wonderful world of wind turbines! Learn how air can exert force and why the blades of a wind turbine spin. Create your own turbines and test them in our awesome tunnel in this great introduction to renewable energy.

Supported by

HITACHI
Inspire the Next

@Hitachi Energy

Little Sparks

ACTIVITY | AGES 5+



CITY ART CENTRE

45 MINS | BOOKING REQUIRED

Get stuck into circuits and discover what electricity does, as you work through challenges to create an electric-powered device. We'll start things off simply by making an easy electrodough circuit, move on to the next level with a snap circuit board, before using your skills and knowledge to build an electrical device.

Splat-tastic

ACTIVITY | AGES 5+



CITY ART CENTRE

20 MINS | BOOKING REQUIRED

Get your goo on in this interactive workshop. Be creative with chemistry and design your own slime to take home. Test its thickness and stickiness under the extreme conditions of our 'Splat-o-Meter' and check out how the appearance and properties of materials can change when a chemical reaction takes place.

Wild Vets

ACTIVITY | AGES 5+



CITY ART CENTRE

45 MINS | BOOKING REQUIRED

Take on the role of an animal conservationist in our totally wild workshop. Discover more about Scottish wildlife heritage by exploring the animals that used to live here and the work being carried out to rewild the landscape and reintroduce animals like the beaver to Scotland.

Blood Bar

ACTIVITY | AGES 7+



CITY ART CENTRE

20 MINS | DROP-IN

Pull up a chair in our Blood Bar and be prepared for things to get gory! Have a go at making your own scabs, mix up a gooey blood clot and even touch a real heart. Explore the science of blood and see how we can diagnose disease with cutting-edge technology. Take a closer look at the heart, lungs and oxygen in our *Don't Hold Your Breath* activity and find out what really happens when we get cuts and bruises in the *Scab Lab* - these workshops alternate throughout the day.

Creative Coding

ACTIVITY | AGES 7+



CITY ART CENTRE

45 MINS | BOOKING REQUIRED

Introducing Marty - the dancing robot! Using the Scratch programming language, budding engineers can program Marty to follow commands and navigate around an obstacle course. Before you leave, get yourself a spot at the coolest party in town and make Marty dance at our robot disco.

Supported by

seebyte

CSI: Crime Scene Investigation

ACTIVITY | AGES 7+



CITY ART CENTRE

45 MINS | BOOKING REQUIRED

A crime has been committed: can you help us solve it? Become a forensic scientist in our special *Crime Scene Investigation* workshop. Study the crime scene and decipher the clues left behind by finding fingerprints, identifying soil samples and investigating blood. Can you solve the mystery and help us catch the criminal?

Speedy Sails

ACTIVITY | AGES 7+



CITY ART CENTRE

45 MINS | BOOKING REQUIRED

Join our team to design, build and test your very own land yacht: a special wheeled vehicle that uses sails to travel across ground. You'll consider how designing a project is about solving a problem. Through the workshop you'll explore the principles and roles of thrust, drag, friction and energy transfer in the world of motion. Engineering has never been this fun!

ER Surgery

ACTIVITY | AGES 8+



CITY ART CENTRE

45 MINUTES | BOOKING REQUIRED

Paging all surgeons to the emergency room! Scrub up in the ER and help diagnose your 'patient', before performing life-saving surgery on the knee, abdomen and brain! Please note, this workshop is closed with no viewing area for parents.

Gadget Factory

ACTIVITY | AGES 8+



CITY ART CENTRE
DROP-IN

Create your own working electronics in our mini *Gadget Factory*. After you've grasped the basics of creating an electrical circuit, pick your kit and use your skills to assemble your very own working electronic gadget you can take home! Once you've learned the secrets of soldering there's no end to the stuff you can make!

Chain Reactor

SHOW | ALL AGES



CITY ART CENTRE
DROP-IN

This machine is quite simply bonkers. It's 10 metres of unstoppable reactions as the wonders of chemistry are revealed in a procession of knock-on effects. Stay behind the danger line as acids splash and alkalis flow and, if you're very lucky, you'll get to start the whole process using the spectacular Toroidal Vortex Generator.

Construction Challenges

ACTIVITY | ALL AGES



CITY ART CENTRE
DROP-IN

Join our construction team to build and explore with our wooden building blocks. How tall can you build a tower? Can you create a bridge with only blocks? Build, play, explore and challenge yourself in this engineering and building activity.

Cosy Cosy Challenge

ACTIVITY | ALL AGES



CITY ART CENTRE
DROP-IN

Compete against your friends and family to keep our model houses cosy and warm. You'll be challenged to work out how to stop heat leaking from your model house and play against the clock to save the most energy, and money!

Supported by

VATTENFALL 

Tech Corner

ACTIVITY | ALL AGES



CITY ART CENTRE
DROP-IN

Our lives have been transformed by the power of technology, from smart phones to speakers, healthcare to homes, technology is everywhere. Discover how technology can be used to recognise objects, use our modular robots to complete challenges and explore augmented reality in our drop-in technology corner.

Imagination Playground

ACTIVITY | ALL AGES

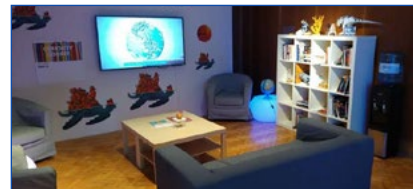


CITY ART CENTRE
DROP-IN

Let your imagination run wild! Unlock your creative spirit and build magical, massive structures with our super-sized construction blocks in our *Imagination Playground*. What amazing structures will you make, and what will inspire your designs? Ideal for young engineers and adults alike.

Curiosity Corner

ACTIVITY | ALL AGES



CITY ART CENTRE
DROP-IN

Pop over to curiosity corner to take a break from the excitement of the City Art Centre. There are plenty of books for the adults to find a new passion, and our science mini-cinema for the whole family to watch!

Learning Through Play

EXHIBITION | ALL AGES



CITY ART CENTRE
DROP-IN

Artist **John Brown** explores the idea of play as a way to discover, learn and invent. Using the history of construction toys as a starting point Brown employs miniature workshop models as sites for building with a basic set of components. These materials are built and rebuilt into various natural forms, architecture and experiments. The photographs of these 'sets' disguise the object's original size and allow the viewer to imagine these miniatures as large-scale proposals that use very few resources.

Plan Your Day at City Art Centre

With your City Art Centre Day Pass, kids will have access to any number of drop-in activities and up to three bookable workshops – the perfect day of science fun! You can mix and match any workshop, or take some inspiration from these suggestions.

for Practical Scientists

It's time to get messy with these hands-on experiences that really bring science to life!

- SPLAT-TASTIC | 5+
- BLOOD BAR | 7+
- ER SURGERY | 8+

for Innovative Engineers

Put on your problem solving hat and explore the worlds of energy, robots and coding.

- LITTLE SPARKS | 5+
- ENERGY MAKERS | 5+
- CREATIVE CODING | 7+
- GADGET FACTORY | 8+

Supported by

lumo

for Dynamic Detectives

Satisfy your curiosity and investigate the world around us with these interactive workshops.

- WILD VETS | 5+
- CSI: CRIME SCENE INVESTIGATION | 7+
- CHAIN REACTOR | ALL AGES

for Nature Explorers

If you wonder about wildlife or have a curiosity for conservation, these workshops are perfect to dive in to.

- WILD VETS | 5+
- DIG UP A DINOSAUR | 5+

for Budding Builders

Let your imagination run wild in these creative experiences that will build your construction skills for the future!

- IMAGINATION PLAYGROUND | 3+
- CONSTRUCTION CHALLENGES | 5+
- COSY COSY CHALLENGE | ALL AGES
- SPEEDY SAILS | 7+

Supported by

HCI
Skills Gateway

for Little Adventurers

There's fun to be had by kids of all ages at City Art Centre – even for the littlest of scientists!

- WEE WONDER WORLD | 3+
- IMAGINATION PLAYGROUND | ALL AGES
- ELLA'S WOBBLE | 3+

Booking Your Day Pass

A child 5+ day pass includes up to three bookable events – the workshop schedule can be found below and on our website. Drop-in activities do not need to be pre-booked and can be enjoyed by all the family throughout the day.

Please note that all activities have a minimum age recommendation, as some workshops may not be suitable for younger participants.

Children must be accompanied by an adult and, unfortunately, we do not issue tickets to lone adults.

Venue sponsor

CIRRUS LOGIC

START TIME	10.00	10.30	11.00	11.30	12.00	12.30	1.00	1.30	2.00	2.30	3.00	3.30	4.00	4.30
3+ ELLA'S WOBBLE 20 MINS														
5+ DIG UP A DINOSAUR 45 MINS														
5+ ENERGY MAKERS 20 MINS														
5+ SPLAT-TASTIC 20 MINS														
5+ WILD VETS 45 MINS														
5+ LITTLE SPARKS 45 MINS														
7+ CSI: CRIME SCENE INVESTIGATION 45 MINS														
7+ CREATIVE CODING 45 MINS														
7+ SPEEDY SAILS 45 MINS														
8+ ER SURGERY 45 MINS														

City Art Centre School Days

Every year before City Art Centre opens to the public, we host three special open days for local schools. This year around 1,000 school children, many of whom wouldn't have the opportunity to visit with their families, get to experience all the activities in our magical science playground for free.

Find out more about our work with local communities at sciencefestival.co.uk/community-engagement

City Art Centre School Days supported by

Baillie Gifford
Edina Trust
HCI
Skills Gateway

The PLACE (Platforms for Creative Excellence) Programme is funded by the Scottish Government – through Creative Scotland – and the Edinburgh Festivals

 Scottish Government
Riaghaltas na h-Alba
gov.scot

 CREATIVE SCOTLAND
ALBA | CHRUTHACHAL

National Museum of Scotland

One of Edinburgh's most iconic buildings, the National Museum of Scotland houses treasures from around the world, all under one roof.

During this year's Science Festival, explore how the materials of yesterday are being reimagined for tomorrow at our brand new interactive exhibition *Growing Home – A New World of Materials* in the Grand Gallery.

Enjoy explosive family shows, inventive workshops and fun drop-in activities throughout the day, and join us in the evening for our programme of talks and discussions for adults and young people [pg.25–34].

SATURDAY 30 MARCH–SUNDAY 14 APRIL | 10AM–5PM
CHAMBERS STREET, EDINBURGH, EH1 1JF

FOR EVENING TALKS AND DISCUSSION EVENTS, ENTER THROUGH LOTHIAN STREET



The University of Edinburgh



THE UNIVERSITY
of EDINBURGH

The University of Edinburgh works to connect science and society to make the world a better place. Discover science with real scientists from The University of Edinburgh during the Science Festival. Visit the Learning Centre at the National Museum of Scotland for family-friendly activities, and keep an eye out for adult events throughout the programme.

growing HOME

a new world of materials



Growing Home: A New World of Materials

EXHIBITION | ALL AGES

NATIONAL MUSEUM OF SCOTLAND | GRAND GALLERY

SAT 30 MAR - SUN 14 APR | 10AM-5PM | DROP-IN | FREE

For centuries, humans have been using materials made from natural sources. But now, as we face the consequences of over-consumption, biomaterials could be key in unlocking a sustainable – and stylish – future.

In this new interactive exhibition, explore biologically derived materials and discover how they will become part of future building, packaging, fashion, daily living and more.

Get hands on with our two activity zones. Become a material tester and create a new biomaterial garment or be a designer to build and control your own prototype robot.

Younger explorers can discover all about the materials that make up their world and how we use language to describe them in our zone for ages 5 and under.

Growing Room

Standing three meters high, *Growing Room* is an impressive architectural structure, devised and created by the **Hub for Biotechnology in the Built Environment** at Newcastle University, made from biomaterials. Grown from wool and mycelium (the root network of fungus) to give it strength and stability, the piece shows how research into the future of biomaterials could transform the built environment.

Symbio

A display of biomaterial themed garments by inspiring Edinburgh-based artist **Emily Raemaekers**. The garments will feature mycelium material and leather made from vegetable processing waste in combination with cutting-edge environmentally friendly fabrics. Adorned with elaborate laser cut designs inspired by mycelium structures, hand carved lino print patterns and featuring plant-derived biomaterial dyes.

Relaxed Opening Session

TUE 9 APR | 9AM | 3 HOURS

FREE BOOKING REQUIRED

RELAXED SESSION

Visit the Grand Gallery for an hour before the National Museum of Scotland is open to the public and enjoy our *Growing Home: A New World of Materials* exhibition in a more relaxed and less crowded environment. This session is primarily for, but not limited to, neurodiverse and autistic children, young people and adults; adults living with dementia; adults and children with mental health problems; and any other visitors with sensory needs or who may prefer a more relaxed experience, plus their families, friends and carers. This relaxed experience will continue on after we open to the public until midday.



Growing Home Presented by Edinburgh Science
Supported by

Developed with support from Creative Scotland through the Scottish Government's Festivals Expo Fund



Scottish Government
Riaghaltas na h-Alba
gov.scot

Edinburgh Napier
UNIVERSITY



School of Computing,
Engineering & the
Built Environment



Rising Tide: Art and Environment in Oceania

P.38 EXHIBITION | ALL AGES
UNTIL SUN 14 APR | 10AM-5PM

Wildlife Photographer of the Year 2024

P.38 EXHIBITION | ALL AGES
UNTIL MON 6 MAY | 10AM-5PM

Creative Informatics: Unleashing the Power of Data

EXHIBITION | ALL AGES



NATIONAL MUSEUM OF SCOTLAND
HAWTHORNDEN COURT
SAT 30 MAR-SUN 7 APR | 10AM-5PM | DROP-IN | FREE

Explore some of the innovative products, new experiences and groundbreaking creative work that has been developed through funding and support from Edinburgh's Creative Informatics programme. Since 2018, Creative Informatics has been supporting individuals and organisations working in the creative industries in Edinburgh and South East Scotland to do inspiring things with data and digital technologies. As the innovation programme draws to a close, this interactive showcase celebrates the achievements of its creative community. Stop by to experience virtual reality worlds, discover new data-driven artworks and use building blocks to create your own music.

Supported by



Discover Our Science with The University of Edinburgh

ACTIVITY | ALL AGES



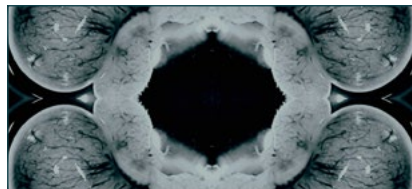
NATIONAL MUSEUM OF SCOTLAND | EVENT SPACE
TUE 2-FRI 5 APR & TUE 9-FRI 12 APR
10.30AM-12.30PM & 1.30PM-4.30PM | DROP-IN | FREE

What is it like to work in a laboratory? How are scientists working to better understand our world and what mysteries are they trying to solve? Meet scientists from The University of Edinburgh and discover the exciting things they're working on in the worlds of biology, chemistry, maths, medicine and Generation Scotland. You'll even have the chance to have a go at being a scientist yourself! Activities will be different each week of the Festival.

Presented by The University of Edinburgh

Ready, Steady, Grow!

ACTIVITY | AGES 8+



NATIONAL MUSEUM OF SCOTLAND
LEARNING CENTRE LEVEL 4, STUDIO 2
TUE 2 APR | 11AM & 2PM | 1 HOUR
£5 | FREE FOR ACCOMPANYING ADULT

Join scientists from the University of Edinburgh's Centre for Reproductive Health to investigate the building blocks of fertility. Learn more about the challenges of creating a new life, from the successful fertilisation of an egg to the growth and development of a healthy human. Examine real mouse embryos to find out how they develop, use microscopes to discover how cells grow and change to become a healthy body and learn about your own cells by investigating what roles different cells in your body have. Children must be accompanied by an adult.

Presented by The University of Edinburgh

Moral Minds

ACTIVITY | AGES 5+



NATIONAL MUSEUM OF SCOTLAND | EVENT SPACE
WED 3, FRI 5, WED 10 & FRI 12 APR
10.30AM-12.30PM & 1.30PM-4.30PM | DROP-IN | FREE

Calling all child scientists to take part in psychological research! The Altruistic Minds Lab aims to understand how we value others – people, animals, plants, and AI. Examine how people think about the moral worth of these beings and how our judgments change from childhood, through the teenage years, and into adulthood. Participation involves working with an experimenter to respond to moral dilemmas with prizes for those who participate. Come along, meet our researchers and get involved!

