Presented by: forum





WELCOME TO NORWICH SCIENCE FESTIVAL 2024!

We have a jam-packed programme for you at NSF24 - which is designed to help you delve deeper into the science subjects that spark your curiosity!

There's plenty of big family shows to enjoy, featuring BAFTA-winning Maddie Moate, CBBC's Dr Daniel Olaiya and TV pyrotechnician Fran Scott.

I can't wait to see Strictly star and keen birder Hamza Yassin at Norwich Cathedral later in the week, encouraging us to take a deeper dive into the world of birds.

Make sure you check out our new strand of events this year - the Science of Self. Designed to fill your lunch hour, these talks are all about helping us to better understand ourselves!

You'll also find forensic science, Al. journeys into the Jurassic era and plenty of ocean exploration in this incredible week of events.

Book now to delve a little deeper!

Claire Mutimer

Producer, Norwich Science Festival

HOW TO BOOK

Don't miss out - book as early as possible to avoid disappointment!

We expect many of our events at NSF24 to sell out, so we recommend booking early if there are any events you'd like to attend. Tickets can be booked at: norwichsciencefestival.co.uk.

Scan the QR code to view event listings and to book.

Norwich Science Festival is presented by:



For the most up to date information,



NOT SURE WHERE TO START?

Here are our NSF24 top picks for:



Little ones

Explore the wonder of science in our dedicated sessions for Under 5s: WonderTots, Expect hands-on play and exploration and a dressing up station for budding scientists! Dates vary. See page 7.



Those short on time

New for 2024 – a series of talks to dip into on your lunchbreak. From the science of love, emotions and grief, mental health and the body's physical limits - look out for our Science of Self series throughout the week. Mon 19-Fri 23 Feb. See pages 21-45.



The tech savvy

We've lots of Al-themed events for you, from ChatGPT to the role tech can play in our workplaces. Don't miss Kate Devlin's CTRL-ALT-DELIGHT - an exploration of the impact of AI on our romantic lives. Mon 19 Feb. See page 19.



If you can't wait!

We are launching a brand-new Satellite event Costessey, in partnership with **Ormiston Victory** Academy. Get stuck into some hands-on science fun, free talks and family workshops on Saturday 20 January, 10am-4pm.

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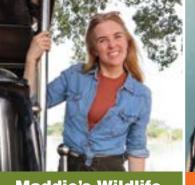
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FESTIVAL HIGHLIGHTS





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Dr Daniel Olaiya's Space Adventure Sun 18 Feb See page 18

THE EXPLORITION

Sat 17 Feb-Sat 24 Feb 10.30am-4pm The Forum Free

Throughout the Festival, The Forum's Atrium and an outdoor heated marquee in the Amphitheatre are transformed into The Explorium!

The Explorium is open everyday during the Festival from 10.30am–4pm and is a place for visitors of all ages to explore science through free, hands-on activities. Each day of the Festival has its own theme, so whether you're keen on astronomy or zoology – you can be sure that there's something for everyone in The Explorium!

Drop-in throughout the day.

Quiet Hour at The Explorium

For a calmer, less busy experience at The Explorium, book onto our Quiet Hour from 9.30am–10.30am each day. This time may particularly suit visitors who are neurodiverse or those who would prefer a quieter sensory experience. Our Festival team will be there to give you a warm welcome!

At 10.30am, the doors will open to the wider public. Visitors joining us for Quiet Hour are most welcome to stay and continue exploring.

Book for Quiet Hour at norwichsciencefestival.co.uk.

The Explorium Marquee is sponsored by:

VATTENFALL —



Clu'Dunnit: A CSI Experience Tue 20 Feb See page 24



Jurassic Park Wed 21 Feb See page 32



Hamza Yassin: Life Behind the Lens Thu 22 Feb See page 37



Stand-up ScienceFri 23 Feb
See page 43

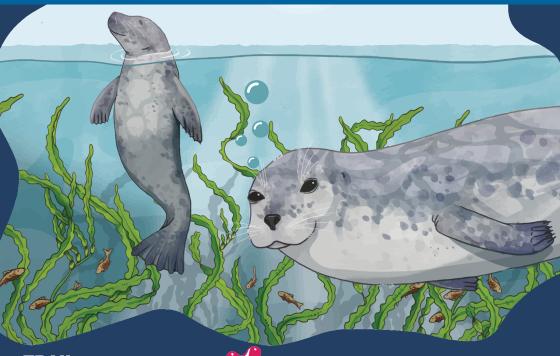


How to Build a Racing Car with Fran Scott Fri 23 Feb See page 45



X-Rated Nature Sat 24 Feb See page 49

THROUGHOUT THE FESTIVAL



TRAIL

Under the Sea

Sat 10 Feb-Sat 24 Feb Mon-Sat 9am-6pm, Sun 10am-4.30pm **Chantry Place** Free

Where in Norfolk might you find the Parpal Dumplin or the Tompot Blenny? Enjoy a self-led family trail with Chantry

Place and Norwich Science Festival this February half term, to discover 'Great Britain's Barrier Reef' - the Cromer Shoal Chalk Beds!

Follow the trail around Chantry Place to discover eight of the most amazing animals and plants that make this 100-million-year-old chalk reef, and its surrounding environments, their home! From seals to starfish and the neverbefore seen purple sponge, you won't

believe the incredible sea life on our doorstep. Can you find all eight creatures?

Take a moment to stop by our 'Under the Sea' Selfie Station and take a memorable photo with all the family - and don't forget to use the hashtag #NorwichSciFest24!

Complete your trail to collect a reward sticker and enter the competition to win a £100 Langleys gift card, kindly provided by Chantry Place. Collect your free trail map from Langleys in Chantry Place. or from The Forum.

The Under the Sea trail is beautifully illustrated by local artist, Bethany Lester. Age 3+

Sponsored by:

© Chantry Place



WORKSHOP

WonderTots

Sat 17-Sun 18 and Tue 20-Wed 21 Feb. **Times vary Lower Gallery, The Forum** Free

Explore the wonder of science with your little ones in our dedicated under 5s sessions, WonderTots! Led by Dr Lucy Catto, we'll make science child's play with lots of hands-on experiences, playful activities, and a dressing up station for budding vets, engineers, doctors and astronauts!

Multiple sessions throughout the day. The first session on each day is a Quiet session. Booking required.

Age 2-4

Sponsored by:





SHOW

To the Moon and Back

Sat 17-Sat 24 Feb. 11am and 2pm The Gallery, The Forum **Free**

Written by and starring Norfolk panto legend and Britain's Got Talent star. Ben Langley, this brilliant one-man play is all about the science behind a rocket trip to the moon!

Expect lots of laughter and adventure as young Tom and his Al friend, Squiffy, embark on a mission to the stars.

Age 5+

This play is supported by the People's Postcode Trust, a grant giving charity funded entirely by the players of the People's Postcode Lottery.





Poo, Glorious Poo! Sat 17-Sun 25 Feb **Pensthorpe** Included with admission

Pensthorpe's Poo Trail is back and better than ever! Follow the route around this amazing 700 acre nature reserve, and discover why your pet rabbit eats their own droppings, and which animal likes to live in their own poo. Ew!

Plus explore the four fabulous gardens, huddle in a bird hide or enjoy the Wild Rootz play zone - there's something for your entire brood at Pensthorpe!

Families







EXHIBITION

Exhibition of Art, Ecology and Science

Sat 17 Feb-Sat 16 Mar, 10am-4pm Diss Corn Hall Free

Humankind's footprint has triggered the next geological era for our planet, known as the Anthropocene. Featuring incredible work from Holly Sandiford, Kaitlin Furguson, Rachel White and Jacques Nimski, this is an exhibition and conversation between artists whose work centres around the arts, ecology and science.

All ages





SHOW

Step inside the Explorer Dome!

Mon 19–Sat 24 Feb, Times vary Norwich School £7

Step inside the magical atmosphere of the Explorer Dome to discover new worlds in these lively, interactive, and entertaining family shows! From the wonders of space to a voyage inside the brain, there are a range of shows to choose from – including dedicated SEND performances. Check the website for full details.

All ages









EVENT DAY

Slow You Down: Exploring Wellbeing

Tue 20-Thu 22 Feb, Sat 24 Feb, 10am-3pm Norwich Castle Museum and Art Gallery Included with admission

Join the team at Norwich Castle to explore the galleries together in a new light! Take a closer look at the collections, play, make, and maybe take a chance to pause and investigate how museums can support wellbeing for everyone.

Families





SCREENING

Toddler Time: The Smeds and the Smoos & The Snail and the Whale

Mon 19 Feb-Tue 20 Feb, Times vary Cinema City £3.30

Join Cinema City for an exploration of space and the natural world throughout the half term, with their regular showings aimed at pre-school children and their parents/carers.

Age 5 and under





WORKSHOP

Techathon 2024

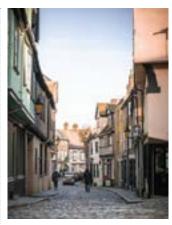
Wed 21 Feb-Thu 22 Feb, 9am-4pm Daynes Sports Centre, Norwich School £10

Step Into Tech brings the Techathon back to Norwich – a two-day event for young people to explore the possibilities of technology, meet expert mentors and learn new skills. In this fun-filled event, each team will take on a techy challenge, finding out what works and what doesn't. Suitable for complete beginners and tech wizards alike!