Presented by The University of Edinburgh

Project Protein! The Chemistry Inside Us

ACTIVITY | AGES 5+



NATIONAL MUSEUM OF SCOTLAND
LEARNING CENTRE LEVEL 4, STUDIO 2
WED 3 APR | 11AM, 2PM & 3.30PM | 1 HOUR
£5 | FREE FOR ACCOMPANYING ADULT

Join our chemists on an exciting journey into the wonderful world of proteins and discover the roles they play in our everyday lives. On our expedition, you will use chemistry to break the shapes of proteins and see their bubbly personality in action. With your new knowledge, design and craft your own protein structure to take home. So get your lab coats and goggles on and join us for some hands-on experiments! Children must be accompanied by an adult.

Presented by The University of Edinburgh

The Power of Programming

ACTIVITY | AGES 8+



NATIONAL MUSEUM OF SCOTLAND

LEARNING CENTRE LEVEL 4, STUDIO 2

THU 4 APR | 11AM, 2PM, 3.30PM | 1 HOUR

£5 | FREE FOR ACCOMPANYING ADULT

Find out how computers work together to solve problems in this hands-on programming workshop. Learn how to program a micro:bit to send and receive messages and simulate how infections are spread. Work together to see how vaccines and medical cures can be used to slow or stop the spread of infections, and see how the UK's national supercomputer ARCHER2 was used to fight the spread of COVID-19. Children must be accompanied by an adult.

Presented by The University of Edinburgh

Zebrafish! A Splash of Science and Art

ACTIVITY | AGES 5+



NATIONAL MUSEUM OF SCOTLAND

LEARNING CENTRE LEVEL 4, STUDIO 2

FRI 5 APR | 11AM, 2PM, 3.30PM | 1 HOUR

£5 | FREE FOR ACCOMPANYING ADULT

Dive into the world of zebrafish in this creative workshop. Discover why these little fish are so big in science – from their unique characteristics to how they help solve scientific puzzles. Learn about the people who take care of these amazing animals, meet the experts and discover the wide ranges of roles involved in working with the fish. Create a zebrafish-themed piece of art, which will be proudly displayed at the Institute of Genetics and Cancer. Children must be accompanied by an adult.

Presented by The University of Edinburgh

LEGO® Build the Change

ACTIVITY | AGES 5+



NATIONAL MUSEUM OF SCOTLAND |

HAWTHORNDEN COURT

MON 8-SUN 14 APR | 10AM-5PM | DROP-IN | FREE

Let's bring nature back! The natural world needs your awesome ideas on how to protect biodiversity all around us. Learn about real-world challenges, build your own brilliant solution and share it with others in this hands-on activity about rewilding.

Supported by



Minecraft Disease Detectives

ACTIVITY | AGES 10+



NATIONAL MUSEUM OF SCOTLAND

LEARNING CENTRE LEVEL 4, STUDIO 2

TUE 9 APR | 11AM, 2PM & 3.30PM | 1 HOUR

£5 | FREE FOR ACCOMPANYING ADULT

Are you up for a playful encounter with science? Join our biologists to explore how to keep people and the planet healthy. In the Minecraft world, become a field scientist and visit different places to collect data on how a virus is spreading. Discover how infectious diseases spread within and between communities, and how we can learn more about them. How can we make good public health decisions? This game-based workshop will give you a taste of global health challenges. Children must be accompanied by an adult.

Presented by The University of Edinburgh

The Game of Life

ACTIVITY | AGES 8+



NATIONAL MUSEUM OF SCOTLAND

LEARNING CENTRE LEVEL 4, STUDIO 2

WED 10 APR | 11AM, 2PM & 3.30PM | 45 MINS

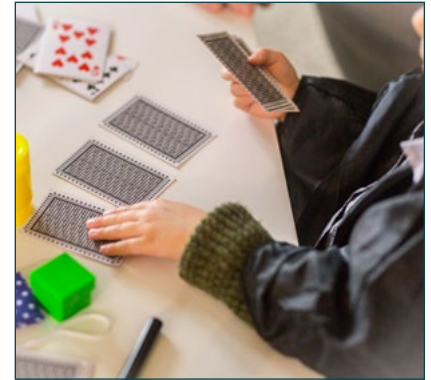
£5 | FREE FOR ACCOMPANYING ADULT

How do your brain and thinking skills develop and change throughout your life? How important are your genes or is it all about how you choose to live your life? Join our researchers, create a DNA bracelet, and play the game of life! You'll also have the chance to see for yourself how brains age using augmented reality glasses. Come along and discover the secrets to healthy brains. Children must be accompanied by an adult.

Presented by The University of Edinburgh

Science is Magic

ACTIVITY | AGES 5+



NATIONAL MUSEUM OF SCOTLAND

LEARNING CENTRE LEVEL 4, STUDIO 2

FRI 12 APR | 11AM, 2PM & 3.30PM | 1 HOUR

£5 | FREE FOR ACCOMPANYING ADULT

Unlock the magic of science! From science that appears magical to the science behind the magic, discover magic trick experiments each offering a new concept to explore. At the end of the workshop you'll have learned four science magic tricks to perform! Children must be accompanied by an adult.

Presented by The University of Edinburgh

Family Shows

Bakineering

SHOW | AGES 8+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
SUN 31 MAR | 11.30AM & 2.30PM | 1 HOUR
£8 | [BSL INTERPRETED](#) | 2.30PM

Join former *Great British Bake Off* finalist and creator and judge of Netflix's *Baking Impossible*, **Andrew Smyth** for an edible exploration of the engineering involved in baking. With audience tasters and live demonstrations, this fast-paced family show takes you on a journey via sea, road and sky to discover the hidden engineering inside his bakes. Children must be accompanied by an adult. The 2.30pm performance will be BSL interpreted. Presented by Andrew Smyth

Seize the Data

SHOW | AGES 8+



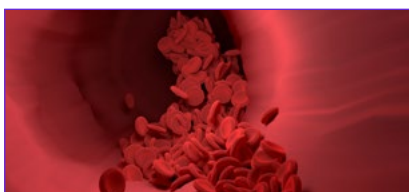
NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
TUE 2 APR | 2PM | 1 HOUR | £6

Join CERN scientists and step into a digital universe to see how computers deal with data in this hands-on family adventure. We will dive into the secrets of the internet, stack heaps of LEGO®, and maybe even discover a star!

Presented by European Organization for Nuclear Research (CERN)

Brilliant Blood

SHOW | AGES 8+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
THU 4 APR | 2PM | 1 HOUR | £6

You have around 5L of it, it comes in 8 sorts and moves at about 2 mph. We know our blood keeps us alive but what is it made of and how does it work? Join science communicator, **James Piercy** on a brilliant journey inside your own blood vessels. Exploring red cells, white cells, plasma and platelets this interactive family show reveals the role of blood, how it moves round the body and what happens when you bleed.

Presented by Centre for Trauma Sciences Queen Mary University London

Mysteries of Animals 3D

SHOW | AGES 5+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
FRI 5 APR | 2PM | 1 HOUR | £6

Is the blue whale really the biggest animal ever to have existed? What killed the Megalodon shark? Did all dinosaurs lay shelled eggs? Why do animals sleep? Hosted by presenter and author **Jules Howard**, this lively show, interspersed with 3D videos that detail the latest science, outlines the weirdest and most elusive animal questions out there for future generations to discover. Are you up for the challenge of solving tomorrow's animal mysteries?

Presented by Jules Howard

The Rocket Show

SHOW | AGES 5+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
SUN 7 APR | 11.30AM & 2.30PM | 45 MINS | £6

Join our back-yard scientist and discover what it takes to build a rocket fit for space. In this explosive family-friendly adventure, delve into rocket science as we explore forces, test materials, and prepare for launch. So strap-in, countdown, and blast-off for a show that's out of this world. This is a friendly performance: there will be some loud noises, but you can download a visual story from our website and we'll have ear defenders available. For any audience members who need a break (or the loo!), re-entry to the show is allowed.

Presented by Edinburgh Science



Edinburgh Zoo

Have a wild day out this Easter at Edinburgh Zoo! Their world-class attractions and roar-some animal collection will give you and your family memories to last a lifetime.

SATURDAY 30 MARCH - SUNDAY 14 APRIL
10AM - 6PM (CLOSES 5PM ON SAT 30 & SUN 31 MAR)
134 CORSTORPHINE ROAD, CORSTORPHINE, EDINBURGH, EH12 6TS



Have Zoo Got What It Takes?

ACTIVITY | AGES 5+



EDINBURGH ZOO | LEMUR LODGE

WED 3 - THU 4 APR | 10AM - 1PM | DROP-IN

FREE WITH EDINBURGH ZOO ADMISSION TICKETS

Drop into Lemur Lodge this Easter for our Career Fayre! Meet some of the Edinburgh Zoo staff members and ask questions about their roles while taking part in fun and engaging activities. Visitors will have the opportunity to hear from keepers, vets, researchers and more to discover what it's like to work at the Royal Zoological Society of Scotland.

Presented by the Royal Zoological Society of Scotland

The Brainsy Brunch

ACTIVITY | ALL AGES



EDINBURGH ZOO | MEMBERS GATE ENTRANCE

SAT 6 & SAT 13 APR | 9AM | 2 HOURS

SEE WEBSITE FOR PRICING

Start your day with an exclusive pre-opening breakfast workshop with our discovery rangers, where you'll learn all about the importance of genetics and breeding for conservation purposes at the Royal Zoological Society of Scotland. The workshop will include activities and crafts for all ages to enjoy, followed by breakfast served in the Gannet restaurant. Tickets include entry to the zoo.

Presented by the Royal Zoological Society of Scotland

Wild Learning

ACTIVITY | ALL AGES



EDINBURGH ZOO | WILDLIFE GADEN

WED 10 - THU 11 APR | 11AM, 12PM & 2PM | 45 MINS

FREE WITH EDINBURGH ZOO ADMISSION,
WORKSHOP BOOKING REQUIRED

Learn something wild at Edinburgh Zoo's *Wild Learning* workshops, where your little ones can take part in a range of exciting activities and experimental play in our Wildlife Garden. Join us for nature inspired fun and games, crafts, STEM activities and outdoor free play for children of all ages to enjoy. Children must be accompanied by an adult.

Presented by the Royal Zoological Society of Scotland

Royal Botanic Garden Edinburgh

The Royal Botanic Garden Edinburgh is a world renowned centre for plant science and education, aiming to explore, conserve and explain the world of plants for a better future.

SATURDAY 30 MARCH–SUNDAY 14 APRIL, 10AM–6PM
JOHN HOPE GATEWAY, ARBORETUM PLACE, EH3 5NZ / EAST GATE, INVERLEITH ROW, EH3 5LR

Visit the Royal Botanic Garden Edinburgh for interactive family activities, exhibitions for all ages and discussions for adults and young people.



Don't miss their *Connecting Histories* and *Silent Archive* exhibitions [pg.39] running throughout the Festival.



Royal Botanic Garden Edinburgh

Connecting History

P.39 EXHIBITION | ALL AGES
SAT 30 MAR–SUN 14 APR | 10AM–6PM

Silent Archive

P.39 EXHIBITION | ALL AGES
SAT 30 MAR–SUN 14 APR | 10.30AM–5PM

Easter Trail

TOUR/TRAIL | AGES 3+



ROYAL BOTANIC GARDEN EDINBURGH

WEST & EAST GATES

SAT 30 MAR–SUN 14 APR | 10AM–4.30PM | DROP-IN
£3 PER BOOKLET

The Botanics bunny needs your help – she has lost her golden egg! Join her on a hunt around the garden and discover many other animals and their eggs. How many eggs can you spot in the garden? Complete the trail and collect a yummy Easter treat. Pick up a trail booklet at the West and East Gates.

Presented by Royal Botanic Garden Edinburgh

Nature Protectors

ACTIVITY | AGES 7+



ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY

SAT 6 APRIL | 10.30AM, 11.30AM, 1.30PM, 2.30PM & 3.30PM | 45 MINS | **FREE, BOOKING REQUIRED**

Do you want to know how the different plants used to build nests impact the chicks who hatch there? Or how satellites and matching colours are helping scientists learn more about what grows in hard-to-reach places? Join us for an interactive session to learn all this and more about the different skills and technologies that scientists, horticulturists, artists, and others are using to work together to protect nature. Children must be accompanied by an adult.

Presented by Royal Botanic Garden Edinburgh and St Andrews Botanic Garden in partnership with The National Lottery Heritage Fund

Build a Better City

ACTIVITY | AGES 5+



ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY

THU 11 APR | 12PM-4PM | DROP-IN | FREE

Can you imagine a city that is good for us, and good for the planet? By bringing nature into our cities, we can do so much; reduce pollution, stop flooding, regulate heat waves and help keep our minds and bodies healthy. Using LEGO® bricks, join our scientists to construct the city of the future where plants make a better place for us all. Build a wall of plants, a rain garden or even better something that no one has invented yet. Speak to our scientists and find out what they are doing to make our cities better.

Presented by Royal Botanic Garden Edinburgh

Meet the Scientist

ACTIVITY | ALL AGES



ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY

THU 11 APR | 12PM-4PM | DROP-IN | FREE

The Royal Botanic Garden Edinburgh is a global leader in botanical science research. This is growing more important due to climate change and biodiversity loss. Come and chat to some of our scientists and learn more about the research that is taking place.

Presented by Royal Botanic Garden Edinburgh

Frankenstein's Plants

ACTIVITY | AGES 3+



ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY

FRI 12-SUN 14 APR | 12PM-4PM | DROP-IN | FREE

Design and make your very own herbarium specimen to take home. Learn what data is important to collect and put on a specimen and how plants are named. Then once your specimen is ready, digitise it to an online catalogue so the world can view it. Find out from the real RBGE Herbarium staff how this fun task mimics the jobs they do every day in the internationally renowned Royal Botanic Garden Edinburgh Herbarium.

Presented by Royal Botanic Garden Edinburgh

Spring in the Vegetable Garden

ACTIVITY | ALL AGES



ROYAL BOTANIC GARDEN EDINBURGH

DEMONSTRATION GARDEN

SUN 14 APR | 12PM-4PM | DROP-IN | FREE

Join our annual spring event to discover how to grow your own food, whatever space you have. Explore our vegetable plots, meet the gardeners and discover fun family-friendly activities. From productive windowsill pots to allotments, there is something for everyone to dig into. This event is suitable for all ages, but children must be accompanied by an adult.

Presented by Royal Botanic Garden Edinburgh

Lichen Walk

TOUR | ALL AGES



ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY

SAT 13 APR | 2PM | 1 HOUR 30 MINS | £5

Scotland is home to more than 1500 species of lichens – fascinating organisms that often go unnoticed. Join one of our garden's scientists on a guided tour to learn about this hidden world. Using a hand lens, you will discover amazing colours and patterns, learn how they grow, and learn why they are so important to the natural world. Children must be accompanied by an adult, with a maximum of two children per adult.

Presented by Royal Botanic Garden Edinburgh



Dynamic Earth

Dynamic Earth is Edinburgh's world-class science centre and planetarium that tells the extraordinary story of planet Earth, from beginning to end. Through exhibition and events, they open the eyes of all kinds of people about planet Earth – its origin, history, its place in the Universe, its present state and potential future. It features a series of interactive exhibits, state of the art technology and even a 4D encounter – you will feel the heat of a bubbling volcano, face the chill of polar ice and fly across the globe before crash landing in a tropical rainforest.

SATURDAY 30 MARCH – SUNDAY 14 APRIL
CHECK DYNAMIC EARTH WEBSITE FOR OPENING HOURS
HOLYROOD ROAD, EDINBURGH, EH8 8AS

There's more to explore at Dynamic Earth. During the Science Festival, visit for a packed programme of events and experiences for families and adults alike.



Our World From Space

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE

SAT 30 MAR – WED 3 APR | 10AM – 4PM | DROP-IN | [FREE](#)

Join us at Dynamic Earth to learn how whatever we do and wherever we go, satellites are in the background supporting us! You can track tigers, tag turtles and even see if you can spot penguin poo from space, plus lots more exciting activities that put all eyes on Earth!

Presented by Dynamic Earth

It's Still a Wonderful Webb

P.39

EXHIBITION | ALL AGES

SAT 30 MAR – SUN 14 APR | 10AM – 4PM

Snippets of Scotland

P.39

EXHIBITION | ALL AGES

SAT 30 MAR – SUN 14 APR | 10AM – 4PM

Dynamic Earth's 'EggStravaganza' Trail

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE

SAT 30 MAR – SUN 14 APR | 10AM – 4PM | DROP-IN

£3 PLUS ADMISSION TO DYNAMIC EARTH

Join us at Dynamic Earth this Easter for an adventurous egg hunt unlike any other! Travel through time and scour our exhibition to find out all about eggs: from corals and dinosaurs to penguins and catsharks, a huge diversity of animals lay eggs of different shapes and sizes. Discover a host of surprising egggy stories, complete the trail and collect a tasty surprise gift!