Ages 8-18

TECHATHON

and refreshments.



TOUR

In Sickness and in Health

Thu 22 Feb, Sat 24 Feb, 2pm Meet outside The Forum £5

From the medieval Great Hospital to the founding of the Norfolk & Norwich, and from Thomas Browne to Edith Cavell – the city of Norwich has a long and rich medical history.

Historical guide, Nigel Wimhurst, takes you on a journey through the city's streets, exploring the history of health in Norwich, and the development of medical services over the centuries.

This walking tour lasts approximately 90 minutes.

Age 18+

SAT 17 FEB - BUGS, BIRDS AND BEASTS

THE EXPLORIUM

Sat 17 Feb, drop-in 10.30am-4pm The Forum, Free

Explore the wonders of the natural world with our partners from across Norfolk, from All ages the smallest of creatures through to the wild and wonderful animals that we share our planet with. Plus, meet Pensthorpe's miniature harvest mice!

Book for our Quiet Hour from 9.30am-10.30am, for those who would prefer a calmer, less busy setting for their visit.

Sponsored by:

Pensthorpe



SATURDAY 17 FEBRUARY

DON'T MISS!



Maddie's Wildlife Rangers

Sat 17 Feb, 2.30pm **Norwich Theatre Royal** £10-£13.50

Get ready as BAFTA award-winning presenter. author, and YouTuber Maddie Moate takes you on a journey into the fascinating world of animals and conservation.

In this lively show, Maddie welcomes you into her wildlife park to join the ranks of honorary Wildlife Rangers. Young rangers will discover the importance of keeping our environment clean, learn the art of animal tracking, test their wildlife knowledge in a curious quiz, and experience the thrill of an animal rescue mission!

Maddie's Wildlife Rangers is an educational and entertaining family show that will leave young minds inspired and ready to protect our planet.

Includes book signing.

Age 6+



WORKSHOP

Build a Flamingo Friend!

Sat 17 Feb, 10.30am **Business & IP Centre Room, Millennium Library**

Flock to this fabulous workshop led by the team from Pensthorpe, in which you will make your very own cuddly flamingo toy!

Once you have brought your flamingo to life, the team will help you perform a health check on your new flamboyant friend - measuring their wings and beaks, checking their foot health, and even 'ringing' your bird.

You'll learn all about these brilliant, bright birds, and take home the perfect memento from your day at Norwich Science Festival.

Age 5+

Pensthorpe

WORKSHOP

The Littlest Jewellery Workshop in the World

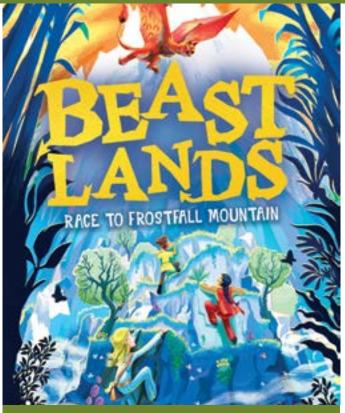
Sat 17 Feb, 11am Heritage Room, Millennium Library £6

Tonight is the world-famous Diatom Ball in Plankton City - and the glamorous, microscopic algae attendees need some diatom jewellery. Can YOU help the local jeweller get everyone ready for the big event?

In this charming workshop led by The Plankton Project, you'll discover what diatoms are and get the chance to design and create your very own diatom crown or tie to take home.

Age 5-8





TALK

Beastlands: Race to Frostfall Mountain

Sat 17 Feb, 11.30am The Auditorium, The Forum £5

Vet, zoologist, and children's author Dr Jess French tells us more about the weird and wonderful beasts that feature in her new book, Beastlands: Race to Frostfall Mountain. But how do you build a brandnew creature, using just your imagination?

Come along to hear more about the creatures that roam the Beastlands, and to find out Jess's top tips for building your own fantasy world. Perfect for budding authors and bookworms alike!

Includes book signing.

Age 8+



SHOW

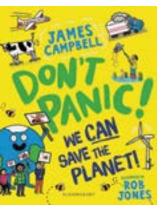
Breathe

Sat 17 Feb, 1pm **Norwich Theatre** Stage Two Adult £12 / Child £9.50

Experience a story told from the perspective of an acorn: the hectic forest floor, thrumming underworlds and dazzling heights of icy branches. Join three storytellers as they lead you through an enchanting experience like no other.

Breathe explores the inner workings of trees, all beautifully realised through a combination of puppetry, detailed sets and live camera work. Underscored through a truly unique blend of thumping Drum & Bass and live ethereal folk songs. Find the epic in the tiny in this celebration of trees, nature, and finding space in a buzzing community. Age 5+

Norwich Theatre



SHOW

Don't Panic! We CAN Save the Planet!

Sat 17 Feb, 2pm **Diss Corn Hall**

Children's comedian and author James Campbell is on a mission to make young Eco Worriers into **Eco Warriors!**

Based around his new book, this live comedy show will inspire children to feel confident that they can do something on their own terms to help in the fight against climate change.

Age 6-11





WORKSHOP

Bugs! Bugs! Bugs! Sat 17 Feb, 2pm Heritage Room, Millennium Library £7

Are creepy crawlies really that creepy? And would vou dare to hold one of them?

Join TV presenter and vet Dr Jess French for this unforgettable bug handling workshop! From the praying mantis to giant millipedes - learn more about these incredible creatures and the role they play in our ecosystem. Minibeasts kindly provided by The Bug Parc. Age 5+

TALK

Diatoms: Small Things that Make a Big Difference!

Sat 17 Feb, 2pm **Business & IP Centre Room,** Millennium Library £3

Did you know that diatoms help you breathe? Or that without them, there would be no dynamite? But what ARE diatoms?

This interactive talk from Elizabeth Beston will take you on a journey into the world of these incredibly important single-celled algae. You'll discover what they are, what they look like, and what they can do - and you'll find that small things can make a BIG difference!

Elizabeth is the founder of the Plankton Project. which surveys the near-shore plankton of Norfolk. Age 12+





BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK



Dan's Garden Jungle

Sat 17 Feb, 2pm The Auditorium, The Forum £4

Explore the amazing wildlife in our gardens with presenter and conservationist, Dan Rouse! From tiny insects to slug-eating hedgehogs and colourful varieties of birds, Dan will show you the different places to look for wildlife, and how we can help them to thrive on our doorstep.

Dan grew up on the South Wales coast and has an incredible passion for coastal birds – this show is perfect for young nature enthusiasts and their grown-ups!

Includes book signing.

Age 8+



14

TALK

Glow-in-the-Dark Creatures

Sat 17 Feb, 4pm The Auditorium, The Forum £5

Join Dr Jess French on a magical journey through the darkest of caves and the deepest of oceans – to discover a world of things that glow!

Learn how animals around the world light up of their own accord, and even meet some real-life glowin-the-dark creatures in this illuminating family talk. Age 5+







TALK

The Science of Beer-making with Jaega Wise (plus tasting)

Sun 18 Feb, 5pm YALM Foodhall £25

Author, presenter, and award-winning Head Brewer of Wild Card Brewery in East London, Jaega Wise, hosts a unique beer tasting event at YALM Foodhall – with a science twist!

Held in collaboration with local brewers Ampersand and Duration, you'll get the chance to taste a range of beers whilst Jaega – who has a background in chemical engineering – walks you through the science of beer-making and the mastery behind brewing.

Jaega is a presenter on BBC Radio 4's The Food Programme and is a fierce advocate for equality within the brewing industry.

Includes book signing.

Age 18+

YALM



SUN 18 FEB - FOOD AND FARMING

THE EXPLORIUM

Sun 18 Feb, drop-in 10.30am-4pm The Forum, Free

Discover the journey our food takes, from fields and farms all the way to the end of our forks! What kind of food is produced here, in Norfolk? How have we farmed in the past, and how is technology shaping farming of the future?

Book for our Quiet Hour from 9.30am-10.30am, for those who would prefer a calmer and less busy setting for their visit.

All ages





WORKSHOP

LEGO Farm Adventures Code, Build, Grow!

Sun 18 Feb, times vary Sir Isaac Newton Sixth Form Family ticket £14

Explore the future of farming with LEGO! Dive into the exciting world of coding and problem-solving in this unique workshop led by a LEGO Educator. Collaborate with others and unlock your creativity, whilst having a blast with LEGO!

Multiple sessions throughout the day, visit the website for details.

Age 8+



TALK

Would You Eat Blue Baked Beans?

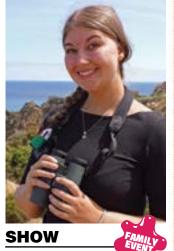
Sun 18 Feb, 10.30am The Auditorium, The Forum Free

The Norfolk and Norwich Science Association's Dr Duncan Gaskin explores the science of taste and flavour in this interactive talk about our experience and enjoyment of food. This talk may involve crisps, sweets and ultimately, trust - do you dare to try the dishes he'll be serving up?