Presented by Dynamic Earth

The Art of Rocks

P.25 ACTIVITY | AGES 14+
MON 1 APR | 11AM & 2PM

Animal Adventures

ACTIVITY | AGES 8+



DYNAMIC EARTH | DISCOVERY BASES
TUE 2 APR | 10.30AM & 2PM | 1 HOUR 30 MINS | £10/£8

Have you ever wanted to track a tiger? How about tagging a turtle? In this digital family workshop, you can do just that! Explore the movements of animals using satellite information, program a satellite to spot different animals and explore why animals migrate across the globe! Children must be accompanied by an adult, and all participants require a ticket. Presented by Dynamic Earth

Fire & Ice

ACTIVITY | AGES 8+



DYNAMIC EARTH | MEET AT STRATOSPHERE
WED 3 & WED 10 APR | 10.30AM & 2PM | 1 HOUR 30 MINS
£10/£8

Kickstart a family adventure in Holyrood Park with the Dynamic Earth team! In this outdoor family walk you'll connect with the nature and landscape of Edinburgh's great outdoors and explore how our local surroundings have been shaped by both fire and ice. From tropical seas to 350 million-year-old lava flows and boulders moved by ice, what will you discover? Children must be accompanied by an adult.

Presented by Dynamic Earth

Planet Protectors

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
THU 4-MON 8 APR | 10AM-4PM | DROP-IN | FREE

Earth is a beautiful and fragile place, and it's up to us to look after it! Join us at Dynamic Earth and learn about different ways you can become a planet protector, make your own mini bug hotel and natural plant pot, plus lots more exciting activities for the whole family! Presented by Dynamic Earth

Satellite Safari

ACTIVITY | UNDER 5S



DYNAMIC EARTH | DISCOVERY BASES
THU 4 APR | 10.30AM & 1.30PM | 45 MINS
£6 | FREE FOR ACCOMPANYING ADULT

In this Early Years session, children and their grown ups can enjoy a fun mix of storytelling, singing and crafting, all based around the satellites that keep watch on our planet! See if your eyes are as good at spotting animals as a satellite, and prepare to get dizzy as we spin in orbit, plus lots more fun activities! Children must be accompanied by an adult.

Presented by Dynamic Earth

Planetarium Late: You Are Here

SHOW | AGES 12+



DYNAMIC EARTH | PLANETARIUM
THU 4-SAT 6 APR & THU 11-SAT 13 APR | 6.30PM
45 MINS | ADULT £14/CONCESSION £12/CHILD £10

Take a journey across the Solar System, with spectacular stops along the way as we push the boundaries of human space exploration. As we venture further from Earth, we will remember to look back at our home in space – the pale blue dot. The Earth is the only world known so far to harbour life, and that life has been on an extraordinary journey. Join our expert astronomers on that journey and delve deeper into the Universe than ever before.

Presented by Dynamic Earth

Planetarium Late: What's Up?

SHOW | AGES 12+



DYNAMIC EARTH | PLANETARIUM
THU 4-SAT 6 APR & THU 11-SAT 13 APR | 7.30PM
45 MINS | ADULT £14/CONCESSION £12/CHILD £10

Let Dynamic Earth's astronomers guide you through the season's highlights of *What's Up* in the spring skies. Our stunning 6K planetarium allows you to travel through space in style, catching up with recent space missions, breaking news and the latest spectacular imagery. No corner of the Universe is off-limits in this show packed with exclusive content! Presented by Dynamic Earth

Planetarium Late: Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+ | THU 4-SAT 6 APR & THU 11-SAT 13 APR
8.30PM

Icy Investigations

ACTIVITY | AGES 8+



DYNAMIC EARTH | DISCOVERY BASES
FRI 5 APR | 10.30AM & 2PM | 1 HOUR 30 MINS | £10/£8

What will happen if the world keeps getting warmer? Why do we want to stop our ice caps melting? In this digital family workshop, you can explore these issues through a blend of coding and experimenting with digital technology! Children must be accompanied by an adult, and all participants require a ticket. Presented by Dynamic Earth

Senses Working Overtime

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
MON 8 APR | 10AM-4PM | DROP-IN | FREE

Join us at Dynamic Earth to meet with experts from the James Hutton Institute and learn all about the power of plants! Discover all the different tastes of the plant palate and see how they can be sweet, salty, bitter and sour, learn all about colour-changing carrots, see how advanced technology can show us how we will use plants in future and even see if a plant can remove your own sense of taste – just for a little while!

Presented by Dynamic Earth and the James Hutton Institute

Carbon Capturers

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
TUE 9 APR | 10AM-4PM | DROP-IN | **FREE**

Join us at Dynamic Earth to meet scientists from The University of Edinburgh who are working on real solutions to some big environmental problems! See first-hand how issues such as carbon emissions and freshwater shortages are being tackled here in Edinburgh, and talk to the experts that are helping solve these global problems! Children must be accompanied by an adult.

Presented by Dynamic Earth and The University of Edinburgh

Prehistoric Planet

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
TUE 9-SUN 14 APR | 10AM-4PM | DROP-IN | **FREE**

Join us at Dynamic Earth for a trip back in time to when dinosaurs ruled the land! Become a palaeontologist and dig up some ancient dino bones, craft your own fossils to take home and explore dinosaurs in augmented reality, alongside lots more fun activities for the whole family – there's lots to sink your teeth into! Presented by Dynamic Earth

Clever Creatures

ACTIVITY | AGES 8+



DYNAMIC EARTH | DISCOVERY BASES
TUE 9 APR | 10.30AM & 2PM | 1 HOUR 30 MINS | **£10/£8**

How can some animals survive in the freezing cold, and others in the pitch darkness? In this digital family workshop, you can investigate the many different ways that animals can adapt to their environments and code a game that explores animal habitats! Children must be accompanied by an adult, and all participants require a ticket.

Presented by Dynamic Earth

The Power of the Planet Showcase

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
WED 10 APR | 10AM-4PM | DROP-IN | **FREE**

Join us at Dynamic Earth for a special event where you can meet Earth's real 'rock stars' – experts in the field of geology! Quiz experts from the British Geological Survey and find out through dazzling displays and fun hands-on activities what deep secrets of the earth can be unlocked by rocks! Children must be accompanied by an adult.

Presented by Dynamic Earth and the British Geological Survey

Climate Hope: Building a Better Future

P. 31 DISCUSSION | AGES 12+
WED 10 APR | 7PM

World of Water

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
THU 11-SAT 13 APR | 10AM-4PM | DROP-IN | **FREE**

Meet with experts from the UK Centre for Ecology and Hydrology and learn how the water cycle will help us to face the challenges of a changing climate! Explore soil quality, get hands-on with an augmented reality sandbox to explore how we can manage floods and droughts, and learn just how much water is required to produce everyday meals as we look towards feeding the future.

Presented by Dynamic Earth and UKCEH

Jurassic Juniors

ACTIVITY | UNDER 5S



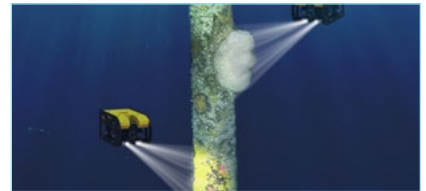
DYNAMIC EARTH | DISCOVERY BASES
THU 11 APR | 10.30AM & 1.30PM | 45 MINS
£6 | FREE FOR ACCOMPANYING ADULT

Join us at Dynamic Earth for a 'roarsome' Early Years session! Can you do a dinosaur stomp? Do you know your T-Rex from your Triceratops? Budding palaeontologists will love this session where we sing songs, get crafty and let out our inner dinosaur! Children must be accompanied by an adult.

Presented by Dynamic Earth

North Sea 3D

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
FRI 12 APR | 10AM-4PM | DROP-IN | **FREE**

Join experts from the Scottish Association for Marine Science to become a marine scientist for the day and explore underwater worlds! Discover in virtual reality what lies beneath a North Sea wind-farm, experience marine life that calls these human-made structures home, and try your hand at controlling an actual underwater robot from the comfort of Dynamic Earth by remotely piloting a research vehicle around an underwater obstacle course!

Presented by Dynamic Earth and SAMS

Climate Hope: Hands-on

ACTIVITY | ALL AGES



DYNAMIC EARTH | STRATOSPHERE
SAT 13 APRIL | 10AM-4PM | DROP-IN | **FREE**

Discover the creativity at the heart of climate research being carried out at Heriot-Watt University. Get hands on with painting and construction, learn more about sustainable buildings and plunge into the deep to discover some the ground-breaking solutions that are helping us to build a more sustainable future.

Presented by Heriot-Watt University and Dynamic Earth

Around Edinburgh

You'll find Science Festival events all over the city and in some of Scotland's picturesque coastal towns. The ultimate science days out – right on your doorstep!

Some of these events take place outdoors – please ensure you are dressed for the Edinburgh weather, including a warm coat and waterproof shoes.

Medical History Tours

TOUR | AGES 5+



THE REAL MARY KING'S CLOSE

SAT 30 MAR, SAT 6 & SAT 14 APR | 4PM, 5.30PM & 7PM
1 HOUR | ADULT £27/CHILD (5-15 YEARS) £22

Step back in time and embark on a captivating 1 hour guided tour through the heart of Edinburgh's rich medical history. Follow one of Mary King's Close's past residents in underground alleyways, delve deeper into the Plague outbreak of 1645, learn how Dr Arnott diagnosed his patients by tasting their urine and uncover the story of the Edinburgh Seven. *The Medical History Tour* promises not only to educate but also to inspire, leaving you with a sense of wonder and curiosity about the future of medicine.

Presented by The Real Mary King's Close

Flying Into the Future

ACTIVITY | ALL AGES



NATIONAL MUSEUM OF FLIGHT | CONCORDE HANGAR

MON 1-FRI 5 APR | 11AM-3PM | DROP-IN
FREE WITH ENTRY TO THE NATIONAL MUSEUM OF FLIGHT

Explore the future of flight through a range of fun activities at the National Museum of Flight. From airships to autogyros and electric to hydrogen-powered aircraft, you will discover how we might fly in the future with fun family activities. Activities include a family-friendly technical challenge to build something that flies out of craft materials, a staff-led tour of the Civil Aviation Hangar and a trail exploring the 50+ aircraft on display in the museum.

Presented by National Museums Scotland

Pounds and Pence – The Science in your Pocket: Coins

ACTIVITY | AGES 5+



MUSEUM ON THE MOUND

TUE 2-SAT 6 & TUE 9-SAT 13 APR | 10AM-1PM | DROP-IN
FREE

R RELAXED WORKSHOP | MON 8 APR | 11AM & 2PM
BOOKING REQUIRED

Using a wealth of fascinating material, discover the materials and methods used to make coins. You'll even have the opportunity to strike your very own coin! An adapted version of this event can be enjoyed as a relaxed workshop at 11am and 2pm on Mon 8 Apr – booking required for the relaxed sessions.

Presented by Museum on the Mound, Lloyds Banking Group

Pounds and Pence – The Science in your Pocket: Banknotes

ACTIVITY | AGES 5+



MUSEUM ON THE MOUND

TUE 2–SAT 6 & TUE 9–SAT 13 APR | 2PM–5PM | DROP-IN

FREE

RELAXED WORKSHOP | MON 8 APR | 11AM & 2PM
BOOKING REQUIRED

Using rarely seen specimens from the Bank of Scotland, examine the complexity of banknote design using microscopes, explore the security features on banknotes and pit polymer against paper to test for strength. An adapted version of this event can be enjoyed as a relaxed workshop at 11am and 2pm on Mon 8 Apr – booking required for the relaxed sessions.

Presented by Museum on the Mound, Lloyds Banking Group

The Story of CO₂

TOUR | AGES 8+



UNIVERSITY OF EDINBURGH

OLD COLLEGE, SOUTH BRIDGE

FRI 5 APR | 10AM & 1PM | 1 HOUR

ADULT £2/UNDER 16 FREE

Retrace the footsteps of Prof Joseph Black who discovered carbon dioxide in Edinburgh in 1754. This short walk will highlight some of the places and instruments associated with the eminent Enlightenment chemist including his former laboratory, residence and some of the surviving glassware he used to make CO₂. Children must be accompanied by an adult.

Presented by The University of Edinburgh

Discover Edinburgh's Mathematical History

TOUR | ALL AGES



CASTLEHILL | WITCHES' WELL

SAT 6 & SAT 13 APR | 11AM | 1 HOUR 30 MINS

ADULT £2/UNDER 16 FREE

Learn about the mathematics and history that has shaped Edinburgh, and the world at large, as we take you on a tour down the Royal Mile. History will be brought to life by some of the University of Edinburgh's mathematicians in this tour that's perfect for families, adults, mathematicians and non-mathematicians alike. Tour finishes at the Scottish Parliament. Children must be accompanied by an adult.

Presented by The University of Edinburgh

Seaside Science Skills

ACTIVITY | AGES 7+



SCOTTISH SEABIRD CENTRE

WED 10–SAT 13 APR | 11AM | 1 HOUR 30 MINS

ADULT £10/CHILD £7.50

Calling future marine biologists! Join the Scottish Seabird Centre team for an introduction to the wonderful world of marine science. Learn how to identify rockpool creatures on the shore and practice different key science skills through family-friendly activities and games. An inspiring, informative session for budding marine scientists or anyone with a general interest in the sea. Please wear shoes with good grip and wear suitable clothing for the outdoors. Children must be accompanied by an adult and advance booking is essential.

Presented by Scottish Seabird Centre

Explore Beach Pebbles: Windows to the World

ACTIVITY | ALL AGES



BEACHES AROUND EDINBURGH

SEE OUR WEBSITE FOR DETAILS

THU 11–SUN 14 APR | 10AM, 11AM & 12PM | 1 HOUR

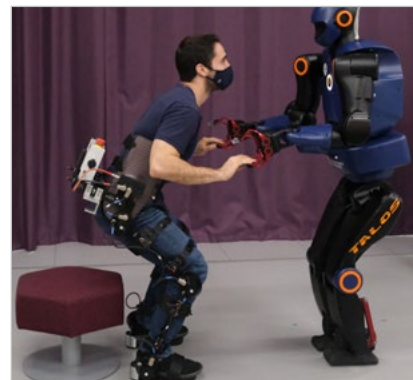
FREE BOOKING REQUIRED

Come and explore beach pebbles and find out about the stories hidden in every stone. We'll discover an amazing variety of different types of pebble, find out where they come from and what they tell us about Scotland's geology. We'll also explore why the beach looks the way it does, and how it might change in the next few decades with climate change.

Presented by Edinburgh Geological Society

Bayes Centre Tour: Meet the Robots

TOUR | ALL AGES



THE UNIVERSITY OF EDINBURGH | BAYES CENTRE

FRI 12 APR | 9AM, 10AM, 11AM, 2PM, 3PM & 4PM | 1 HOUR

ADULT £2/UNDER 18 FREE

Dive into the fascinating world of robotics with the Statistical Machine Learning and Motor Control Lab (SLMC) at the Edinburgh Centre for Robotics. Discover groundbreaking robotic technologies such as Exoskeletons for enhanced mobility, the humanoids Talos and EVA, and robotic arms for handling objects. Experience first-hand the thrill of operating some of these platforms. This isn't just a showcase, but an immersive journey into the future of human-robot interaction. Join us and see how technology can support our lives! Children must be accompanied by an adult.

Presented by The University of Edinburgh

Robotics Unveiled at the National Robotarium

TOUR | ALL AGES



HERIOT-WATT UNIVERSITY CAMPUS
NATIONAL ROBOTARIUM

FRI 12 APR | 10AM, 12.30PM, 3PM | 1 HOUR 40 MINS
ADULT £2/UNDER 16 FREE

Come and explore the National Robotarium, the UK's newest, fanciest, cutting edge centre of all things robotics! The whole family is welcome to join our interactive tour where you'll meet the robot petting zoo, see the latest artificial intelligence and find out what happens when science, creativity and healthcare collide. The Robotarium's brilliant scientists and engineers can't wait to meet you and show you how robots can make our lives safer, healthier and more productive. Under 16s must be accompanied by an adult.

Presented and supported by



Exploring Edinburgh's Urban Outdoors

TOUR | ALL AGES



UNIVERSITY OF EDINBURGH
MAIN LIBRARY, GEORGE SQUARE

FRI 12 - SAT 13 APR | 10AM, 12PM & 2PM | 1 HOUR 30 MINS
ADULT £2/CHILD FREE

Join this guided walk through some of Edinburgh's green and blue spaces and explore how contact between humans and the natural environment can result in a range of health and well-being benefits. Using the Our Outdoors app throughout the tour, you'll have the chance to help contribute research data as a citizen scientist! Children must be accompanied by an adult.

Presented by The University of Edinburgh

Aged 12-18?

Explore the wonders of STEM for less – use promo code **TEENTALK** to get £5 tickets to our talk and discussion events at the National Museum of Scotland and The Bayes Centre.



Save the date!

Edinburgh International
Children's
Festival

The World's Best
Theatre and Dance
Young



Edinburgh International
**Children's
Festival**
25 May – 2 June 2024

What to expect at the Festival:

- ★ 14 visually stunning theatre, circus and dance shows
- ★ Inspiring performances to stimulate young minds
- ★ Sat 25 May: Free Family day at the National Museum

Programme announced and tickets on sale from 20 March
www.imagine.org.uk



ALBA | CHRUTHACHAL

THE CITY OF EDINBURGH COUNCIL

Scottish Government
Riaghaltas na h-Alba
gov.scot

Science for Adults

Our Science for Adults events have something for everyone! Our programme of talks and discussions will inspire ideas, inspire debate and, most importantly, inspire hope. Learn how we can ethically embrace Artificial Intelligence to tackle the climate crisis, see how neanderthal DNA affects us today and explore the science behind magic and illusions.

Take part in adult workshops that combine science with art and join tours that explore Edinburgh's ground-breaking scientific history.

Explore our full Adult programme – including our **Science Nights Out** [pg.35-37] – in our quick reference guide located on [pg.47]

Early Bird Tickets

Save £2 per ticket on our talk and discussion events at the National Museum of Scotland and The Bayes Centre if booked before Sunday 3 March. Call the Box Office or book online using the code EARLYBIRD24.

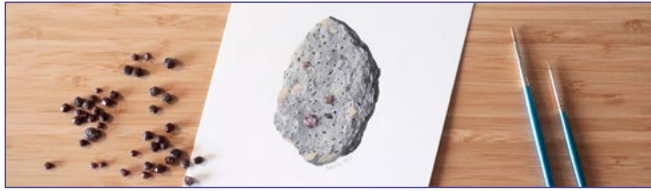
Big Ideas, Small Price

Aged 12-18? Explore the wonders of STEM for less – use promo code TEENTALK to get £5 tickets to our talk and discussion events at the National Museum of Scotland and The Bayes Centre.



The Art of Rocks

ACTIVITY | AGES 14+



DYNAMIC EARTH | DISCOVERY BASES

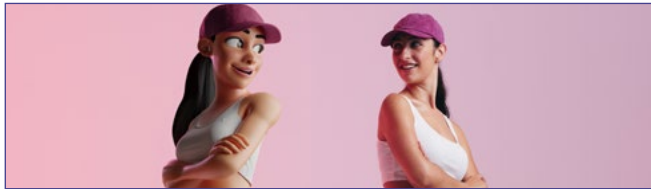
MON 1 APR | 11AM & 2PM | 1 HOUR 30 MINS | £10/£8

Get inspired by geology in this creative workshop! You will explore rocks from both creative and scientific points of view with the guidance of science artist **Vojta Hybl**. Vojta will take you through the basics of doing your own illustration of a rock specimen and show you how to identify it based on careful observations of its features. No art experience is necessary.

Presented by Dynamic Earth

Virtual Twins

DISCUSSION | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

MON 1 APR | 6PM | 1 HOUR | £12/£10

Discover how scientists around the world are working to build digital twins to enhance our future lives. Authors of the new book *Virtual You*, **Peter Coveney** and **Roger Highfield** reveal how digital human twins can help with virtual drug trials, predict our risk of disease, and extend our life expectancy. Join them in conversation with BBC Health and Science presenter **Laura Foster** to discuss the history and context of digital twin research, from modelling cars, spacecraft and even Earth itself, and the future of digital twins in the clinic to herald a new era of truly personalised and predictive medicine.

Presented by Princeton University Press

Science and Solutions for a Clean Ocean

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

MON 1 APR | 8PM | 1 HOUR | £12/£10

You might not look to your washing machine as a major culprit of pollution but microplastics and fibres from synthetic clothing are constantly being washed into our waterways and can be found everywhere, from the deepest depths of the oceans to food products and even in our own bodies. Join National Geographic Explorer and Founder of Rozalia Project for a Clean Ocean **Rachael Miller** as she guides us through the problem with plastic and the innovative new technologies that are helping us to solve this critical environmental challenge.

Supported by



U.S. Embassy London

Disposing of the Body

DISCUSSION | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

TUE 2 APR | 6PM | 1 HOUR 15 MINS | £12/£10

What happens to our bodies after we die? From the rising demand for greener funerals, to water cremation and human composting, choices are no longer limited to burial or cremation. Or would you like to donate your body to science at one of the world's "body farms" – a place where decomposing cadavers can be studied? Join our panel of experts lifting the shroud on the fascinating and taboo topic of alternative post-mortem care; Funeral Arranger and host of the *Deathinitions* podcast **Jasper Chanter**, Forensic Anthropologist **Prof Anna Williams** and Human Remains Conservator at Surgeon's Hall Museums **Cat Irving**. Chaired by BBC Health and Science presenter **Laura Foster**.

How to Look After Your Brain

DISCUSSION | AGES 12+



BAYES CENTRE, POTTERROW

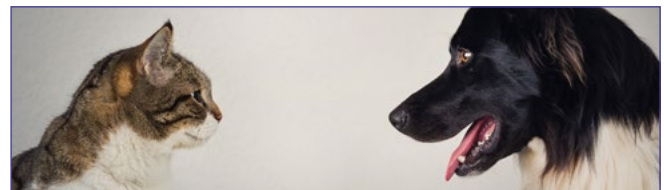
TUE 2 APR | 7PM | 1 HOUR | £12/£10

In this interactive discussion with **Dr Catherine Pennington** from Edinburgh Dementia Prevention, we will discuss the knowns and unknowns of brain health. How do we slow down brain ageing? Can we prevent dementia? Is staying sharp into old age down to your genes, your environment or just good luck? Come along and learn how you can look after your amazing brain!

Presented by The University of Edinburgh

Cats Versus Dogs

DISCUSSION | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

TUE 2 APR | 8PM | 1 HOUR | £12/£10

Are you a die-hard dog lover or a best friend of felines? Have your say and join zoologist and author of *Wonderdog* **Jules Howard** and feline behaviour expert and co-author of *The Trainable Cat* **Dr Sarah Ellis** as they go head to head in a claws-out debate on which animal deserves your vote for our undying affection.

Presented by Jules Howard

Edinburgh Medal Address: Good Pharma – For Patients Not Patents

TALK | AGES 12+



CITY CHAMBERS | COUNCIL CHAMBER

TUE 2 APR | 7PM | 1 HOUR | £12/£10

Each year *The Edinburgh Medal* is presented to those who have made a significant contribution to the wellbeing and understanding of humanity through the sciences. This year's recipient is the **Mario Negri Institute for Pharmacological Research**, a pioneer nonprofit research institute dedicated to open clinical and biomedical research.

Director **Giuseppe Remuzzi** will accept the medal on behalf of the Institute and share his insights into the benefits of the approach of this exceptional research team that does science for social good.

When the Institute opened in 1963, it represented an unusual kind of organisation, one which was totally independent of the pharmaceutical industry, the state, universities, politics, investors and religious ideologies.

For over 60 years, the researchers have been conducting first-class research in a collegial, open science culture, where the research teams retain control over research design, data, methods, results, and publications. Honouring the long-time tradition of considering medicines as a public good, the Institute has decided not to seek patents and profits from royalties, in the belief that such pursuit compromises good science.

A patient-centric philosophy has created a unique framework at the Institute for research on unmet clinical needs, considered too unprofitable or unpatentable by big corporations, thus fostering a paragon of doing science as a true social good.

The Edinburgh Medal is awarded by the **Lord Provost of the City of Edinburgh**, with an oration to be delivered by **Sir Iain Chalmers** and the Vote of Thanks from **Prof Wendy Bickmore**.

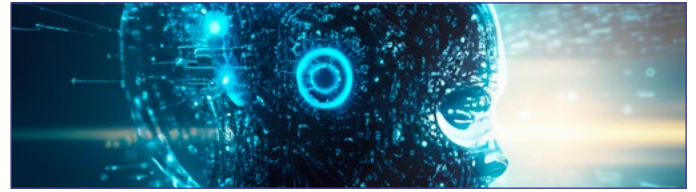
Previous Recipients

2023 Prof Marion Nestle	2006 Prof James Lovelock
2022 Dr Gladys Kalema-Zikusoka	2005 Prof Colin Blakemore
2021 Prof Heidi Larson	2004 Prof Steven Rose
2020 Sunita Narain	2003 Prof Wang Sung
2019 Christiana Figueres	2002 Dr Lise Kingo
2018 Prof Cordelia Fine	2001 Sir John Sulston
2017 Prof Peter Piot	2000 Prof Lynn Margulis
2016 Kevin Govender & IAU	1999 Prof Jocelyn Bell Burnell
2015 Mary Midgley	1998 Sir David Attenborough
2014 Prof Mary Abukutsa-Onyango	1997 Prof Amartya Sen
2013 Prof Peter Higgs & CERN	1996 Prof Richard Levins
2012 Dr James Hansen	1995 Sir John Crofton
2011 Prof Carl Djerassi	1994 Prof Manuel Patarroya
2010 Sir Alex Jefferies	1993 Prof Wangari Maathai
2009 Prof Jonathan Beckwith	1992 Prof Heinz Wolff
2008 Prof Chris Rapley	1991 Prof Jane Goodall
2007 Dr Richard Horton	1990 Prof Stephen J Gould
	1989 Prof Abdus Salam

Wednesday 3 April

The Future of AI

DISCUSSION | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

WED 3 APR | 6PM | 1 HOUR 15 MINS | £12/£10

Join Director of the AI & Geopolitics Project at the University of Cambridge and former Global Head of Policy for Google DeepMind **Verity Harding** and AI Editor at the Financial Times **Madhumita Murgia** as they explore how the rise of artificial intelligence permeates our lives. From advances in disease diagnosis and treatment to the hidden carbon cost of AI, discover how this revolutionary technology will affect global politics and society. Chaired by futurist and ethics in Artificial Intelligence Champion at the University of Salford **Prof Andy Miah**.

Presented by Princeton University Press and Pan Macmillan

Custodians of the Cosmos

DISCUSSION | AGES 12+



ROYAL SOCIETY OF EDINBURGH, GEORGE STREET

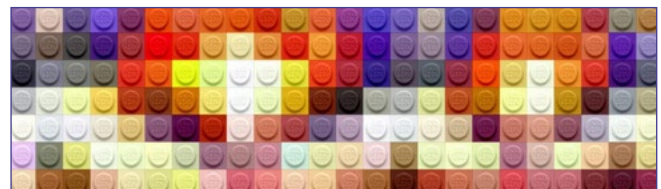
WED 3 APR | 6.30PM | 1 HOUR | FREE BOOKING REQUIRED

Join **Prof Andy Lawrence** from The Royal Observatory Edinburgh and eminent photographer **Max Alexander** for an exploration of the central role that space plays in our everyday lives. Learn about the increasing threat of space debris and why studying the skies is of vital cultural and economic importance. Discover the people and technology that are working to protect this fragile environment and how unconstrained growth may put both space activity and astronomy at risk. This discussion is centred on the themes of Max Alexander's major photography exhibition *Our Fragile Space*, which is exhibited throughout the Festival on The Mound.

Presented by Royal Observatory Edinburgh and Royal Society of Edinburgh

Identity by Algorithm

DISCUSSION | AGES 12+



BAYES CENTRE, POTTERROW

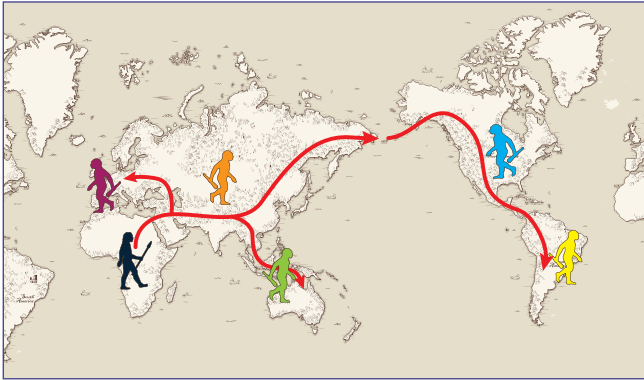
WED 3 APR | 7PM | 1 HOUR | £12/£10

Does it matter to you how you describe yourself? Increasingly, AI is being used to identify patterns in the huge quantities of health and wellbeing data each of us generates every day. These patterns can help to identify new diagnoses or risk profiles, but they also create new ways of thinking about who we are. This conversation between bioethicists, philosophers, and data specialists invites you to consider whether you want to outsource the job of deciding 'what sorts of people we can be' to algorithms.

Presented by The University of Edinburgh

Ancient DNA, Modern Medicine

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
WED 3 APR | 8PM | 1 HOUR 15 MINS | £12/£10

Discover how cutting edge genetic science is helping to answer the age-old question: where do we come from? We are each made up of 1–4% of Neanderthal DNA, which has some surprising effects on our immune systems today. Join Director of the Mario Negri Institute for Pharmacological Research **Prof Giuseppe Remuzzi** as he uncovers the fascinating trail of how our ancient ancestors were able to survive, what they have passed down to us in our own DNA and why it is so important to how we manage modern health and disease. Chaired by writer and presenter **Zara Janjua**.

Thursday 4 April

Planetarium Late: You Are Here

P.19 SHOW | AGES 12+
6.30PM | DYNAMIC EARTH

Planetarium Late: What's Up?

P.19 SHOW | AGES 12+
7.30PM | DYNAMIC EARTH

Planetarium Late: Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+
8.30PM | DYNAMIC EARTH

Healthy Pregnancies, Healthy Lives

ACTIVITY | AGES 12+



BAYES CENTRE, POTTERROW
THU 4 APRIL | 7PM | 2 HOURS | £12/£10

Join our interactive workshop highlighting cutting edge pregnancy research. Flash talks from interdisciplinary researchers will show how health in pregnancy builds lifelong health for parents, children and communities. We will explore the potential of digital data to help us learn about how our environment affects healthy pregnancy and childhood growth, the links between physical and mental health for mums and children and the role of society in promoting health.

Presented by The University of Edinburgh

Women in

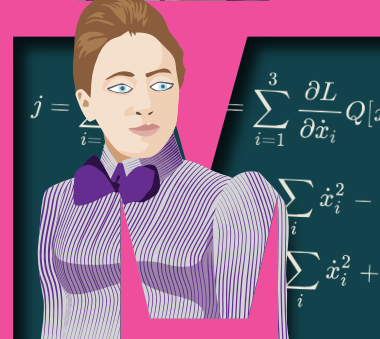
Jocelyn Bell Burnell



Annie Easley



Marie Curie



Emmy Noether

Science for Adults

Representation remains vitally important in the world of science, technology, engineering and mathematics (STEM), and the Edinburgh Science Festival are proud to champion the achievements of women in science and science communication. We strive to promote, encourage and inspire the next generation of women into STEM by showcasing some of amazing women in a series of panel events and discussions. Here are just some of the highlights from this year's programme:

P.25	DISPOSING OF THE BODY TUE 2 APR 6PM NATIONAL MUSEUM OF SCOTLAND
P.26	THE FUTURE OF AI WED 3 APR 6PM NATIONAL MUSEUM OF SCOTLAND
P.28	INDECENT INSECTS FRI 5 APR 6PM NATIONAL MUSEUM OF SCOTLAND
P.31	HOW WILL AI SHAPE OUR HEALTH? WED 10 APR 6PM BAYES CENTRE, POTTERROW
P.32	THE FUTURE OF TRANSPORT THU 11 APR 6PM NATIONAL MUSEUM OF SCOTLAND

Friday 5 April

Planetarium Late: You Are Here

P.19 SHOW | AGES 12+
6.30PM | DYNAMIC EARTH

Planetarium Late: What's Up?