Age 8+







Brilliant Birds

Sun 18 Feb, 11am NWT Cley Marshes Visitor Centre £4

Join presenter and ornithologist, Dan Rouse, for an interactive show which explores amazing birds with very unusual talents from around the world.

Featuring bubble-creating ducks, vomiting seabirds, and snake-stomping birds of prey, this is a talk for all the family to enjoy!

Age 8+





TALK

Can Robots Feed the World?

Sun 18 Feb, 12pm The Auditorium The Forum £5

Find out how agriculture robots are already growing our food in this talk from Kit Franklin, founder of the Hands Free Hectare project.

The project showcased automation in farming by completing the world's first autonomously grown cereal crop, without the help of human hands.

Kit will recap the fundamentals of robotics within agriculture and how this project developed from an idea on a postit to a ground-breaking world first!

Age 12+



TALK

The Future of Meat: What Will We Eat in 2034?

Sun 18 Feb, 2pm The Auditorium The Forum £5

Join Professor Tom MacMillian from the Royal Agricultural University as he discusses the trends and issues shaping what we eat, and where it comes from.

Meat production is a big factor in climate change but not all meat is created equal. From lab-grown nuggets to conservationgrazed beef, this talk will also explore the pros and cons of different types of meat production and will consider how we might be eating in ten years' time.

Age 12+

SHOW

Dr Daniel Olaiya's Scientific Space Adventure





Sun 18 Feb, 2pm **Norwich Theatre Playhouse** Adult £16 / Child £11

Join CBBC's Operation Ouch! presenter Dr Daniel Olaiya as he takes you on an awe-inspiring journey to discover the effects of space travel on the human body! Check out the effects of gravity on the heart through ultrasound, be wowed by extreme space footage and witness the outcome of pressure on the lungs (with explosive effects!)

Medicine meets the cosmos in this must-see family show - featuring big experiments, cutting-edge tech, and the wonder of space exploration.

Age 8+



WORKSHOP

Science On a Roll

Sun 18 Feb, 2pm The Games Table Free

Explore science through the roll of a dice, play together, and discover something new about the world around us! Are you ready to disappear into new realities through the medium of board games?

Age 7+





TALK

STEMM Careers: So You Want to Work in Medicine?

Sun 18 Feb, 4pm The Auditorium, The Forum Free

When not on our screens. Dr Daniel Olaiya is working as a frontline doctor - as an anaesthetic and critical care doctor with the NHS. He also specialises in international medical evacuation, repatriating sick patients from all over the world.

In this fascinating talk, Daniel will share his

experiences in medicine, and offer up lots of tips and insights into life as a doctor and the importance of a healthy work/life balance.

If you're thinking about a career in medicine, this is one not to miss!

Age 12+

Sponsored by:



MON 19 FEB - TECH, INNOVATION & ENGINEERING

MONDAY 19 FEBRUARY

DON'T MISS!

TALK

CTRL-ALT-DELIGHT

Mon 19 Feb, 7pm **Norwich Arts Centre** £9.50

Have you ever swiped right on a chatbot? Or considered a romantic rendezvous with a robot?

Join computer scientist Dr Kate Devlin for an electrifying evening of AI intimacy, as we explore our close interactions with technology.

Just how is Al influencing our emotional landscapes? Might it change how we have sex? And what does this mean for our own human connections? Get the answers to these questions - and more - as we explore the complex and fascinating world of human-machine relationships.

Kate is a Reader in Artificial Intelligence & Society at King's College London, is the author of Turned On: Science, Sex and Robots, and has made several appearances on TV and radio.

Includes book signing.

Age 18+

Norwich Centre.



THE EXPORTUNI

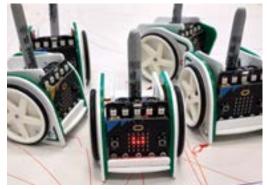
Mon 19 Feb, drop-in 10.30am-4pm The Forum. Free

Delve into the wonders of technology and engineering - from the tiniest of computer chips to the biggest of buildings! Talk tech and Al with those who know it best, and meet local experts in the construction industry.

Book for our Quiet Hour from 9.30am-10.30am, for those who would prefer a calmer and less busy setting for their visit.

All ages





WORKSHOP

Creative Drawing with Robot Buggies

Mon 19 Feb, 10am-12pm and 2pm-4pm **Creative Tech Lab**

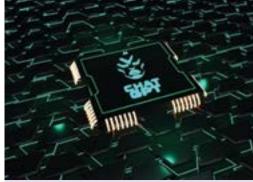
Norwich University of the Arts £3

Learn how to programme a BBC micro:bit robot buggy car and command it to draw artistic patterns in the Norwich University of the Arts' brand new Creative Tech Lab!

Perfect for young people with an interest in programming or those who want to have a go at making art in a new way!

Age 12+





TALK

Liar, Liar, ChatGPT on Fire

Mon 19 Feb, 11am The Auditorium, The Forum Free

Does ChatGPT ever lie?

Postgraduate Researcher Niklas Henderson unravels how ChatGPT works behind the scenes - considering the unfortunate consequences of its training methods and why users should be wary about trusting some of the information it provides.

Age 12+



MON 19 FEB - TECH, INNOVATION & ENGINEERING



The Science of Running

Mon 19 Feb, 1pm **Production Theatre Norwich University of the Arts** £6

Are you a runner? Perhaps you jog the occasional Park Run, or you've completed the Run Norwich 10K?

In this inspiring talk, Professor Ben Garrod shares his experience of preparing to run the Dragon's Back - a 380km, six-day running journey across Welsh mountain summits.

Having submitted himself to a battery of tests before, during and after the race - including muscle function, cognition and blood and urine sampling - Ben will reveal how we might all become better runners, no matter your PB.

Ben Garrod is a presenter, author, evolutionary biologist. His notable TV credits include BBC's Attenborough and the Giant Dinosaur. Secrets of Skin and Baby Chimp Rescue.

Age 12+

Sponsored by:



WORKSHOP

Living Breathing Cyber: **Digital Escape Room**

Mon 19 Feb, times vary Heritage Room, Millennium Library Free



A crime has been committed! But not just any crime - a cybercrime, using computers and online networks.

We need your help to find the culprit! You'll work as a team to crack the codes, decipher puzzles and piece together clues in this immersive, high-energy experience, inspired by escape rooms.

Hosted by Professor of Cyber Security Oli Buckley. Multiple sessions throughout the day.

Age 8+





BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK

MON 19 FEB - TECH, INNOVATION & ENGINEERING

TALK

Oppenheimer to Atoms for Peace: Nuclear Medicine through the Ages



Mon 19 Feb, 2pm **Business & IP Centre Room** Millennium Library Free

Is going nuclear always negative? Is radioactivity only about atomic bombs?

Come and discover the weird and wonderful world of nuclear medicine, from Marie Curie to the modern day. Explore 120 years of nuclear medicine with Clinical Scientist Matthew Gray, who will explain the history of the field, and where it might end up in the future.

Age 12+

Norfolk and Norwich (1) University Hospitals

MON 19 FEB - TECH, INNOVATION & ENGINEERING

60(E)

TALK

Science in the Movies

Mon 19 Feb, 7pm The Auditorium, The Forum Free

Have you ever watched a movie and wondered - is this possible?

In this entertaining talk, biologist, selfconfessed geek and cinephile Dr Tony Blake will dig deep into the science behind our some of our favourite movie franchises! With input from UEA lecturers in biology, chemistry and physics, together you'll rank the plausibility of the science outlined in Hollywood's most famous scripts. Warning - may contain (major) spoilers!

Age 12+



TALK

Digital Ghosts: Al and Our **Altered Reality**

Mon 19 Feb, 4pm The Auditorium The Forum. Free

The lines between the digital world and reality have become increasingly blurred. Oli Buckley, Professor of Cyber Security at UEA, will explore some of the ways that artificial intelligence can be used to make us believe things that never happened. How can we tell the real from the fake? Age 12+



Dive into the fascinating fusion of Al and art with Chris Hoffmann – an experimental image maker who uses machine learning tools creatively.

Chris will share his perspective on Al as an artist - exploring both how the technology works within his process, but also why AI can be problematic. Chris has worked with a variety of clients. including Microsoft and Apple. Age 12+



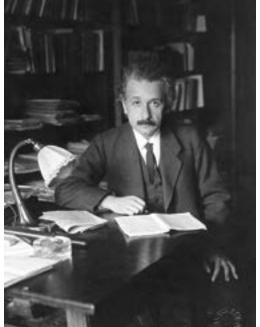
Einstein in Time and Space

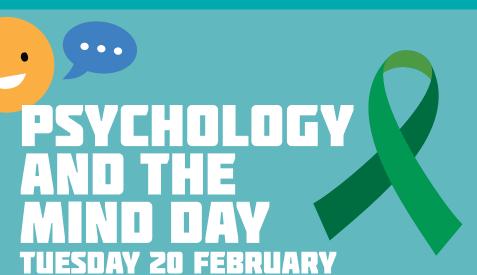
Mon 19 Feb, 7.30pm The Refectory Bakery and Café, **Norwich Cathedral £8**

Today, his image is instantly recognisable, and his name has become a shorthand for genius. He's as much a symbol as a man – but who was Albert Einstein, really?

From love letters to joke-telling, the Nobel Prize-winning physicist is brought back to life in author Samuel Graydon's book. Einstein in Time and Space. Samuel, in conversation with Henry Layte, will discuss his book and the life of the eminent scientist.

Includes book signing. Age 16+





DON'T MISS!

IMMERSIVE EXPERIENCE

Clu'Dunnit: A CSI Experience

Tue 20 Feb, 7.30pm **The Assembly House** £25

Join former Scotland Yard Detective Chief Inspector and criminal psychologist, Steve Gaskin, for an evening of hands-on CSI and forensic science.

Armed with a police dossier, you'll search the crime scene for clues, using forensic science techniques from blood splatter to ballistics - to piece together the puzzle and solve the murder in just two hours. It's a race against time to put your deduction and analytical skills to the test!

This unforgettable immersive murder investigation experience, with its blend of mystery, science, and fun, is perfect for friends to enjoy together.

Ticket includes one free drink.

Age 16+





TUES 20 FEB - PSYCHOLOGY AND THE MIND

THE EXPLORIUM



Tues 20 Feb, drop-in 10.30am-4pm The Forum Free

Our brains are amazing! This fantastic organ enables us to learn, create and feel, as well as controlling every blink of our eyes and beat of our heart. But what about our mental health or state of mind?

Explore the wonders of psychology and the mind with our partners from across Norfolk – and beyond!

Book for our Quiet Hour from 9.30am-10.30am, for those who would prefer a calmer and less busy setting for their visit.

All ages

WORKSHOP

Young Artist's Studio: Symbolic Turtles

Tue 20 Feb, 10.30am-3.30pm **Sainsbury Centre for Visual Arts** Suggested £15

Spend the day in the Sainsbury Centre galleries and studio with an artist, exploring the turtle-themed objects in their collection, including objects that are made using smooth, darkly mottled turtle shell.

Investigate why these materials might have been used, what they may mean for their makers, and then create your own artworks that remind us of what we can learn about protecting our oceans.

Age 7-11



EVENT DAY

Crossings: Nature in Migration

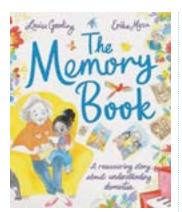
Tue 20 Feb. 10.30am-3.30pm **Time and Tide Museum** Included in admission

Enjoy a day of nature-related fun, exploring the theme of migration. Norfolk Wildlife Trust volunteers will be on hand, plus take part in a starlings murmuration craft, alongside other activities throughout the museum.

Age 6+



TUES 20 FEB - PSYCHOLOGY AND THE MIND



TALK

The Memory Book: Storytime with Louise Gooding

Tue 20 Feb, 11am Sir Isaac Newton Sixth Form £3

Join Louise Gooding for a reading of The Memory Book, a heartfelt and reassuring story for children about understanding dementia, and the love between a little girl and her grandma.

After the reading, there will be some time to discuss and reflect together on the ways that we can continue to create new memories with loved ones who are affected by dementia.

Age 5+



TALK

The Power of Shared Experience: Local Women and the Menopause

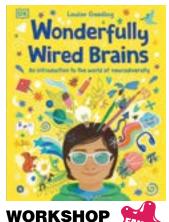
Tue 20 Feb, 11am The Auditorium The Forum Free

Professor Anne-Marie Minihane, from UEA's Norwich Medical School, is joined by health-care professionals and local women as together they delve into findings of a recent report into the experiences of peri- and post- menopausal women.

The panel will share support and advice, alongside ambitions for the future of menopausal healthcare.

Age 16+





Wonderfully Wired Brains

Tue 20 Feb, 1pm and 3pm Sir Isaac Newton Sixth Form £6

Discover your wonderfully wired brain with best-selling author Louise Gooding, in this interactive family workshop! You'll work together to explore your strengths and values, and the building blocks that make you, you!

This workshop is neurodivergent friendly.

Louise is a proud ADHDer herself, and is keen to increase the representation of neurologically diverse people in children's books. Age 8–12

SCIENCE OF SELF

TALK

Emotional Ignorance

Tue 20 Feb, 1pm
Production Theatre
Norwich University of the Arts



Why can't we think straight when we're hungry? And why can we never forget embarrassing memories? One thing is for sure – emotions can be a pain.

After losing his dad to Covid-19, neuroscientist and author Dr Dean Burnett decided to put his emotions under the microscope, for science. Combining expert analysis, humour, and powerful insights into the grieving process, Dean will explore how instead of holding us back, emotions make us who we are.

Dean is a neuroscientist, lecturer, author, science communicator and comedian. Includes book signing.

Age 16+

TALK

Antibiotics in Nature and Medicine

Tue 20 Feb, 2pm Business & IP Centre Room, Millennium Library Free

Plants and insects have been a source of – and have used – antibiotics for millennia, long before the discovery of penicillin almost a century ago. Head of Molecular Microbiology at the John Innes Centre and Professor Matt Hutchings will recap the history of antibiotics, and will explore how studying relationships within the natural world could provide us with a new generation of medicines.



BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK



The Great Big Dinosaur Show

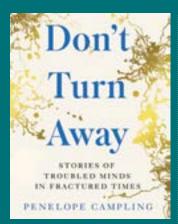
Tue 20 Feb, 2pm Norwich Theatre Stage Two Adult £12 / Child £10

Join poet Simon Mole and musician Gecko for a family show full of poems, raps and songs about all your favourite prehistoric protagonists (and some you haven't heard of yet!). Expect some spine-tinglingly funny scares and get your groove on to some Jurassic Classics!

Families



TUES 20 FEB - PSYCHOLOGY AND THE MIND



TALK

Don't Turn Away: Britain's Broken Mental Health Service

Tue 20 Feb, 2pm The Auditorium The Forum £6

Psychotherapist Penelope Campling will offer her unique insight into how we treat those in distress. Having worked with patients from all walks of life over the course of her 40-year career - including supporting frontline clinicians during the Covid-19 pandemic -Penelope will explore how progress in mental health care is fast being eroded. and how crucial it is in today's uncertain world that we do not turn away. Includes book signing.

Age 18+



TALK

STEMM Careers: So You Want to be an Engineer?

Tue 20 Feb, 4pm **The Auditorium** The Forum Free

Mechanical engineer, TV presenter, podcaster and author Dr Shini Somara shares stories from her career in this insightful and engaging talk. Shini is committed to making science and tech more diverse and inclusive, and her transformative journey has ensured her place amongst the most highprofile engineers working today.

Age 12+







PANEL EVENT

Al and the Future of Education

Tue 20 Feb, 6pm **Production Theatre Norwich University** of the Arts £5

How might artificial intelligence shape the future of education?

A panel of leading experts from across the education sector come together to discuss how advancements in Al might change our lessons, lectures, and exams. Covering issues of plagiarism, the use of ChatGPT and how technology can enhance the learning experience, this event will be of incredible interest and value to teachers. educators, parents, and students alike.

Age 16+



PANEL EVENT

STEMM Careers: So You Want to **Work in Science?**

Tue 20 Feb. 7pm The Refectory **Bakery and Café Norwich Cathedral** Free

Hear from a panel of leading women working in the STEMM industries, as they share insight into their journeys and careers so far.

Featuring scientists from Norfolk and beyond, this event is guaranteed to inspire – as well as offer practical tips for those who are thinking of a career in science.

Age 12+ Sponsored by:





TALK

Stats of the Day

Tue 20 Feb, 7.30pm The Auditorium, The Forum £7



In the modern era of football, data has become a game-changer. Football clubs aren't only looking for raw talent and instinct when it comes to their teams – but are also hoping to harness the power of information to gain a competitive advantage in games.

Performance Analysts George Buckley and Emily Escreet will take you deep into the data behind the Academy at Norwich City Football Club - revealing the importance of stats in realising the full potential of the Canaries' young players.

Age 16+

SHOW

The Nature of Forgetting

Norwich Theatre

Tue 20 Feb, 7.30pm **Norwich Theatre Playhouse** Adult £19.50 / Child £12.50 / Schools £10

Tom is living with young onset dementia. We meet him as he prepares for his 55th birthday party and past memories come flooding back.

Developed with UCL Neuroscience Professor Kate Jeffery and the Alzheimer's Society, this deeply moving show is a life-affirming journey into a weakening mind, where broken does not have to mean defeated.

Age 8+

WED 21 FEB - GORLESTON SCIENCE SATELLITE



Gorleston Science Satellite at East Norfolk Sixth Form College

Wed 21 Feb, drop-in 10am-4pm Free

Norwich Science Festival-on-sea, anyone? We're bringing the very best of the Festival to Gorleston in partnership with East Norfolk Sixth Form College for one day only!

Book in advance onto our free workshops, talks and shows at norwichsciencefestival.co.uk.

THE MINIEXPORTUNI

Drop-in to visit the Mini Explorium and explore science and our changing world through FREE family-friendly, hands-on activities.

Plus – meet the intrepid explorers who discovered the sunken 16th century HMS Gloucester just a few miles off the coast of Great Yarmouth, Join our friends from the Time and Tide Museum to explore the science and history of the Norfolk coast through artefacts, dressing up and hands on fun!