P.19 SHOW | AGES 12+
7.30PM | DYNAMIC EARTH

Planetarium Late: Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+
8.30PM | DYNAMIC EARTH

Transformative Spaces: Science-Art Residencies

DISCUSSION | AGES 12+



INSPACE, CRICHTON STREET

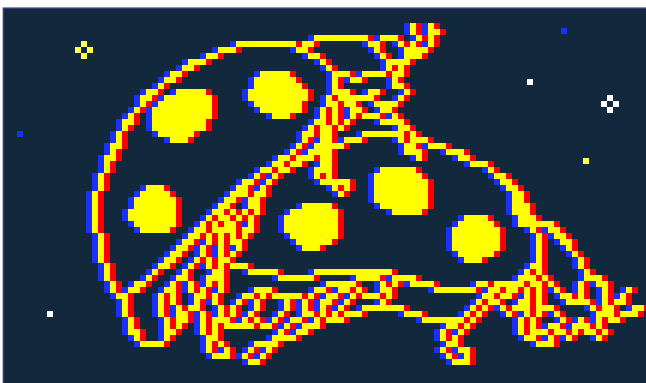
FRI 5 APR | 6PM | 2 HOURS | FREE BOOKING REQUIRED

This panel brings together **Fiona Smith** (Creator-in-residence), **Matthias Günther** and **Bianka Hofmann** (Fraunhofer MEVIS) and the Institute for Design Informatics, University of Edinburgh, to give insights into the "STEAM Imaging V" residency. Join this event to learn how artists, scientists, and school students created an innovative science engagement space to explore the promises and challenges of AI in future healthcare.

Presented by The University of Edinburgh

Indecent Insects

DISCUSSION | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

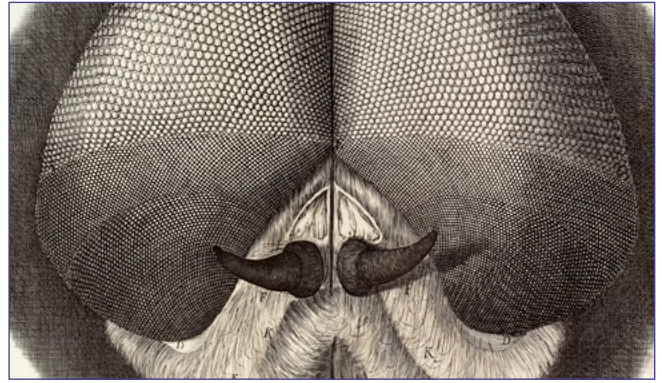
FRI 5 APR | 6PM | 1 HOUR | £12/£10

They lie, steal, kiss and sing. They offer gifts, create mind-altering chemical cocktails and, sometimes, explode and chew off their genitals – all to secure the next generation. We bet you didn't know how diverse insects' sex lives can be! Naturalist and author **Jules Howard** is joined by world fly expert **Dr Erica McAlister** to fill you in on all the latest discoveries in insect sex science in their trademark light-hearted style.

Presented by Jules Howard and Dr Erica McAlister

Microphones, Microscopes, Micrographia

SHOW | AGES 12+



BAYES CENTRE, POTTERROW

FRI 5 APR | 7PM | 1 HOUR | £12/£10

Robert Hooke's remarkable 1655 book *Micrographia* details the wonderful sights viewed through early microscope and telescope lenses. His spectacular hand-drawn images of fleas, snowflakes and cells have become world-famous. Composer **Timothy Cooper** uses microphones as 'microscopes for the ear', revealing tiny, quiet sounds that become the basis of his music, and is creating new pieces exploring Hooke's work. Join Cooper and musicians **László Rózsa** and **Lucia Capellaro** as they share and discuss these compositions, showcasing ways to use microphones like microscopes.

Presented by The University of Edinburgh

Saturday 6 April

Planetarium Late: You Are Here

P.19 SHOW | AGES 12+
6.30PM | DYNAMIC EARTH

Planetarium Late: What's Up?

P.19 SHOW | AGES 12+
7.30PM | DYNAMIC EARTH

Planetarium Late: Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+
8.30PM | DYNAMIC EARTH

Monday 8 April

Two Truths and a Robot Lie

ACTIVITY | AGES 11+



PANMURE HOUSE

MON 8 APR | 10AM, 12.30PM & 3PM | 1 HOUR 30 MINS | £12/£10

Can you trust a robot? This interactive experience explores deception, truth and robotics. Travel around the historic Panmure House and encounter the future. With a series of interactive games, you'll have the chance to come face-to-face with cutting edge technology... and find out if you can believe it.

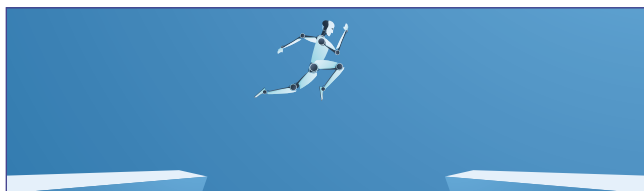
Presented and supported by



THE NATIONAL
ROBOTARIUM
PEOPLE CENTRED - INTELLIGENCE DRIVEN

The Promises and Pitfalls of AI

DISCUSSION | AGES 12+

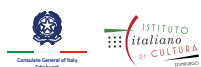


NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

MON 8 APR | 6PM | 1 HOUR 15 MINS | £12/£10

Artificial intelligence is increasingly built into our lives, helping to deliver economic and social benefits to a rapidly expanding global population. But debates about the ethical consequences of AI are never far from the headlines. Join Chemical Engineer **Prof Raffaella Ocone**, Quantum Scientist **Prof Daniele Faccio**, and Medicinal Chemist **Prof Stefano Moro** as they explore how AI is shaping their scientific fields and why it is so much more than just ChatGPT.

Supported by



Carbon Capture and Storage for a Net-Zero Future

DISCUSSION | AGES 12+



BAYES CENTRE, POTTERROW

MON 8 APR | 7PM | 1 HOUR 30 MINS | £12/£10

Join researchers from the School of Geosciences and the School of Social and Political Science who will be discussing the role of the latest technologies and nature-based solutions to remove carbon dioxide from the atmosphere in tackling climate change. How effective are they? How much carbon dioxide can be captured and stored? What are the risks of storing carbon dioxide underground? As carbon emissions continue to rise, what are the risks of not doing so?

Presented by The University of Edinburgh

The Secret Psychology of Magic

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

MON 8 APR | 8PM | 1 HOUR | £12/£10 |  BSL INTERPRETED

Join psychologist and magician **Prof Richard Wiseman** as he explores the secret world of magic and illusion. See some of the world's great optical illusions, explore the secret psychology of magic, find out why learning to perform the impossible is good for you and discover how to transform a tea towel into a chicken! A fun, entertaining and interactive journey into the fascinating world of mystery and magic.

Presented by Richard Wiseman

Support Our Charitable Work

We are one of Scotland's largest science, technology, engineering and mathematics (STEM) education charities, bringing the wonder of science to thousands of children and communities for over 30 years.

Every year we open the doors of the Edinburgh Science Festival for free to local school pupils and community groups, who would otherwise miss out on these unique experiences. Our year-round education programmes bring immersive science activities directly into classrooms across Scotland, inspiring pupils with the idea that STEM is for everyone.

We can only do this with the support of people like you. **Please consider adding a donation to your booking to help us continue our vital work.**



Be A Catalyst – Create Change

Our Catalysts are a dedicated group of individuals who share our vision to inspire, encourage and challenge people of all ages and backgrounds to explore and understand the world around them.

Will you join us?

Do you want to be part of inspiring others and showing people of every age that science is all around us? Make a financial gift today to support our year round work sharing science outwith the Festival to inspire the next generation of innovators and change makers.

For more information on becoming a Catalyst, seeing behind the scenes of our projects, invitations to special events and how your contribution will create change visit sciencefestival.co.uk/support-us

Email hannahs@scifest.co.uk to speak to Hannah Schlesinger, Director of Development and Marketing.

With Thanks to our Catalysts

Benefactors

Paul Atkinson
David Milne
The Nimar Charitable Trust

Innovators

Joe Faraday
Ron Inglis
Dawn Robertson
Ian Wall

Patrons

Janet Brown
Brendan Dick
Edina Trust
Simon Gage
Richard Kimberlin
Mairi Mickel
Ian Ritchie

And all those who wish to remain anonymous

A Very Short Introduction to Fractals

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

TUE 9 APR | 1PM | 1 HOUR | £12/£10

Many are familiar with the beauty of fractal forms within nature. Fractal geometry describes familiar shapes and patterns, such as the complex contours of coastlines, the outlines of clouds, and the branching of trees. Professor of Pure Mathematics at University of St Andrews **Kenneth Falconer** presents the 'new geometry' of fractals and explores the wide range of applications in science and in aspects of economics.

Presented by Oxford University Press

Free Agents

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

TUE 9 APR | 6PM | 1 HOUR | £12/£10

Join leading neuroscientist **Kevin Mitchell** on an astonishing journey of discovery about ourselves and how brain activity controls our behaviour. In this fascinating talk, Mitchell makes the evolutionary case for free will, arguing that we are not mere machines responding to physical forces but agents acting with purpose. Learn how, across a billion years of Earth history, life evolved the power to choose and why it matters.

Presented by Princeton University Press

Perspectives on Mental Health

DISCUSSION | AGES 12+



BAYES CENTRE, POTTERROW

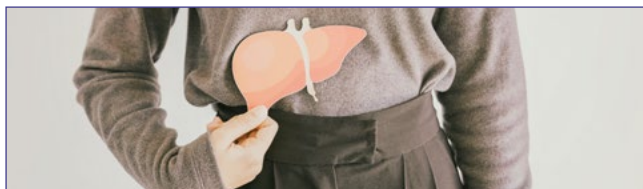
TUE 9 APR | 7PM | 1 HOUR 30 MINS | £12/£10

Join our experts for a documentary film screening and panel discussion exploring mental health. While our film explores the lived experience of hearing voices and other unusual sensory perceptions, our researchers discuss the history of mental health research and today's cutting edge use of brain scans and genetics. Discover how environmental risk factors, such as traumatic events, interact with the genome and provide new promises for personalised medicine. Find out how people with lived experience of mental illness are informing and influencing future research. We then invite the audience to share their perspectives and engage in discussion with our panel.

Presented by The University of Edinburgh

Liver Transplant – How Hard Can it Be?

ACTIVITY | AGES 12+



OLD COLLEGE, SOUTH BRIDGE | PLAYFAIR LIBRARY

TUE 9 APR | 7.30PM | 1 HOUR 30 MINS | £12/£10

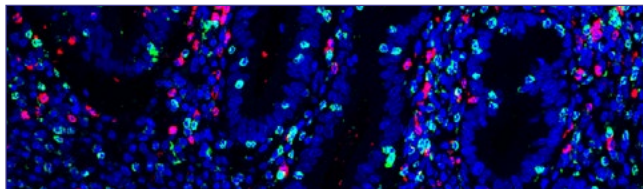
Surgeons **Ian Currie**, **Chris Johnston** and **Ben Stutchfield** and lead perfusion specialist **Fiona Hunt** explore the liver and liver transplants. How does the liver work, and how can we keep it alive outside the body? How do we resuscitate organs and how do we know the liver is going to work after transplant? Discover more about this fascinating organ through visual material, equipment displays, hands-on demos and audience participation. Learn from the experts and try your hand!

Presented by The University of Edinburgh

Wednesday 10 April

Our Lives with IBD

FILM | AGES 18+



OLD COLLEGE, SOUTH BRIDGE | PLAYFAIR LIBRARY

WED 10 APR | 6PM | 1 HOUR 30 MINS | £12/£10

Join us for the world premiere of *Our Lives with IBD*, a short film about inflammatory bowel diseases (IBD), the people affected by them, and the new research that aims to improve these conditions. Following the film, comedian **Susan Morrison** will guide an entertaining discussion about IBD. Meet the filmmaker **Hugo Hemmati** and the film's stars, including gastroenterologist **Dr Gwo-tzer Ho** and IBD patient **Molly Halligan**. There will be a drinks reception following the event.

Presented by The University of Edinburgh

Creative AI for Creative Work

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

WED 10 APR | 6PM | 1 HOUR | £12/£10

The rapid rise of Artificial Intelligence is creating challenges for the creative industries around human creativity, originality, intellectual property, and ethics. However, AI has incredible potential as a tool for creative work – for experimentation or as part of an ideation process. Hear from creative professionals working with AI to enhance their projects – from developing playful innovations to creating new revenue streams for sound and audio production. Chaired by **Frauke Zeller**, Professor of Human-Computer Interaction and Creative Informatics at Napier University.

Supported by



How Will AI Shape Our Health?

TALK | AGES 12+



BAYES CENTRE, POTTERROW

WED 10 APR | 6PM | 1 HOUR | £12/£10

Artificial intelligence has the potential to transform the future of healthcare. With AI we can learn more from medical images, improve the way we look after patients, rethink the way we diagnose disease, and give doctors more time to focus on the things that humans do best. But what are the risks? What are the ethical issues? And how will AI change the doctor-patient relationship? Join University of Edinburgh scientist **Prof Michelle Williams** to explore the role of AI in shaping our future health.

Presented by The University of Edinburgh

Climate Hope: Building a Better Future

DISCUSSION | AGES 12+



DYNAMIC EARTH | OZONE

WED 10 APRIL | 7PM | 1 HOUR 30 MINS | £12/£10

Join us for a conversation where we'll explore the cutting-edge research and community action that is already creating change and leading the way for a more just and sustainable future. We'll hear from some of Heriot-Watt University's leading sustainability researchers and find out more about the positive impact that their work is having on climate change, communities and beyond.

Presented by Heriot-Watt University and Dynamic Earth

Constructing Tomorrow

DISCUSSION | AGES 12+

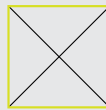


NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

WED 10 APR | 8PM | 1 HOUR | £12/£10

What will Edinburgh feel like in the future? As a UNESCO world heritage site which needs to provide new housing in a climate crisis, construction in the city walks a careful balance between conservation and creation. New materials and technologies mean our built environment will be packed with new textures, designs and aesthetics, so come and meet some of the innovators working at the forefront of future construction and get up to speed with the science of sustainable building.

Supported by



CREATIVE INFORMATICS

Creative Informatics is an ambitious research and development programme based in Edinburgh, that brings the city's world-class creative industries and tech sector together, by providing funding and development opportunities that explore how data can drive ground-breaking new products, business, and experiences.

Since 2018, Creative Informatics has supported creative professionals in Edinburgh and Southeast Scotland to undertake innovative work with data. The programme has engaged with almost three thousand businesses and individuals, with 683 benefitting from training and new skills programmes, and 136 SMEs supported to explore data-driven business opportunities. This work has sustained 429 jobs and created 210 new products, services, and experiences, in turn generating over £7.5 million in further funding and investment.

This year, Creative Informatics has partnered with Edinburgh Science Festival to celebrate the end of its funded programme and showcase the amazing community that has been built. Themed events and activities pop up across the programme, with creative experiences, demonstrations, and debate, inviting Festival-goers to immerse themselves in a new world of data-driven inspiration.

Creative Informatics: Unleashing the Power of Data

P.12

NATIONAL MUSEUM OF SCOTLAND
SAT 30 MAR - SUN 7 APR | 10AM-5PM

Explore some of the products, experiences and groundbreaking creative work that has been developed through funding and support from the Creative Informatics programme.

Creative AI for Creative Work

P.30

NATIONAL MUSEUM OF SCOTLAND
WED 10 APR | 6PM

Hear from creatives who are working with AI to enhance their projects – from developing playful innovations, to creating new revenue streams for sound and audio production.

Let's Play

P.37

SUMMERHALL
FRI 12 APR | 7PM

Join us for an evening that will extend your reality with AI-generated beats, interactive experiences, tech demonstrations and quick-fire presentations.

Creative Informatics is a partnership across four organisations: The University of Edinburgh, Edinburgh Napier University, Codebase and Creative Edinburgh, funded by the Arts and Humanities Research Council, Department of Culture, Media & Sport, the Data Driven Innovation programme, and the Scottish Funding Council.
creativeinformatics.org



Thursday 11 April

Planetarium Late: You Are Here

P.19 SHOW | AGES 12+
6.30PM | DYNAMIC EARTH

Planetarium Late: What's Up?

P.19 SHOW | AGES 12+
7.30PM | DYNAMIC EARTH

Planetarium Late:
Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+
8.30PM | DYNAMIC EARTH

The Professors Shaping the Future

TALK | AGES 18+



OLD COLLEGE, SOUTH BRIDGE | PLAYFAIR LIBRARY
THU 11 APR | 5PM | 2 HOUR 30 MINS | FREE BOOKING REQUIRED

Our professors are shaping the future of their field using creativity, collaboration and innovation to change our world for the better. Join us to hear the human stories behind the science that has shaped their research, and their own lives. The talks will be followed by a drinks reception.

Presented by The University of Edinburgh

The Future of Transport

DISCUSSION | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
THU 11 APR | 6PM | 1 HOUR | £12/£10

Transport and IT play critical roles in curbing carbon emissions within urban areas. Join Chief Scientific Adviser for the Department for Transport **Prof Sarah Sharples** to explore the challenges and opportunities of transport decarbonisation. Examining shifts in travel behaviours and fuel transitions, at this Michaelson Talk Prof Sharples debates the need for a human-centric yet technologically-advanced approach. Chaired by **Dr Sunny Bains**, a science journalist and academic specialising in hardware approaches to AI and robotics.

Presented by BCS - The Chartered Institute for IT

What's Your Poison?

TOUR | AGES 12+



ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH
THU 11 APR | 6.30PM | 1 HOUR | £4

Take a behind-the-scenes tour of the Royal College of Physicians of Edinburgh and discover the fascinating history of poisons. From experimental ancients to murderous Victorians, we uncover the history of poison panics, exotic antidotes and accidental arsenic ingestion. What if there was poison in your shoes? Your hair? Your water? Your lunch? The College's fascinating early medical texts and illustrations will show how the past was fraught with peril at every step.

Presented by Royal College of Physicians of Edinburgh and the Royal Pharmaceutical Society

Virus Bingo

ACTIVITY | AGES 12+



BAYES CENTRE, POTTERROW
THU 11 APR | 7PM | 1 HOUR | £12/£10

What does it take for a virus to cross the divide between animals and humans? Join us on an interactive journey into their world to find out. Follow animal viruses on their journey to a fully-fledged human outbreak as chance mutations and events shape the population. Some will change for the better, others will fail before they've ever really begun. Will your virus have what it takes or will bad luck stand in the way? Who will win *Virus Bingo*?

Presented by The University of Edinburgh

AI for Earth

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

THU 11 APR | 8PM | 1 HOUR 30 MINS | £12/£10

How could AI help us respond to the climate and nature crises? In the next decade, the world needs to take decisive steps to save the planet as we know it. At the heart of whether we will be successful or not, is whether we will be able to make the urgent progress in cleaning and greening the built environment. Join **Dr Will Cavendish**, Global Digital Leader at Arup and ex-Strategy Lead at Deep Mind, to hear about what role AI might play in helping the world meet these urgent challenges and what might hold us back.

Supported by

ARUP

Friday 12 April

Planetarium Late: You Are Here

P.19 SHOW | AGES 12+
6.30PM | DYNAMIC EARTH

Planetarium Late: What's Up?

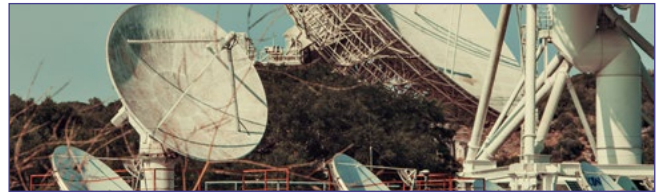
P.19 SHOW | AGES 12+
7.30PM | DYNAMIC EARTH

Planetarium Late: Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+
8.30PM | DYNAMIC EARTH

Our Accidental Universe

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

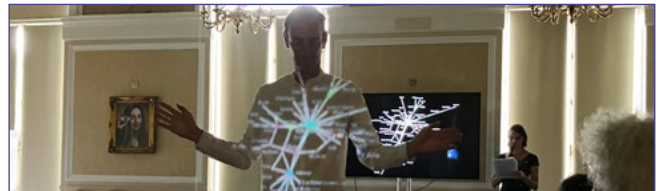
FRI 12 APR | 6PM | 1 HOUR | £12/£10 | BSL INTERPRETED

Join BBC presenter of *Sky at Night* and Gresham Professor of Astronomy **Chris Lintott**, as he takes us on an astonishing tour of bizarre accidents, big characters, and human error to tell the story of some of the most important astronomical events of the past hundred years. As new telescopes are built on mountaintops and in deserts around the world, aiming to transform our view of the universe once more, Lintott shows us that keeping an open mind will benefit us all – whatever might still be out there for us to find.

Presented by Penguin Random House

Ectocarpus: When Seaweed Meets Dance

SHOW | AGES 12+



BAYES CENTRE, POTTERROW

FRI 12 APR | 7.30PM | 1 HOUR | £2

Ectocarpus is a brown seaweed known for the speed at which it completes its lifecycle, and it can be found across the globe. This weird and wonderful alga connects seaweed researchers and marine research institutes worldwide, including Scotland and France. In this performance, researchers from the RSE Saltire project Geography of Collaborations explore with choreographer **Brendan Le Delliou** of Frichti Concept, how dance can aid our work to map and analyse global research collaboration, such as in seaweed research.

Presented by The University of Edinburgh and the Institut Français

The One Thing You Need to Know

TALK | AGES 12+



NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM

FRI 12 APR | 8PM | 1 HOUR | £12/£10

What is the one thing you need to know to understand the big bang, theory of relativity and global warming? Award-winning broadcaster and author **Marcus Chown** gives the lowdown on why Einstein's special theory of relativity follows from the fact that nothing can catch up to a beam of light; how global warming follows from the fact that small molecules are effectively connected by springs; and how the hotness of the Sun follows from the fact it is terribly, terribly massive. Join Chown for a breakdown of the big physics questions that explain our universe.

Presented by Marcus Chown

Saturday 13 April

Planetarium Late: You Are Here

P.19 SHOW | AGES 12+
6.30PM | DYNAMIC EARTH

Planetarium Late: What's Up?

P.19 SHOW | AGES 12+
7.30PM | DYNAMIC EARTH

Planetarium Late: Pink Floyd's The Dark Side of The Moon

P.36 FILM | AGES 16+
8.30PM | DYNAMIC EARTH

Sunday 14 April

Science Festival Church Service

TALK | AGES 12+



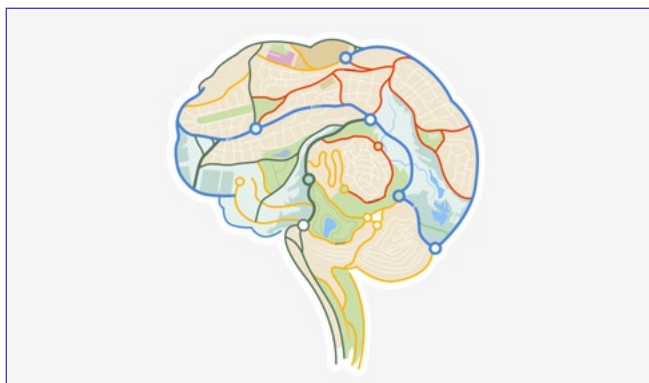
ST GILES' CATHEDRAL, HIGH STREET
SUN 14 APR | 11AM | 1 HOUR | FREE

The Lord Provost of Edinburgh and the Minister of St Giles' Cathedral warmly invite you to the annual church service celebrating the Edinburgh Science Festival. **Prof Linda Bauld** is this year's featured speaker. Prof Bauld is the Bruce and John Usher Chair in Public Health in the Usher Institute at the University of Edinburgh and is a leader in the sphere of public health, working extensively on drug and alcohol use, inequalities in health, overweight and obesity, smoking cessation and more recently on Covid-19.

Presented by Edinburgh Science and St Giles' Cathedral

Neurotrail

TOUR | AGES 12+



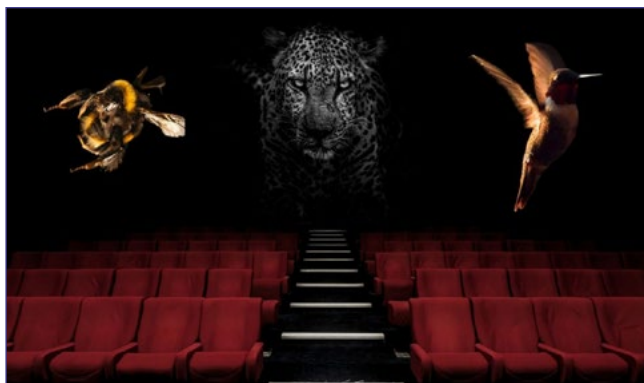
SUMMERHALL
SUN 14 APR | 11AM & 2PM | 1 HOUR 30 MINS | £2

Whether Foramen of Monro, Bell's Palsy or Morris Maze, neuroscientists around the world use words and methods developed in Edinburgh and the city remains a major centre of neuroscience. How are memories made in the brain? How can we keep our brains sharp into old age? How does multilingualism influence the brain? Neuroscientist **Dr Thomas H Bak** will answer these questions and others on this guided tour through places of historical interest and contemporary activity.

Presented by The University of Edinburgh

Edinburgh Conservation Film Festival

FILM | AGES 12+



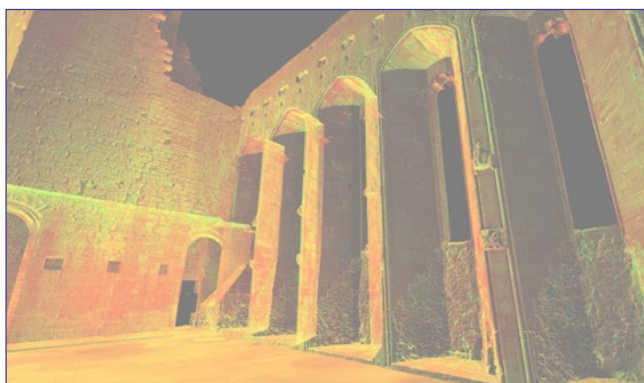
NATIONAL MUSEUM OF SCOTLAND | AUDITORIUM
SUN 14 APR | 1PM | 1 HOUR 45 MINS | £5

The *Edinburgh Conservation Film Festival* is a celebration of conservation stories from around the world that will inspire, engage, and inform you about some of the many projects helping to protect the world's biodiversity. This year, the film festival is aligning with the Science Festival by aiming to showcase where the future of conservation could be if we embrace creativity, positivity, innovation and entrepreneurship. Discover some of the people and projects that are helping preserve our global biodiversity through science, passion, and film, followed by a prize-giving ceremony for the winning films. The films will then be accessible to view on-demand on the Edinburgh Science Festival website.

Presented by Edinburgh Conservation Film Festival

Tam Dalyell Prize Lecture

TALK | AGES 18+



OLD COLLEGE, SOUTH BRIDGE | PLAYFAIR LIBRARY
SUN 14 APRIL | 6PM | 1 HOUR 30 MINS | FREE BOOKING REQUIRED

Now a ruined shell clinging to the side of the peel above Linlithgow Loch, Linlithgow Palace was once the great pleasure palace of the kings and queens of Scotland. It resounded to music sung by skilled musicians in magnificent surroundings. **Dr James Cook** is determined to recapture its lost glory bringing together scientific acoustic research, historical archival work, archaeology, and performance to reconstruct the music within Virtual Reality. He has been awarded the University of Edinburgh's Tam Dalyell Prize for Excellence in Engaging the Public with Science in recognition of his work increasing the public understanding of music in pre-Reformation Scotland. The lecture will be followed by a drinks reception.

Presented by The University of Edinburgh

Science Nights Out

If you like your science with some flair, then our social science evenings are for you! These adult-only events combine science, immersive art, hands-on activities and music to create the coolest Festival nights out.

Immerse yourself in the mysterious world of mycelium at *A Night in the Undergrowth*, be blown away by cutting-edge engineering marvels at *Innovation Late with Lady MacRobert* and experience why Scotland has a global reputation in the video game, film and TV industries at *Let's Play*.

Science Festival Late

EXPERIENCE | AGES 18+



CITY ART CENTRE

THU 28 MAR | 7.30PM | 2 HOURS 30 MINS | £15/£13

Don't let the kids hog the hands-on science fun! Join us as we turn our flagship family venue into the ultimate science party. Dance with a robot, rock up to the *Blood Bar* or get down digging up a dinosaur. Play detective in *CSI: Crime Scene Investigation* or try your hand operating in *ER Surgery* at this event just for the grown-ups!

Presented by Edinburgh Science



Stranger Than Fiction: The Panel Game

SHOW | AGES 18+



VOODOO ROOMS | BALLROOM

SUN 31 MAR | 7PM | 1 HOUR | £12/£10

A panel game with a difference – it's the panel vs the audience. The Science Festival's most popular lie-busting show is back! A motley team of non-fiction writers will try to pull the wool over your eyes by sneaking some surprising facts amongst ridiculous fiction and persistent scientific myth. Each round has a different flavour, ranging from short fictional speeches to quick fire truth-or-fiction. Get ready to make some noise!

Presented by Stranger Than Fiction

UniverSilly Challenged Quiz

ACTIVITY | AGES 18+



VOODOO ROOMS | BALLROOM

TUE 2 APR | 7PM | 1 HOUR | £12/£10

Science troubadour **Jonny Bertliner** ("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. Niche prizes to be won and full marks for foolishness. Paxman would hate it.

Presented by Simon Watt and Jonny Bertliner

Sci-Fi Snobbery

SHOW | AGES 18+



VOODOO ROOMS | BALLROOM

WED 3 APRIL | 7PM | 1 HOUR | £12/£10

Jamie Gallagher is a terminal Trekkie. **Simon Watt** is a sci-fi cynic. They need your help to determine exactly what is the best of the best science fiction film. Is *Back to the Future* better than *Tenet*? Is *ET* more accurate than *Alien*? Is *The Matrix* good enough to let us forgive its sequels? Simon and Jamie debate the merits of their favourites to work out which sci-fi movie has the most merit on both a scientific and cinematic basis. Bring your smartphone to play along.

Presented by Simon Watt and Jamie Gallagher

Growing Home After Hours

EXPERIENCE | AGES 18+



NATIONAL MUSEUM OF SCOTLAND | GRAND GALLERY

THU 4 APR | 7PM | 3 HOURS | £15/£13

Unveil a night of brilliant biomaterials as we throw open the doors of the National Museum of Scotland after hours. Immerse yourself in our *Growing Home* exhibition, exploring a new world of materials made from nature. At this adults-only event, experience the new Creative Informatics exhibition, take part in exclusive hands-on activities, marvel at new works in the biomaterial costume show from the Edinburgh College of Art, capture memories at the photobooth, engage with enlightening talks and groove along to our DJ.



Presented by Edinburgh Science and the National Museum of Scotland

Supported by

Developed with support from Creative Scotland through the Scottish Government's Festivals Expo Fund



Scottish Government
Riaghaltas na h-Alba
gov.scot

Planetarium Late: Pink Floyd's The Dark Side of the Moon

FILM | AGES 16+



DYNAMIC EARTH | PLANETARIUM

THU 4-SAT 6 APR & THU 11-SAT 13 APR | 8.30PM | 45 MINS | £20/£18

After a sell-out run during the Edinburgh Fringe, Pink Floyd's *The Dark Side of the Moon* planetarium experience is back! Experience a mesmeric and immersive 360° show with breath-taking views of the Solar System, set to the official 1973 album in spectacular surround sound. Half a century after its launch in a planetarium, this truly is a unique way to experience this album.

Presented by Dynamic Earth

Pints and Puzzles

ACTIVITY | AGES 18+



VOODOO ROOMS | BALLROOM
MON 8 APR | 7PM | 1 HOUR | £12/£10

Join mathematicians **Katie Steckles** and **Ben Sparks** for a mind-boggling evening of puzzles and mathematical thinking. Pit your wits against a series of beautiful, bamboozling maths brain teasers in this sociable night of fun.

Presented by Katie Steckles and Ben Sparks

Innovation Late with Lady MacRobert

EXPERIENCE | AGES 18+



DYNAMIC EARTH | STRATOSPHERE
MON 8 APR | 7.30PM | 2 HOURS 30 MINS | £15/£13

Celebrate incredible ideas that have changed our world in a perfectly engineered evening of hands-on activities, short talks and interactive exhibits! Experience cutting-edge technology with live demonstrations from past and would-be MacRobert Award winners and enjoy an exclusive preview of a new series of photographs by artist **Ted Humble-Smith**, highlighting the amazing stories behind these award-winning inventions. Named in honour of geologist and philanthropist Lady Rachel MacRobert, the MacRobert Award has honoured the engineers behind the UK's most exciting engineering innovations of the last 55 years. Ticket includes a welcome drink.

Supported by



A Night in the Undergrowth

EXPERIENCE | AGES 18+



THE BISCUIT FACTORY, ANDERSON PLACE
WED 10 APR | 7PM | 3 HOURS | £15/£13

Cap-tivate your curiosity and treat yourself to an in-spore-ational evening of fungi fun! Learn how to hunt for and identify mushrooms in our foraging zone and dig into talks from experts in the world of fungi. Pull up a toadstool for some hands-on activities, immerse yourself in creating some mycelium art, relax at the bar and enjoy some beats from our DJ. Be sure to book your tickets early, or there might not be mush-room left!