SHOW

Spectacular Science

Wed 21 Feb, 10.30am **East Norfolk Sixth** Form College Free

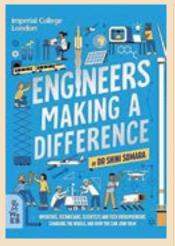
Think science is boring? Think again!

Mark Thompson will showcase the strange and (almost!) magical properties of matter in his award-winning Spectacular Science show – featuring vortex generating dustbins and howling jelly babies!

Great fun for all the family

like you have never seen it before.





TALK

Engineers Making a Difference with **Dr Shini Somara**

Wed 21 Feb, 11am **East Norfolk Sixth** Form College Free

Engineers are the superheroes of the real world – using problem solving skills to try and tackle some of the biggest challenges we face.

Hear from engineer, author and TV presenter, Dr Shini Somara, as she shares insights from her career journey to date. Shini will also introduce you to some of the engineers who have inspired her too.

Includes book signing. Age 10+



TALK

Prime Mates with Professor **Ben Garrod**

Wed 21 Feb, 1pm **East Norfolk Sixth Form College** Free

When it comes to humans and wild apes, there's less that separates us than you might think!

Join biologist, author, and broadcaster Professor Ben Garrod - who has lots of first-hand experience working with chimps, gorillas and orangutans as he explores just how close we all are to our nearest living animal relatives.

Includes book signing. Age 7+

WORKSHOP Forensic Fingerprint Fun!

Wed 21 Feb, times vary **East Norfolk Sixth** Form College Free

Former Detective Chief Inspector Steve Gaskin hosts this incredible fingerprint masterclass in which you will become an expert in forensic fingerprinting! You'll hear about famous criminal cases that have depended upon fingerprints, and you'll see how fingerprints appear in the natural world.

Age 6+



PLUS MANY MORE!

For workshops, talks, and shows, we advise booking in advance. For full details of all events at Gorleston, and to book, visit norwichsciencefestival co.uk.

This Science Satellite event is supported by Norfolk Community Fund, through the Dudgeon Community Fund.



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WED 21 FEB - NORWICH RESEARCH PARK

THE EXPLORIUM

Wed 21 Feb, drop-in 10.30am-4pm The Forum Free

Explore the amazing scientific research happening right here in our fine city! Meet the real scientists who are changing the world as we speak – and be inspired to have a go for yourself.

Book for our Quiet Hour from 9.30am-10.30am, for those who would prefer a calmer and less busy setting for their visit.

All ages





WEDNESDAY 21 FEBRUARY

DON'T MISS!

BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK



SCREENING

Jurassic Park

Wed 21 Feb, 6pm **Cinema City** Members £5 / Non-members £8

Steven Spielberg's award-winning film - the one 65 million years in the making - is back on the big screen, for one night only!

This special screening of Jurassic Park (1993) for Norwich Science Festival will kick off with a short talk from film fan and biologist Dr Tony Blake on the science behind one of the biggest films in motion picture history. Sit, back, relax and enjoy – the park is open.

Age 12+





WORKSHOP

Hunting the Higgs!

Wed 21 Feb, times vary **Sir Isaac Newton** Sixth Form £6

Make history all over again and control the legendary Large Hadron Collider (LHC) in this interactive workshop. With the help of Dr Sam Gregson – who used to work at CERN - and direct access to actual LHC data, vou'll become a particle physicist for the day!

Be a part of one of the greatest discoveries of modern science. Do you have what it takes to beat the clock and find the elusive Higgs Boson particle?

Workshops take place throughout the day. Age 12+





WORKSHOP

Speak Up to Save the Planet!

Wed 21 Feb. 10.30am **Business & IP Centre Room, Millennium Library** Free

Could you campaign to stop climate change? Do you want your voice to be heard?

In this workshop led by UEA Honorary Lecturer Beth Derks, you'll be taught tips and tricks on how to write powerful speeches and how to deliver them. You'll gain skills and confidence, discover how to get audiences to listen to your message, and come home with the tools to take the next steps.

Get inspired, find your voice, and make a difference in the fight against climate change.

Age 12+





WED 21 FEB - NORWICH RESEARCH PARK

TALK

Secrets of the Seaside

Wed 21 Feb, 10.30am The Auditorium, The Forum Free

Have you ever wondered why the seaside smells the way it does?

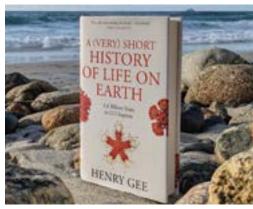
That familiar smell is made by many millions of tiny organisms that make their home in the water and the mud on the coast. Discover what these organisms are, how they work and why they are so important to the environment – from the forming of clouds to the growing of crops through a series of scenic clips of the North Norfolk coast and a presentation by Dr Beth Williams. 60UE\ Age 12+



TALK

A (Very!) Short History of Life on Earth

Wed 21 Feb, 6pm The Auditorium. The Forum £6



This is the story of life on our restless planet. Once upon a time, asteroids fell from outer space, creatures crawled from sea to land, dinosaurs roamed the earth, and the human species was born.

Writer Henry Gee will transport us throughout history, covering billions of years, from the birth of our planet to the evolution of life itself. He'll tell us the unlikely tale of humanity: one of luck and perseverance. He'll conjure a future beyond our imagining, a billion years ahead.

From disaster to hope, this is the most amazing story of all. Are you sitting comfortably? It's time to begin. Age 12+

SCIENCE OF SELF



Team Dynamics: Decoded Wed 21 Feb, 1pm

Production Theatre Norwich University of the Arts £6

34

Curious about how to improve the performance of your team? Or how to navigate tricky interpersonal dynamics? Perhaps you want to be a better team player? If the answer to any of the above is yes, then this workshop is for you!

James Bianco will explore the science of building teams that work, with practical advice and takeaways to apply in your workplace.

James is the Director of 16degrees.org an organisation that supports teams to improve their performance in a human way - and a coach, geologist, and an amateur ornithologist.

Age 16+

Sponsored by:



TOUR

Star Walk with Mark Thompson

Wed 21 Feb, 6pm Meet at Deepdale Camping & Rooms, Deepdale Farm £14

How often do you look up at the stars? Do you know what you see when you do?

Enjoy time to stargaze in this fascinating walk and talk from astronomer, Mark Thompson. Meeting at Burnham Deepdale, you'll walk 1 and 1/4 miles out along a section of the Norfolk coast path, where Mark will take you on a tour of the stars.

BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK

Don't forget appropriate footwear and winterwear!

Age 10+



PANEL EVENT

Artificial Intelligence and Me

Wed 21 Feb, 6pm **Production Theatre Norwich University of the Arts** Free

Al is changing the world, and our role within it. The future of work is being transformed.

This is your chance to hear from a panel of experts, including Google employee Matthew Buskell, and learn about AI, from the opportunities to the threats.

In this practical talk, you'll receive valuable insight into the role of AI in culture today, where it's going in the future, and how to choose a career – whether you're a parent wanting to advise your child, or a young person making crucial decisions about what comes next.

Age 12+



TALK

Pint of Science

Wed 21 Feb, 7.30pm Cafe Bar Marzano, The Forum £5

exploring the research taking place right here in Norwich - and how it is contributing to the discovery of the cures of the future.

Local scientists will share stories from their cutting-edge work developing new anti-cancer drugs, and will explain the importance of metals in drugs and how microbes can be both good and bad for our life on Earth.

new research, over a pint or two!

Age 18+



THURSDAY 22 FEBRUARY

DON'T MISS! TALK

Hamza Yassin: My Life Behind the Lens

Thu 22 Feb, 7.30pm **Norwich Cathedral** £23.50

Wildlife presenter, skilled cameraman and winner of Strictly Come Dancing Hamza Yassin will share insight into his life behind the lens, from his young life in Sudan to his travels around the world. Hamza is known for his appearances on BBC's Countryfile and his recent documentary, Hamza: Strictly Birds of Prev.

Featuring a few industry secrets and an infectious passion for birds, this utterly lovely and inspirational talk will have you reaching for a camera and a pair of binoculars. This is not one to miss!

This event is presented in partnership with the Norfolk Wildlife Trust.

Age 12+







How are new drugs discovered?

Join Pint of Science for an evening of talks

Come and enjoy an evening of exciting

THU 22 FEB - CHEMISTRY. PHYSICS AND ASTRONOMY

THE EXPLORITION

Thu 22 Feb, drop-in 10.30am-4pm The Forum, Free

Explore the great expanse of the universe – from shooting stars to black holes – through to the tiniest of molecules and atoms that make up our lives here on Earth! Plus, find out how physics plays a role in your eyesight.

Book for our Quiet Hour from 9.30am–10.30am, for those who would prefer a calmer and less busy setting for their visit.

All ages

Sponsored by:







WORKSHOP

Adventures in Modular Synthesis and Electronic Music

Thu 22 Feb, 10am and 11.30am Sir Isaac Newton Sixth Form Free

Explore sound, music and electronics in this journey through the extraordinary world of Eurorack modular synthesis.