Presented by Edinburgh Science

Supported by

Developed with support from
Creative Scotland through the
Scottish Government's
Festivals Expo Fund



Scottish Government
Riaghaltas na h-Alba
gov.scot

Andy Warhol & The Chemistry of Ice Cream

EXPERIENCE | AGES 18+



DOVECOT STUDIOS
FRI 12 APR | 5.30PM | 1 HOUR 30 MINS | £16

Get the scoop on all things ice cream at Dovecot's latest exhibition *Andy Warhol: The Textiles*. See Warhol's vibrant ice cream prints and learn the science behind successful ice cream. From sugar, milk, fats and freezing to colour, texture and taste, the talk will explore how seemingly simple things are sometimes highly complicated. This event includes the opportunity to enjoy a delicious sample with entry to the 'coolest' exhibition in Edinburgh. Includes welcome drink on arrival.

Presented by Dovecot Studios

Let's Play

EXPERIENCE | AGES 18+



SUMMERHALL | DISSECTION ROOM
FRI 12 APR | 7PM | 3 HOURS | £15/£13

Get your game face on and extend your reality as we explore how creative technologies and on-screen innovation are changing how we play and experience the world around us - and worlds we can only imagine. Virtual production is one of the most exciting new technology areas and Scotland has a global reputation for game, film and TV production. Join us for a playful evening with interactive experiences and short talks from industry creatives and researchers. Try out some new creative tech or relax with a drink from the bar and some AI-generated beats.

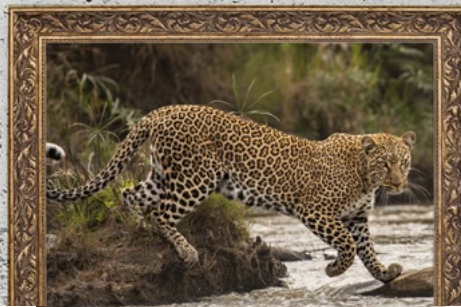
Supported by



Science and Art

Discover how the world of science can be explored and reinterpreted through art.

Featuring photography, sculpture and animation, our Science and Art programme spans the vastness of space to the microscopic world of cells.



Rising Tide: Art and Environment in Oceania

EXHIBITION | ALL AGES



NATIONAL MUSEUM OF SCOTLAND
SPECIAL EXHIBITION GALLERY 2, LEVEL 3
UNTIL SUN 14 APR | 10AM-5PM | DROP-IN | **FREE**

Delve into the most important and pressing issue of our time – humanity's damaging relationship with planet Earth. *Rising Tide* considers our relationship to the natural environment through contemporary responses to climate change and plastic waste by Indigenous Australian and Pacific Islander artists. The exhibition hosts the latest version of artist **George Nuku's** installation, *Bottled Ocean 2123*, which imagines the state of the oceans 100 years into the future in an immersive, undersea landscape crafted from single use plastic bottles.

Presented by National Museums Scotland

Wildlife Photographer of the Year 2024

EXHIBITION | ALL AGES



NATIONAL MUSEUM OF SCOTLAND
SPECIAL EXHIBITION GALLERY 1, LEVEL 3
UNTIL MON 6 MAY | 10AM-5PM | [SEE NATIONAL MUSEUM OF SCOTLAND WEBSITE FOR PRICING](#)

The *Wildlife Photographer of the Year* is the most prestigious photography event of its kind, providing a global platform that showcases some of the best photography talent from around the world for nearly 60 years. On loan from the Natural History Museum in London, the exhibition displays exceptional images which capture fascinating animal behaviour, spectacular species and the breathtaking diversity of the natural world.

Presented by National Museums Scotland

Image: Shashwat Harish

Our Fragile Space: Protecting the Near-Space Environment

EXHIBITION | ALL AGES



THE MOUND PRECINCT
FRI 8 MAR-THU 18 APR | DAILY | **FREE**

This fascinating photographic exhibition will transport you to orbital space to explore the increasing issue of space debris and satellite crowding. Journey through photographer and creative strategist **Max Alexander's** stunning photography to explore the rising concept of space sustainability. Showcasing the importance of space to our economy, society and scientific communities, this exhibition addresses the crucial need for stewardship of this fragile environment. This touring exhibition has already informed space policy units in Europe and the US, and now travels to Scotland – a world leader in satellite production and emerging key player in space initiatives. It is a call to action for all of us to play our part as custodians of our precious night skies.

Presented by Max Alexander

Designing Data Humans

EXHIBITION | ALL AGES



INSPACE, CRIGHTON STREET

SAT 30–SUN 31 MAR | 10AM–5PM | DROP-IN | FREE

This interactive exhibition features the work of students from the MSc and MA Design Informatics course at the University of Edinburgh. Students have created a series of playful prototypes which examine and question our relationships to data technologies and consider how we can use data as a tool for design. The works on display help us to understand what it means to be human in a digital world and explore ideas addressing sustainable practices at the intersection of data and design, culture and society.

Presented by The University of Edinburgh

It's Still a Wonderful Webb

EXHIBITION | ALL AGES



DYNAMIC EARTH | OUTDOOR TERRACE

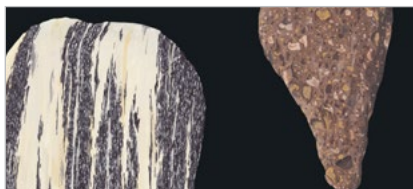
SAT 30 MAR–SUN 14 APR | 10AM–4PM | DROP-IN | FREE

Since launching on Christmas Day 2021, the James Webb Space Telescope has drawn back the curtain on the universe's early galaxies, and in doing so has captured the imagination of people worldwide. Marvel at the latest images it has taken during its time in space in this awe-inspiring outdoor exhibition.

Presented by Dynamic Earth

Snippets of Scotland

EXHIBITION | ALL AGES



DYNAMIC EARTH | STRATOSPHERE

SAT 30 MAR–SUN 14 APR | 10AM–4PM | DROP-IN | FREE

How did Scotland change over the last three billion years? From an Edinburgh volcano to dinosaurs on Skye, Scotland's rich history can be told through its stone. In this indoor mini-exhibition created in partnership with science artist **Vojta Hybl**, take a journey through our geological past and discover the stories hidden in ten Scottish rocks.

Presented by Dynamic Earth

Connecting Histories

EXHIBITION | ALL AGES



ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY GALLERY

SAT 30 MAR–SUN 14 APR | 10AM–6PM | DROP-IN

FREE

Connecting Histories presents botanical illustrations of familiar and less familiar plants, depicted with both scientific accuracy and spectacular artistry. The Royal Botanic Garden Edinburgh (RBGE) is host to a remarkable collection of Indian botanical drawings within its archive – highlighting long and historic links to India. These unique drawings represent an often overlooked, important moment in the history of Indian art and highlight the movement of plants through Empire.

Descriptive Tour

TOUR | ALL AGES

ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY GALLERY

TUE 9 APR | 10AM | 1 HOUR | £5

AD AUDIO DESCRIBED

Take a multisensory journey through the collection of Indian botanical illustrations in this live, audio descriptive tour. This exhibition tour is specifically designed for people with a visual impairment and led by **John Cummings**.

Spotlight Talk

TALK | ALL AGES

ROYAL BOTANIC GARDEN EDINBURGH

JOHN HOPE GATEWAY GALLERY

SAT 13 APR | 2.30PM | 30 MINS

FREE BOOKING REQUIRED

Enjoy a free introduction to *Connecting Histories*, in which one of the RBGE volunteers shines a light on their favourite aspect of this intriguing exhibition.

Presented by Royal Botanic Garden Edinburgh

Silent Archive

EXHIBITION | ALL AGES



ROYAL BOTANIC GARDEN EDINBURGH

INVERLEITH HOUSE

SAT 30 MAR–SUN 14 APR | 10.30AM–5PM | DROP-IN

FREE

Painful truths, surprising revelations and fresh perspectives on humanity's complex relationships with the botanical world emerge from our exhibition *Silent Archive*. International artists reveal the archives of the Royal Botanic Garden Edinburgh (RBGE) in new ways, challenging us to discover hidden narratives and hear long-ignored voices that are preserved in our collections. Significant works that tell stories of scientific discoveries, colonial histories and cultural heritage are displayed for the first time. Plant artistry, photography, music and more help convey how these archives shape our view of history, whose past they represent and how they might inspire change.

Online Tour

TOUR | ALL AGES

ONLINE

WED 3 APR 6PM | THU 4 APR 9AM | 45 MINS | FREE

Join **Dr Max Coleman** on the Royal Botanic Garden's Instagram account (@rbgedinburgh) live out-of-hours for a behind-the-scenes tour of *Silent Archive* exhibition.

Spotlight Talk

TALK | ALL AGES

ROYAL BOTANIC GARDEN EDINBURGH

INVERLEITH HOUSE

THU 11 APR | 2.30PM | 30 MINS

FREE BOOKING REQUIRED

Enjoy a free introduction to *Silent Archive*, in which one of the RBGE volunteers shines a light on their favourite aspect of this intriguing exhibition.

BSL Tour

TOUR | ALL AGES

ROYAL BOTANIC GARDEN EDINBURGH

INVERLEITH HOUSE

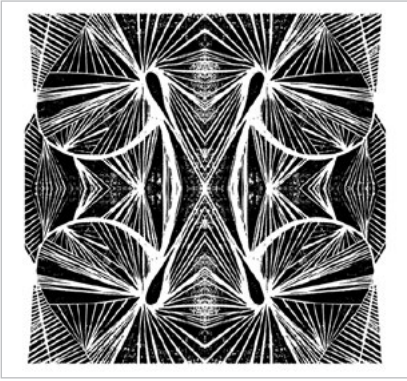
SUN 7 APR | 2PM | 1 HOUR | £5 | **BSL INTERPRETED**

Join us for a British Sign Language tour of the *Silent Archive* exhibition, led by **Trudi Collier**.

Presented by Royal Botanic Garden Edinburgh

The BOX

EXHIBITION | ALL AGES



INSPACE, CRICHTON STREET

SAT 6-FRI 19 APR | 10AM-5PM | DROP-IN | FREE

The BOX is an interactive installation by **Dr Fiona Smith**, Creator in Residence at Fraunhofer MEVIS, presented by the Institute for Design Informatics, exploring the practical and ethical implications of integrating AI technology into healthcare. Come explore the 'black box' aspect of AI technology in the context of digital medicine and journey into the internal and invisible workings of AI systems through the artwork, which asks, 'If we feed the AI with incomplete or biased data – can we expect it to come up with reasonable predictions?'.
Presented by The University of Edinburgh

Presented by The University of Edinburgh

Future Proof at Summerhall

Based in the former Royal Dick School of Veterinary Studies, Summerhall is a major arts venue with a host of performance, gallery and workshop spaces, as well as a welcoming cafe and bar.

EXHIBITION GALLERIES OPEN

SATURDAY 30 MARCH-SUNDAY 26 MAY, WEDNESDAY-SUNDAY 11AM-5PM

SUMMERHALL, SUMMERHALL PLACE, EH9 1PL

Summerhall and ASCUS Art and Science present *Future Proof*, a series of exhibitions and events from visual artists that explore alternative futures through examination of the past and present and pose existential questions from the blurred boundary of art and science. Artist talks included in the programme will shed light on their work and associated workshops in ASCUS Lab will invite you to experiment alongside the artists.

Future Proof Launch

SUMMERHALL | LIBRARY GALLERY | SATURDAY 30 MARCH 11AM-1PM



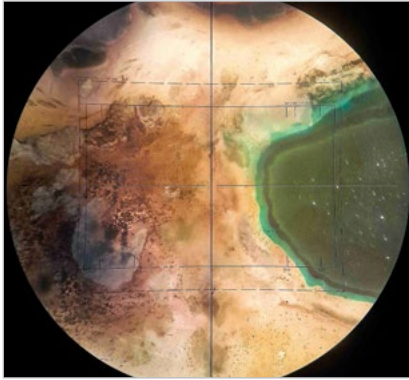
SUMMERHALL



ASCUS
ART & SCIENCE

A Topography of Micro Planets

EXHIBITION | ALL AGES



SUMMERHALL | CORNER GALLERY

SAT 30 MAR-SUN 26 MAY [WED-SUN] | 11AM-5PM

DROP-IN | [FREE](#)

Photographic artist **Imogen Hero** uses her expertise in analogue photographic techniques combined with scientific processes to examine the interconnectedness of life in the Universe. The work in this exhibition was created by collaborating with microbial cultures on the surface of photographic film to create new 'Micro Planets' which act as topographic studies of microbial landscapes. The images presented act as cross-species collaborations that transcend terrestrial ecology to reflect what life may look like on other planets, and across vastly different scales.

Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

Geometry, Art & Mind

EXHIBITION | ALL AGES



SUMMERHALL | BASEMENT GALLERIES

SAT 30 MAR-SUN 26 MAY [WED-SUN] | 11AM-5PM

DROP-IN | [FREE](#)

Since ancient times, humans have been fascinated by shapes and structures, but looks can be deceiving! Mind-bending mirrors make marvelous optical illusions, mapmakers fight to make flat maps from a round Earth, and is it possible to know what "four-dimensional space" would look like? The Maths Outreach and College Engagement teams at the University of Edinburgh have joined forces so that you can explore the difference between how things really look, and how you might perceive them.

Presented by The University of Edinburgh, Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

Morality Calculus

EXHIBITION | AGES 12+



SUMMERHALL | WAR MEMORIAL GALLERY

SAT 30 MAR-SUN 26 MAY [WED-SUN] | 11AM-5PM

DROP-IN | [FREE](#)

Morality Calculus is a bioart installation by artist **Yuning Chen** that recounts the endeavour of creating bread fermented with yeast-human cell hybrids in a synthetic biology lab in collaboration with biologist Dr. Elise Cachat. The installation aims to provoke a discussion on the moral dimension of the part-based analogy prevalent in synthetic biology: if living organisms are seen as mechanical vessels containing functional genetic legos, how do we 'calculate' the moral status of a yeast-human cell hybrid? Will it be a mere concatenation of the source organisms, defined by the ones that have a higher moral status or affected by the resulting traits they exhibit?

Presented by Summerhall, ASCUS Art & Science and Design Informatics and The Centre for Engineering Biology, in partnership with Edinburgh Futures Institute

Mythic Instruments

EXHIBITION | ALL AGES



SUMMERHALL | LAB GALLERY

SAT 30 MAR-SUN 26 MAY [WED-SUN] | 11AM-5PM

DROP-IN | [FREE](#)

Mythic Instruments explores the past and future of science and craft through mysticism and material. This exhibition of sculptural works by Edinburgh-based artist **Emma Hislop** presents artefacts from a future past, transported from a time where humanity bridged the gap between science, art and nature through a reverence for traditional knowledge. A return to and evolution of folklore, myth and ritual appears to have opened a portal for a greater type of knowledge.

Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

Post-Industrial Ecologies

EXHIBITION | ALL AGES



SUMMERHALL | MEADOWS GALLERIES

SAT 30 MAR-SUN 26 MAY [WED-SUN] | 11AM-5PM

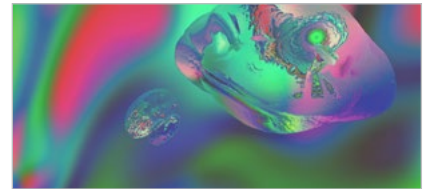
DROP-IN | [FREE](#)

Interlinking, multimedia installations by **Dawn Felicia Knox** exploring the way plants and fungi work together to undo the toxic residue of industrialisation. Moving through deep time into the mycorrhizal remediating present, the work investigates 320 million years on one plot of land. The site, a coalmine during the industrial revolution, is a contaminated brownfield yet through the entanglement of plants and fungi it has become a vibrant ecosystem. Dawn's work digs through the layers of time to unearth the architecture of bioremediation knitting together in our Wastelands.

Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

We Pretended It Wasn't Green

EXHIBITION | ALL AGES



SUMMERHALL | SCIENNES GALLERY

SAT 30 MAR-SUN 26 MAY [WED-SUN] | 11AM-5PM

DROP-IN | [FREE](#)

We Pretended It Wasn't Green is a generative animation by **James Stephen Wright** using satellite data. Showcasing a frog and enchanting mushrooms intricately woven into a constantly changing narrative influenced by earth data, the project highlights a disorienting contrast: a world where the vibrant green hues of nature are distorted and manipulated, representing our tendency to ignore the consequences of our actions. Within this distorted reality, the mushrooms become silent witnesses, existing on the brink of vulnerability yet potentially outliving us all.

Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

Microscopy Workshop with Dawn Felicia Knox

ACTIVITY | AGES 16+



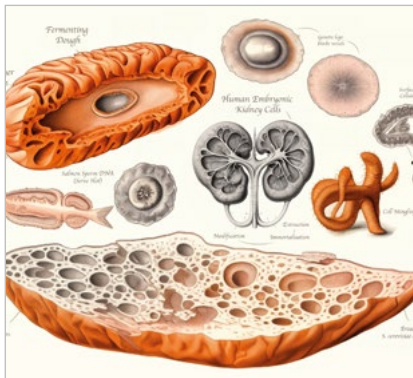
SUMMERHALL | ASCUS LAB

THU 4 APR | 6.30PM | 1 HOUR 30 MINS | £15

Investigate the intricate microscopic worlds found just below the ground in the rhizomes of ferns. Learn to use various microscopes and polychromatic stains to identify different cellular structures. Join artist **Dawn Felicia Knox** in her intercellular search to learn how plants navigate the pollution humans have left in the soil. This is a practical workshop open to anyone. All materials will be provided and no experience is needed. Participants are invited to contact the facilitators to discuss any access needs. Presented by Summerhall and ASCUS Art & Science

Morality Calculus Tasting Event

ACTIVITY | AGES 18+



SUMMERHALL | WAR MEMORIAL GALLERY

SAT 13 & SUN 14 APR | 1PM | 1 HOUR

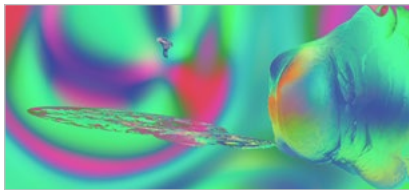
FREE BOOKING REQUIRED

Alongside the display of the real lab-baked hybrid bread, an event will be held by **Yuning Chen** to provide a theatrical tasting experience for the participants to explore their personal morality calculus. The experience will involve eating food fermented by fictional hybrid organisms analogous to the ones involved in the bread making experiments. Through ordering, tasting and thinking through food with fellow participants, the audience is invited to calculate the incalculable – the morality of genetic parts from different living beings, and to reflect on the choices they've made during the process.

Presented by Summerhall, ASCUS Art & Science and Design Informatics and The Centre for Engineering Biology, in partnership with Edinburgh Futures Institute

Artist Talk: We Pretended It Wasn't Green

TALK | AGES 12+



SUMMERHALL | ANATOMY LECTURE THEATRE

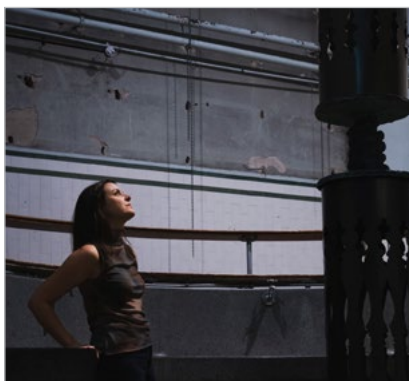
SAT 13 APR | 11AM | 45 MINS

FREE BOOKING REQUIRED

James Stephen Wright will discuss his work *We Pretended It Wasn't Green*, a generative animation showcasing a frog and enchanting mushrooms intricately woven into a constantly changing narrative influenced by real-time earth data from satellites spinning above us. Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

Artist Talk: Mythic Instruments

TALK | AGES 12+



SUMMERHALL | ANATOMY LECTURE THEATRE

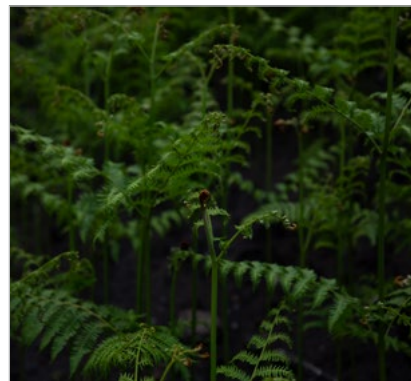
SAT 13 APR | 2.30PM | 1 HOUR

FREE BOOKING REQUIRED

Emma Hislop will give an illustrated presentation on her work that comprises the exhibiton *Mythic Instruments*. Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute
Image: Olive+Maeve

Artist Talk: Post-Industrial Ecologies

TALK | AGES 12+



SUMMERHALL | ANATOMY LECTURE THEATRE

SUN 14 APR | 2.30PM | 1 HOUR | FREE

Artist **Dawn Felicia Knox** will discuss her exhibition, *Post-industrial Ecologies*, grown from a decade of research moving through geology, industrial archaeology and ecology across one plot of land. Dawn has been exploring ferns found in the fossil excavated when the site was a coalmine as well as ferns on the site now actively working to undo the damage done through the extraction of coal. As we face climate catastrophes, what can we learn from the plants and fungi already navigating our wastelands? Presented by Summerhall and ASCUS Art & Science, in partnership with Edinburgh Futures Institute

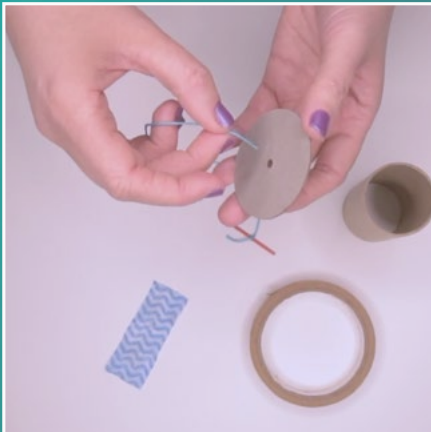
Experience the Festival Online

Anywhere. Anytime.

sciencefestival.co.uk/on-demand



Free online content ready to enjoy now, including:



Make at Home Workshops

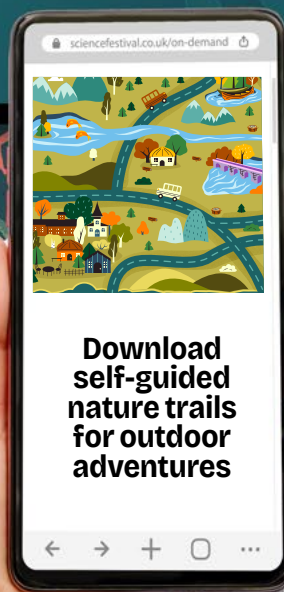


Engaging Talks and Discussions



and I was involved in making this exhibition here, which is called Consumed.

Behind the Scenes Interviews



Download self-guided nature trails for outdoor adventures

Our Work Beyond the Festival

In the Community

We believe that the wonders of science, technology, engineering and maths (STEM) are for everyone and should be a joy for anyone who engages with them. However, we're acutely aware that accessing these experiences is difficult for some, who might be held back by financial barriers or long ingrained negative associations with science. It is part of our mission as an educational charity to see an end to these barriers and prevent them from forming in the first place.

This year we will be working with 17 different community organisations across Edinburgh, delivering free and engaging hands-on activities throughout the year. As well as supported trips to the Science Festival, we are delivering a programme of activities across local libraries and gala events, helping to form long-standing positive relationships within those communities.

Last year we had the pleasure of working with Craigmillar Library to deliver a science take-over day, where local residents could experience a range of drop-in activities including stories and crafts around the science of sound, building with foam dinosaur bones and watching our amazing science busking shows. It was the library's most successful event with over 500 visitors and a big jump in their library card sign ups. We can't wait to form and deliver more relationships just like this in 2024!

To find out more about our community work and how you can help, visit sciencefestival.co.uk/community-engagement.



Thanks to visitors like you who add a charitable donation onto their ticket purchases and our Community Funding Partners, we are able to run these unforgettable experiences free of charge for those who would not otherwise be able to take part.

Community Funding Partners

Baillie Gifford[™]

SCOTTISH
**CHILDREN'S
LOTTERY**

The PLACE (Platforms for Creative Excellence) Programme is funded by the Scottish Government – through Creative Scotland – and the Edinburgh Festivals



Scottish Government
Riaghaltas na h-Alba
gov.scot



ALBA | CHRUTHACHAIL



Experiences for Schools

As well as the Science Festival, we deliver programmes year-round for schools, inspiring pupils with the wonders of our world and supporting teachers in their mission to engage students in all areas of science, technology, engineering and maths (STEM).

As one of Scotland's largest outreach charities, it is our passion to ensure students all over Scotland have equal access to fun and engaging science activities, and have the opportunity to receive the same experiences regardless of location.

Generation Science, our touring outreach programme for primary schools, has been delivering immersive STEM workshops and shows for over 30 years. Over 30% of the programme is delivered for free, with all other state schools offered a heavily subsidised visit. Every year we visit all 32 local authorities in Scotland and we are committed to supporting Scotland's education system to create positive and long-lasting memories and experiences in STEM.

To ensure pupils' passion for STEM is nurtured, we run *Careers Hive* – a skills and careers event for early year secondary pupils. This free, interactive event allows pupils to engage meaningfully with STEM professionals, to broaden their understanding of career opportunities as well as reflecting on their own skills, interests and strengths, and where they may fit in a future workforce.

If you are a teacher or parent who wants to find out how your school can get involved with one of our programmes, visit sciencefestival.co.uk/schools for more information.



Thanks to Our Supporters

Principal Learning Funding Partners

Baillie Gifford™

•EDINBURGH•
THE CITY OF EDINBURGH COUNCIL

Edina
Trust

 Scottish Government
Riaghaltas na h-Alba
gov.scot

Major Learning Funding Partners



HITACHI
Inspire the Next

 Hitachi Energy

Learning Funding Partners



Edinburgh Airport
Where Scotland meets the world


Edinburgh Napier
UNIVERSITY
School of Computing,
Engineering & the
Built Environment



Institute of Acoustics
Sound • Noise • Vibration



ROYAL AIR FORCE Youth STEM



Aberbrothock Skea Charitable Trust | The Britford Bridge Trust

Cruden Foundation | David and Averil Macdonald Fund | Elizabeth Drummond Charitable Trust

Meikle Carewe Wind Farm Community Fund | The Misses Barrie Charitable Trust

The Nancie Massey Charitable Trust | SSE Renewables Achany Community Fund | The Hayward Sanderson Trust

The Nancy Roberts Charitable Trust | The Sylvia Aitken Charitable Trust | The W M Mann Foundation

our Catalysts and those who prefer to remain anonymous

ADULT PROGRAMME QUICK REFERENCE GUIDE					
DATE	TIME	EVENT	TYPE	THEME	PAGE
THU 28 MAR	7.30PM	SCIENCE FESTIVAL LATE	EXPERIENCE	SOCIETY & CULTURE	35
SUN 31 MAR	7PM	STRANGER THAN FICTION: THE PANEL GAME	SHOW	SOCIETY & CULTURE	36
MON 1 APR	11AM & 2PM	THE ART OF ROCKS	ACTIVITY	ARTS & DESIGN	25
	6PM	VIRTUAL TWINS	DISCUSSION	TECH & INNOVATION	25
	8PM	SCIENCE AND SOLUTIONS FOR A CLEAN OCEAN	TALK	CLIMATE & SUSTAINABILITY	25
TUE 2 APR	6PM	DISPOSING OF THE BODY	DISCUSSION	MIND & BODY	25
	7PM	HOW TO LOOK AFTER YOUR BRAIN	DISCUSSION	MIND & BODY	25
	7PM	EDINBURGH MEDAL ADDRESS: GOOD PHARMA – FOR PATIENTS NOT PATENTS	TALK	MIND & BODY	26
	7PM	UNIVERSILLY CHALLENGED QUIZ	ACTIVITY	SOCIETY & CULTURE	36
	8PM	CATS VERSUS DOGS	DISCUSSION	ENVIRONMENT & NATURE	25
WED 3 APR	6PM	THE FUTURE OF AI	DISCUSSION	TECH & INNOVATION	26
	6.30PM	CUSTODIANS OF THE COSMOS	DISCUSSION	SPACE	26
	7PM	IDENTITY BY ALGORITHM	DISCUSSION	TECH & INNOVATION	26
	7PM	SCI-FI SNOBBERY	SHOW	SOCIETY & CULTURE	36
	8PM	ANCIENT DNA, MODERN MEDICINE	TALK	MIND & BODY	27
THU 4 APR	6.30PM	PLANETARIUM LATE: YOU ARE HERE [ALSO FRI 5–SAT 6 & THU 11–SAT 13 APR]	SHOW	SPACE	19
	7PM	GROWING HOME AFTER HOURS	EXPERIENCE	ENVIRONMENT & NATURE	36
	7PM	HEALTHY PREGNANCIES, HEALTHY LIVES	ACTIVITY	MIND & BODY	27
	7.30PM	PLANETARIUM LATE: WHAT'S UP? [ALSO FRI 5–SAT 6 & THU 11–SAT 13 APR]	SHOW	SPACE	19
	8.30PM	PLANETARIUM LATE: PINK FLOYD'S THE DARK SIDE OF THE MOON [ALSO FRI 5–SAT 6 & THU 11–SAT 13 APR]	SHOW	ARTS & DESIGN	36
FRI 5 APR	6PM	TRANSFORMATIVE SPACES: SCIENCE-ART RESIDENCIES	DISCUSSION	ARTS & DESIGN	28
	6PM	INDECENT INSECTS	DISCUSSION	ENVIRONMENT & NATURE	28
	7PM	MICROPHONES, MICROSCOPES, MICROGRAPHIA	SHOW	ARTS & DESIGN	28
MON 8 APR	10AM, 12.30PM & 3PM	TWO TRUTHS AND A ROBOT LIE	ACTIVITY	TECH & INNOVATION	28
	6PM	THE PROMISES AND PITFALLS OF AI	DISCUSSION	TECH & INNOVATION	29
	7PM	CARBON CAPTURE AND STORAGE FOR A NET-ZERO FUTURE	DISCUSSION	CLIMATE & SUSTAINABILITY	29
	7PM	PINTS AND PUZZLES	ACTIVITY	PHYSICS & MATHS	37
	7.30PM	INNOVATION LATE WITH LADY MACROBERT	EXPERIENCE	ENGINEERING	37
	8PM	THE SECRET PSYCHOLOGY OF MAGIC	TALK	MIND & BODY	29
TUE 9 APR	1PM	A VERY SHORT INTRODUCTION TO FRACTALS	TALK	PHYSICS & MATHS	30
	6PM	FREE AGENTS	TALK	MIND & BODY	30
	7PM	PERSPECTIVES ON MENTAL HEALTH	DISCUSSION	MIND & BODY	30
	7.30PM	LIVER TRANSPLANT – HOW HARD CAN IT BE?	ACTIVITY	MIND & BODY	30
WED 10 APR	6PM	OUR LIVES WITH IBD	FILM	MIND & BODY	30
	6PM	CREATIVE AI FOR CREATIVE WORK	TALK	TECH & INNOVATION	30
	6PM	HOW WILL AI SHAPE OUR HEALTH?	TALK	MIND & BODY	31
	7PM	CLIMATE HOPE: BUILDING A BETTER FUTURE	DISCUSSION	CLIMATE & SUSTAINABILITY	31
	7PM	A NIGHT IN THE UNDERGROWTH	EXPERIENCE	ENVIRONMENT & NATURE	37
	8PM	CONSTRUCTING TOMORROW	DISCUSSION	ENGINEERING	31
	5PM	THE PROFESSORS SHAPING THE FUTURE	TALK	SOCIETY & CULTURE	32
THU 11 APR	6PM	THE FUTURE OF TRANSPORT	DISCUSSION	CLIMATE & SUSTAINABILITY	32
	6.30PM	WHAT'S YOUR POISON?	TOUR	CHEMISTRY	32
	7PM	VIRUS BINGO	ACTIVITY	MIND & BODY	32
	8PM	AI FOR EARTH	TALK	CLIMATE & SUSTAINABILITY	33
	5.30PM	ANDY WARHOL & THE CHEMISTRY OF ICE CREAM	EXPERIENCE	CHEMISTRY	37
FRI 12 APR	6PM	OUR ACCIDENTAL UNIVERSE	TALK	SPACE	33
	7PM	LET'S PLAY	EXPERIENCE	ARTS & DESIGN	37
	7.30PM	ECTOCARPUS: WHEN SEAWEED MEETS DANCE	SHOW	ARTS & DESIGN	33
	8PM	THE ONE THING YOU NEED TO KNOW	TALK	PHYSICS	33
	SAT 13 APR	11AM	ARTIST TALK: WE PRETENDED IT WASN'T GREEN	TALK	ARTS & DESIGN
2.30PM		ARTIST TALK: MYTHIC INSTRUMENTS	TALK	ARTS & DESIGN	42
SUN 14 APR	11AM	SCIENCE FESTIVAL CHURCH SERVICE	TALK	SOCIETY & CULTURE	34
	11AM & 2PM	NEUROTRAIL	TOUR	MIND & BODY	34
	1PM	EDINBURGH CONSERVATION FILM FESTIVAL	FILM	CLIMATE & SUSTAINABILITY	34
	2.30PM	ARTIST TALK: POST-INDUSTRIAL ECOLOGIES	TALK	ARTS & DESIGN	42
	6PM	TAM DALYELL PRIZE LECTURE	TALK	ARTS & DESIGN	34