YouTuber and local musician Robin Vincent will be your guide, as you learn to patch oscillators, trigger rhythms, and sequence your way to cool basslines – working together to generate music by connecting different synthesizer modules!

Dive into music technology at its most experimental and interactive.

Age 12+

38



EVENT DAY

Wall of Sound

Thu 22 Feb, 10am-2pm Norwich Cathedral £3.50 per child

Sound and science collide in Norwich's beautiful Norman Cathedral!

Kids will learn how sound works through engaging activities and inspiring workshops, from echoes to acoustics.

This exciting event will give children the chance to perform their own experiments and explore how sound is all around us.

Age 5+

NORWICH

THU 22 FEB - CHEMISTRY. PHYSICS AND ASTRONOMY

WORKSHOP

Do You Love Exploring?

Thu 22 Feb, 10.30am Lower Gallery, The Forum Free



Explore the wonders of the natural world with award-winning children's authorillustrator, Matt Robertson!

From the tiniest of kingdoms underneath our feet, to the deepest seas – you'll learn about our amazing planet in Matt's awesome quiz, and then have a chance to flex your creative muscles by making your very own wild creature! Perfect for intrepid explorers.

Age 5+

Sponsored by:





WORKSHOP

Creative Sound with SoundHoppers

Thu 22 Feb, 10.30am Diss Corn Hall, £3 per child

Developed by sound artists, this interactive workshop encourages children to engage with sound freely and playfully – with listening activities, soundboxes and sound-generating devices and materials. Explore how sound travels through materials and objects – and make plenty of noise!

Age 5-11

CORN



Bones, Beaks and Body Bits!

Thu 22 Feb, 10.30am–12.30pm NWT Cley Marshes Visitors Centre Members £5, Non-members £6

Did you know that there are five species of owl in Britain? You can often see them across Norfolk, including at Cley!

Dissect owl pellets to look for the bones of their latest meal, and learn all about these captivating and nocturnal creatures.

Families



THU 22 FEB - CHEMISTRY, PHYSICS AND ASTRONOMY



TALK

Detecting Waves on a Galactic Scale

Thu 22 Feb, 11am **The Auditorium** The Forum Free

Scientists have successfully identified evidence for gravitational waves being emitted by the largest possible individual objects in the entire universe: supermassive black holes.

Associate Professor in Physics, Dr Robert Ferdman will share insight into this groundbreaking discovery - how it was achieved. its importance to astrophysics and what it might mean for the future. 60UE\

Age 12+

TALK

Life on Mars

Thu 22 Feb 12pm **Business & IP Centre Room Millennium Library** Free

Will humans ever be able to live on Mars? And if we could, what would life be like when we arrived?

Life-long space enthusiast Dr Steven Cutts takes us on a journey to this neighbouring planet - one which we have been fascinated by for more than half a century - outlining what we know about it, and how.

Age 16+

SCIENCE OF SELF

TALK

The Balanced Brain Thu 22 Feb, 1pm **Production Theatre Norwich University of the Arts** £6

Understanding the cause of poor mental health is one of the crucial questions of our time. Where does good mental health come from? Why do treatments work well for some people, but not others? The answers are unique to us all.

Award-winning neuroscientist Camilla Nord will explore how the brain constructs our sense of mental health. and will show that, with so many factors at play – there are more possibilities for recovery and resilience than we think.

Camilla leads the Mental Health Neuroscience Lab at the University of Cambridge, and her research has been featured in national publications.

Age 12+

Sponsored by:



TALK

The Periodic Table

Thu 22 Feb, 2pm The Auditorium The Forum £6



How well do you know the Periodic Table?

THU 22 FEB - CHEMISTRY, PHYSICS AND ASTRONOMY

In this entertaining journey through the elements, science communicator and chemist Dr Jamie Gallagher will chart the discovery of the elements that make up this iconic table.

Presented by the Cosmic Shambles Network.

Age 12+



TALK

Can We Discover More in Space?

Thu 22 Feb, 6pm The Auditorium The Forum Free

From tackling climate change to battling disease, how might the experience of microgravity help with the challenges that humans face?

Gravitilab's Charlotte Daniels and Rob Adlard will explore how access to outer space allows researchers and scientists to conduct incredible and ground-breaking experiments, which could help to identify solutions to some of the most pertinent global questions we face on earth.

Age 16+

Norwich Theatre



SHOW

The Science of Jurassic **World with Jon Chase**



Thu 22 Feb, 2pm **Norwich Theatre Playhouse** Adult £13 / Child £10

Join author and presenter Jon Chase for an entertaining expedition into the world of the dinosaurs!

In this family show, you'll dive deep into the science behind the much-loved movie franchise that sees geneticists resurrect dinosaurs, and uncover the facts behind the films. Jon Chase is the co-author of The Science of Jurassic World.

Age 8+

LUNCH

HOUR



PANEL EVENT

Should We Trust New Tech?

Thu 22 Feb, 6pm
Production Theatre
Norwich University of the Arts
£6

The introduction of new technologies into our lives is a complex issue, and we are living in a time in which the pace of technological change seems to outstrip our ability to assess the long-term impacts.

On the one hand, tech brings immense benefits to the way we live, the way we communicate, and the way we work – even the way in which we are treated in hospital. However, trust in tech is not universal, nor unconditional.

Dr Jack Stilgoe, Dr Penny Hundleby, Professor Mark Wickham and Dr Harry Dyer join host, Dr Jamie Gallagher, to unpack why we are suspicious of new tech and whether there is an advantage to being an early adopter.

Age 16+



TALK

Beyond Behaviour with Marie Gentles OBE

Thu 22 Feb, 7.30pm Norwich Arts Centre £12.50

Fresh from her BBC documentary Helping our Teens, Marie Gentles OBE will share insight into her groundbreaking work, and the profound impact this has had on the lives of families.

Marie aims for all children and young people to feel seen, heard, understood, empowered and safe. Through her positive and practical approach, she has provided parents, educators, and caregivers with invaluable insights into nurturing healthy, well-adjusted children.

This is a fantastic opportunity to gain insight from one of the UK's leading child behaviour experts and a true pioneer in the field.

Includes book signing.

Age 16+

Norwich Arts Centre



SI

SHOW

Stand-up Science

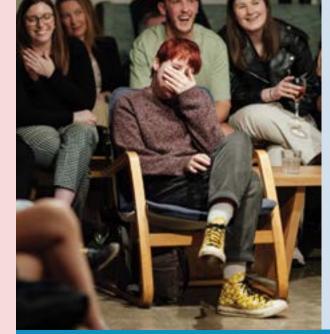
Fri 23 Feb, 7.30pm
The Refectory Bakery and Café
Norwich Cathedral
£12.50

Love science? Love comedy? Want to laugh and feel smart? Then this stand-up show is just the thing for you!

Featuring a compilation of comedians talking about their favourite scientific topics and hosted by scientist Matt Hobs and Jericho Comedy founder Alex Farrow, Stand-up Science is fresh from successful sell-out shows at the Edinburgh Fringe Festival.

Plus there'll be an array of Bread Source treats available for purchase.

Age 16+



BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK

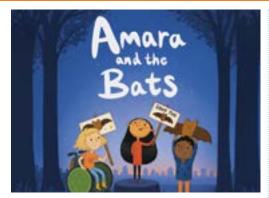
FRI 23 FEB - CLIMATE CHANGE AND SUSTAINABILITY

THE EXPORTUNI

Fri 23 Feb, drop-in 10.30am-4pm The Forum. Free

Globally we witnessed some of the most extreme weather in 2023, from devastating 9.30am-10.30am, for those who heatwaves to torrential downpours and flooding. The climate crisis is here - and action is desperately needed. Explore some of the incredible research taking place here, in Norwich, to counter the





WORKSHOP

Amara and the Bats

Fri 23 Feb, times vary **Sir Isaac Newton Sixth Form** £3

Author and illustrator Emma Reynolds reads from her charming picture book, Amara and the Bats - a story of wildlife conservation and hope!

Plus - games and drawing to help younger children explore this magical nocturnal world. Sessions take place throughout the day.

Age 3+

Sponsored by:





Sharks: Predator or Prey

Fri 23 Feb, 11am The Auditorium, The Forum **Free**

There are a whopping 500 species of shark - yet most of us can only name a few, and usually because they have a bad reputation!

In this insightful talk from marine conservation biologist, Ian Campbell, you'll learn about the roles that these incredible creatures play in our oceans and how organisations across the world are helping to protect them.

Age 8+

SHOW

How to Build a Racing Car with Fran Scott

Fri 23 Feb, 11am and 2pm **Epic Studios** £5

Buckle up and charge your batteries! We're going full throttle into the science behind racing cars in this family stage show with TV engineer and pyrotechnician, Fran Scott. You'll get the chance to help Fran decide how to create the perfect eco-racing car, with plenty of amazing demonstrations along the way!

Fran has been presenting engineering on TV for years - from CBBC's Absolute Genius with Dick and Dom to Channel 4's Lego Masters - and is an experienced



prop maker and demo developer. including for the Ri's Christmas Lectures. Age 6+

epicstudios≡

SCIENCE OF SELF



TALK

The Science of Love

Fri 23 Feb, 1pm **Production Theatre Norwich University of the Arts** £6

What is love? From Shakespeare to Haddaway, poets, artists and musicians have long been asking themselves the very same question.

Fresh from her appearance on BBC's Planet Sex with Cara Delevinge evolutionary anthropologist Dr Anna Machin may have an answer. On a whistlestop tour from neurochemicals to genes, Anna will explore the factors that impact how we behave and how we feel when we are in love - even offering a glimpse into the role of technology in our relationship with one of our most powerful emotions.

Includes book signing.

Age 16+

Sponsored by:



HOUR

WORKSHOP

Create, Imagine, Change! Comics for a Better World

Fri 23 Feb, 2pm and 3pm **Sir Isaac Newton Sixth Form** 26

Young people are helping to transform our collective future. In this uplifting comic-making workshop inspired by the graphic novel, Drawn to Change the World, you'll learn about amazing youth activists who are working all over the world to protect both people and planet.

Led by author-illustrator Emma Reynolds, you'll explore the importance of protest and taking action, and use the power of imagination to create your own change-making comic about an issue that matters to you!

Age 8+





SHOW

The Ultimate Shark Quiz

Fri 23 Feb. 2pm Heritage Room, Millennium Library Free

Know your hammerhead from your cookiecutters? Your lemons from your tigers? Test your knowledge in this interactive shark quiz hosted by wildlife conservationist and PhD student Maisie Evans! Brush up on your biology and come armed with your coolest shark facts - with extra points if you take part in our tricky tasks.

Who will be crowned champion? Age 8+







WORKSHOP

Cut, Stick, Minibeasts!

Fri 23 Feb, 3pm **Lower Gallery, The Forum** Free

Join award-winning children's author and illustrator Kate Read as she reads from her books, The Big Bad Bug and Butterfly Skies, before making some collage and print minibeasts of your own!

This workshop is perfect for younger ones who love to explore the natural world and get creative.

NDRWICHSCIENCEFESTIVAL.CO.UK

Age 3+

Sponsored by:





TALK

Decolonising Climate Justice: Amplifying Indigenous Voices

Fri 23 Feb, 4pm **Business & IP Centre Room. Millennium Library** Free



Climate justice is a means of tackling the climate crisis in a way that also creates a more just and equal world. But what happens when discussions around the climate crisis becomes a source of injustice in itself?

Sociologist Dr lokiñe Rodríguez will share her experience of working with Indigenous peoples from Latin America, using arts-based methods such as community-authored books and video making to create spaces for their voices on the concept of climate justice.

lokiñe is an Associate Professor from the School of Global Development at UEA. Her work on environmental conflict transformation focuses on issues of local history and knowledge, and environmental justice and equity.

Age 12+

PANEL EVENT

The State of Our Oceans: Charting a Sustainable Course

Fri 23 Feb, 6pm
Production Theatre
Norwich University of the Arts
£6



Are you worried about the health of our planet's oceans? Hear from a panel of top marine scientists, conservationists and academics, as they consider some of the key issues affecting the earth's marine ecosystems – from pollution to the global temperature rise.

With thought-provoking conversations and an inspiring overview of conservation success stories, this event is the perfect way to find out more about our ocean's most pressing challenges, and how we can become part of the solution.

Age 12+

Sponsored by:





Genetics Bingo: Eyes Down for a Full Chromosome

Fri 23 Feb, 6.30pm Cafe Bar Marzano, The Forum £7

Join the Genetics Society for a bingo show with a difference – you'll learn about ear wax, cheetahs and asparagus wee as you play along with the fabulous Professor Bingo, Jonathan Pettitt.

With exciting prizes to be won, the Genetics Society promises a brilliant evening unlocking the secrets of your own genetic code. Will it be five in a row?

Age 12+





SHOW

What Does Stuff Do?

Fri 23 Feb, 7pm Norwich Theatre Stage Two Adult £12 / Child £9.50

Featuring liquid manipulation and performance ping-pong – juggler, waterbender and deep-thinker Robin Dale presents his award-winning debut show. Part philosophy lecture, part astounding circo-odyssey!

Age 12+



HEALTH AND WELLBEING DAY SATURDAY 24 FEBRUARY

DON'T MISS!



SHOW

X-Rated Nature

Sat 24 Feb, 7.30pm The Atrium, The Forum £12

There are some things that you just might not hear about in a wildlife TV show – like the frankly bizarre and outrageous world of animal sex.

As the Festival's dedicated nature voyeurs, Professor Ben Garrod, Dr Jess French and Mark Thompson are here to tell all! Can you distinguish the fact from the fiction in this X-rated panel show with a difference? Expect plenty of adult content!

This incredibly popular adult-only event returns for 2024.

Age 18+

SAT 24 FEB - HEALTH AND WELLBEING

THE BYPLOPIUM

Sat 24 Feb, drop-in 10.30am-4pm The Forum Free

Rarely does science feel more important than when we need modern medicine. Don't miss today's amazing display from the East Anglian Air Ambulance, and also a toxicology unit and a blood bar.

See what you can do to boost your wellbeing!

Book for our Quiet Hour from 9.30am-10.30am, for those who would prefer a calmer and less busy setting for their visit.

All ages





WORKSHOP

Inside Baby Minds

Sat 24 Feb. drop in 9.30am-11.30am **Business & IP Centre Room** Free

Learn how to become a developmental psychologist in your own home in this interactive talk from UEA researchers. Developmental Psychologist and Associate Professor Teodora Gilga will explore how brain imaging and eye tracking can help us to decipher what babies understand. This session is designed for you to take part in a few interactive experiments with your baby or toddler (under 2 years of age).

Age 16+



WORKSHOP

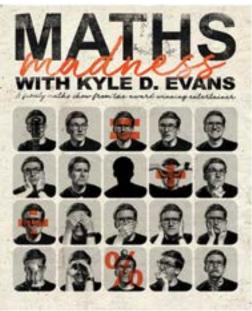
Digging for DNA

Sat 24 Feb 10am Sir Isaac Newton Sixth Form **£8**

An ancient grave has been discovered. and you are the archaeologist on the dig! Can you put together the clues to tell the story of this person who once lived?

Led by genetics and forensics specialist Mandy Hartley - who has used DNA to solve forensic cases and trace longlost families - this workshop will show how we can use science to answer our questions about the lives of people from the past.

Age 7+



SHOW

Maths Madness

Sat 24 Feb, 11am The Blake Studio, Norwich School

Are you ready for an energetic hour of mind-blowing maths?

Award-winning maths communicator and musical comedian Kyle Evans takes us on an adventure into the world of maths - from paper-folding world championships to songs based on the Fibonacci sequence.

Expect music, laughs and mind-bending mathematical demos. This show promises fun and number-play for the whole family!

Age 7+

SHOW

Brilliant Blood

Sat 24 Feb. 11am The Auditorium. The Forum Free

There's a lot happening inside our bodies. All the time, a busy network of blood vessels pumps five litres of blood, at a speed of about two miles per hour, from the very top of our heads to the tip of our toes (via the heart, of course)!

But what is blood made of? And what does it do? Science communicator James Piercy acts as our guide on this deep dive into the body, revealing all there is to know about blood, and how it keeps us alive, in this interactive and informative show.

Age 8+



WORKSHOP

The Riddle of the **Viking Treasure**

Sat 24 Feb, 12pm Sir Isaac Newton Sixth Form

Someone has stolen valuable artefacts from the local museum!

You will become a Forensic Ecologist, using your knowledge of plants and habitats to help solve the crime. In this lively workshop, you'll discover how Forensic Ecologists can use the natural world around us to help solve criminal cases.

Age 8+



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SAT 24 FEB - HEALTH AND WELLBEING

SHOW

The Big Maths Game Show

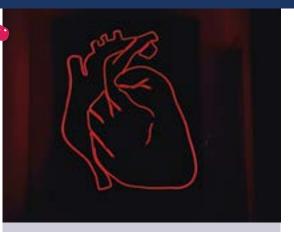
Sat 24 Feb, 1pm The Blake Studio, Norwich School £5

Award-winning presenter, entertainer and comedian, Kyle Evans, performs his brand-new family comedy show for Norwich Science Festival - how will you fare in The Big Maths Game Show?

Featuring five different rounds of number based competitive games, you will go up against each other in this interactive game show-style performance, before the ultimate champion is crowned!

Age 10+





TALK

Healing the Heart and Diagnosing Damage

Sat 24 Feb, 2pm The Auditorium, The Forum Free

Clinical Professor of Cardiac Medicine and Cardiologist Vassilios Vassiliou and Cardiology Registrar Vicky Tsampasian discuss the wonders of the human heart - drawing upon their research to explore how it functions, and how illnesses and conditions can affect it.

Age 16+

SHOW Garlic Theatre Presents: Snug and Grub Catch a Bug



Snug and Grub live safely underground in their earthy heap. One day they pop out from under a rock to see some googly eyes peering through the grass. What on earth is it, and who can catch it first? But beware, something is hovering in the blue sky ready to swoop down!

Join Garlic Theatre for a funny organic tale, featuring a host of colourful puppets, a beautifully crafted set, and foot tapping music.

Age 3-8



60(EA



TALK

170 Years of Jenny Lind Hospital: the **Evolution of Paediatrics**

Sat 24 Feb, 2pm **Business & IP Centre** Room, Millennium Library Free

Norwich was the second city to open a dedicated children's hospital 170 years ago, after London's Great Ormond Street.

A lot has changed in paediatric medicine since then. We have transformed our approach to child health. Paediatrics Consultant, Dr Anjay Maliyackel Pillai will trace some of the key themes in this evolution, whilst also shedding some fascinating light on the Jenny Lind archives.

Age 12+

Norfolk and Norwich (1)



SHOW

Animal Top Trumps

Sat 24 Feb, 3pm The Blake Studio **Norwich School** 83

Back by popular demand - Dr Jess French and Professor Ben Garrod go head-to-head in this energetic game of Animal Top Trumps!

Will you be team 'extant' or team 'extinct'? Compare skeletons, teeth, behaviours, and lifestyles in a battle between living modern-day animals and dinosaurs.

Would a rhino win a fight with a T-Rex? And which was the weirdest animal ever? You decide!

Age 5+

BOOK AT NORWICHSCIENCEFESTIVAL.CO.UK



SCREENING

Objects of the Mind: Exploring Mental Health **Collections** through Film

Sat 24 Feb, 4pm The Auditorium The Forum Free

Media Historian and Associate Professor Tim Snelson hosts a screening of three short films developed in partnership with the Science Museum. which contextualise three objects within the museum's medical collections - a straitiacket. an EEG machine, and sand trays used in children's play therapy.

This event will explore the interactions between media, cinema and mental health.

Age 16+



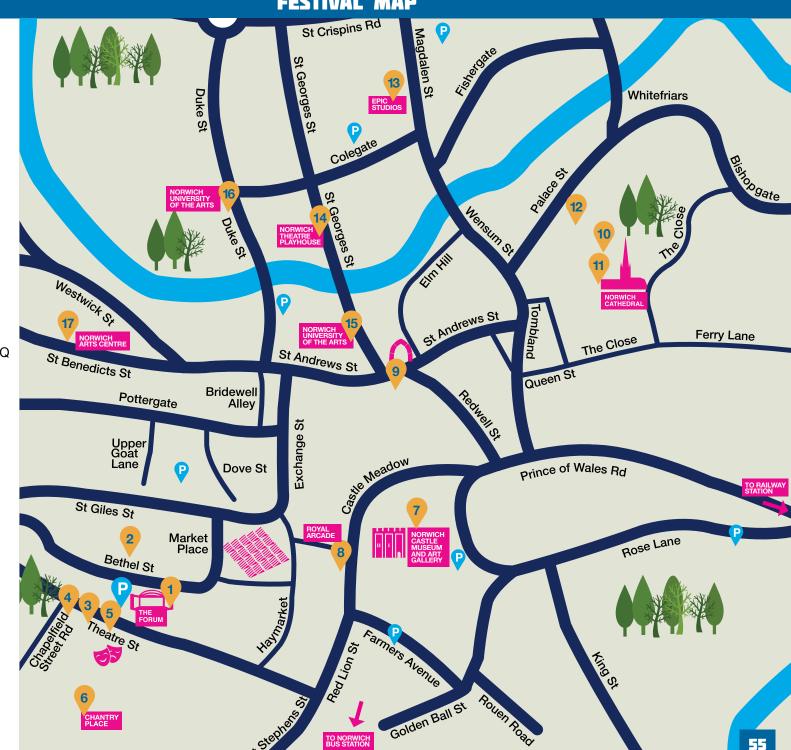
FESTIVAL MAP

City Centre Festival Venues

- 1 The Forum, Millennium Plain, NR2 1TF - Norfolk and Norwich Millennium Library - Cafe Bar Marzano
- 2 Sir Isaac Newton Sixth Form, 30 Bethel Street, NR2 1NR
- Norwich Theatre Royal, Theatre Street, NR2 1RL
- Norwich Theatre Stage Two, Theatre Street, NR2 1RL
- The Assembly House, Theatre Street, NR2 1RQ
- Chantry Place, 40-46 St Stephens Street, NR1 3SH
- Norwich Castle, Castle Street, NR1 3JU
- YALM Foodhall, The Royal Arcade, NR2 1NQ
- Cinema City, St Andrews Street, NR2 4AD
- Norwich Cathedral, The Close, NR1 4DH
- 11 The Refectory Bakery and Café. Norwich Cathedral, The Close, NR1 4DH
- 12 Norwich School, The Close, NR1 4DH
- 13 Epic Studios, Magdalen Street, NR3 1JD
- 14 Norwich Theatre Playhouse, 42-58 St Georges Street, NR3 1AB
- 15 Norwich University of the Arts Creative Tech Lab, 30 St George's Street, NR3 1AB
- **16** Norwich University of the Arts, Production Theatre, 26 Duke Street, NR3 3AJ
- 17 Norwich Arts Centre. 51 St Benedicts Street, NR2 4PG

Look out for Norwich Science Festival events taking place outside of the city centre and across Norfolk!

For full venue and accessibility information, visit norwichsciencefestival.co.uk.



PLAN YOUR VISIT



forum

BOOKING TICKETS

Most Norwich Science Festival events must be booked in advance. You can book tickets for events listed in this brochure online at **norwichsciencefestival.co.uk**. For certain events, you can book directly with the venue.

Please note that many of the Festival's free events also require pre-booking. Refunds are not offered unless an event is cancelled or postponed.

AGE GUIDANCE

We have included an age recommendation for all Festival events, based on content and level. Children under 16 years of age must be accompanied by an adult.

ACCESSIBILITY

See individual event listings for accessibility information for each of the venues listed in this brochure. If you have access requirements, free Essential Companion tickets are available to make your visit easier and more comfortable. Please see our website for more information.



TRAVELLING TO NORWICH

Norwich city centre is about a fifteen-minute walk from Norwich railway station, with routes to Ipswich, Cambridge and London.

Local buses stop along
Theatre Street, Castle
Meadow and St Stephens
Street. Secure cycle parking
facilities are located outside
The Forum.

The Forum car park is convenient and central. Parking here helps to support events presented by The Forum.

FINDING YOUR EVENT

Norwich Science Festival events take place at The Forum and at venues across the city and in Norfolk. Visit our website to see individual event listings and a what3words address.

FESTIVAL PATRONS



Jon Chase

Jon is a science communicator, author and incredibly skilful rapper! Jon has also co-authored three books – exploring the science behind muchloved TV shows and films. Jon believes knowledge should be made available in a way that allows everyone to access it, which is demonstrated in his work with BBC Learning, CBBC and the Open University.



Dr Jess French

From deep-sea parasites to garden wildlife, Jess encourages audiences to fall in love with every aspect of the natural world. A familiar face on CBBC, Jess is a zoologist, vet and successful children's author. Her passion for animals and adventure has taken her all over the globe.





Professor Ben Garrod

Ben is an evolutionary biologist and primate conservationist and is well-known for his appearances on television and radio – having appeared alongside Sir David Attenborough and Professor Alice Roberts for the BBC. Ben is also an author and presenter, bringing the world of the dinosaurs to life for children and families!

Mark Thompson

Mark is an astronomer and is dedicated to making science accessible – through his work as a broadcaster, podcaster, presenter and author. Mark has made multiple appearances on our screens, as part of BBC's Stargazing Live, but also on The One Show, This Morning and Celebrity Mastermind!

COULD YOU BE AT

FESTIVAL 2025?

Sci Comms East return with their brilliant conference event for budding and expert science communicators alike on Saturday 20 April! Featuring a range of speakers, workshops and networking activities, the Sci Comms East Conference is perfect for advancing your communication, engagement, and performance skills. More information coming soon.



COMING UP AT THE FORUM

NORFOLK MAKERS FESTIVAL

13-21 Apr 2024

Celebrate the joy of creativity with open exhibitions, free activities, inspiring demonstrations, workshops and fascinating talks. Everybody is welcome, from beginners to experts. Have a go at something new, meet local makers and indulge in some crafty conversation!

norfolkmakersfestival.co.uk





ABOUT THE FORUM

The Forum is here for everyone. Our iconic city-centre building is open year-round. with space for everybody to hire, and a car park. The Forum presents Norwich Science Festival, alongside Norfolk Makers Festival and Norwich Games Festival, and coordinates Norfolk Heritage Open Days. As a registered charity, The Forum reinvests all its income to protect the building and to put on our amazing range of free events. theforumnorwich.co.uk

The NSF team:

Claire Mutimer, Danie Hadley, Samantha Joyce, Helen Dingle, Sophie Conroy, Anna Stevenson, Hannah Tough, and Hannah Linsdell, plus incredible support from the wider Forum staff and Events Team.

Brochure designed by:



Brochure printed by:



The paper used in this brochure supports the World Land Trust and, through carbon offsetting, will preserve 270 square metres of rainforest.

ACKNOWLEDGEMENTS

Presented by:



We would like to say a huge thank you to all our partners, sponsors, and funders. Without their valued support, the Norwich Science Festival would not be possible.

PARTNERS







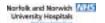


















































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