



### Lancashire Science Festival







### **Competition time!**

Share your festival photos and videos with #LancSciFest on Twitter and Facebook to enter our exciting social media competition. We have two family passes for Blackpool Pleasure Beach up for grabs for the winners. Share on Twitter or Facebook with our hashtag, and don't forget to tag us @LancSciFest.

Terms and Conditions available on our festival website lancashiresciencefestival.co.uk













### **Visitor Information**

### Check-in open 9am, last check-in 3pm Showfloors open at 9am Show and workshops start at 10am





### @LancSciFest #LancSciFest

There is so much to discover across the festival. Take a look at our zone programmes for venues and timings to plan your day.

Take a seat in a Show for a live performance or demonstration, there may even be a chance for you to get involved! Take part in one of our many Drop-in sessions to discover something new or get hands-on with an experiment. Visit our three Science Showfloors, full of exciting activities the whole family can enjoy. If you need any help, look out for our festival ambassadors in yellow t-shirts or visit one of our four Help Huts.

### Age group guidance

- Family friendly sessions for all to enjoy
- Lots of fun for children who are beginning school
- Fun and engaging; content may be too advanced for younger children
- These advanced sessions are aimed at older children who are at, or about to start, secondary school

#### **Zones**

We have three zones on campus: Blue, Orange, and Green. You can see where these zones are on page 25. The programme has been divided into the activity taking place in each zone to help you plan your day.

#### **Shows**

- You do not need to pre-book; please arrive at the venue 15 minutes before the start time to receive a queue number
- Queue numbers will be issued on a first come, first served basis, which will guarantee you entry to the show
- Entry will close 5 minutes before the advertised start time
- Please check the age guidance as some shows may not be suitable for younger children

#### Drop-ins and Science Showfloors

- You do not need to pre-book; check out our zone programmes for venues and timings
- There may be a short wait for some activities at busy times

### Workshops

- All workshop sessions have been fully pre-booked with no additional places available today
- If you have pre-booked a workshop, please arrive at the venue at least 5 minutes before the advertised start time. Late arrivals may not be admitted

### Finding venues

#### All festival venues can be found using the maps in this guide. View the full festival map on pages 24-25.

### **H** Help Huts

We have four Help Huts across campus where you can pop along with your queries and our festival ambassadors will be able to help you.

#### Festival shops

Located on both Harrington Building (Green Zone) and Sir Tom Finney Sports Centre (Blue Zone) Showfloors our shop has lots of cool things for you to buy.

#### **Parking**

Please use public transport if possible. A limited amount of free parking is available on the University's car parks. You can ignore any University pay and display machines or permit holder only signs. However, please keep disabled bays free for blue badge holders. If parking in public car parks you must follow their payment requirements. Find out where the University and public car parks are on the festival map (page 24-25).

### Food and drink

Food and drink are available in the Café 1828 (Student Centre), Coffee Square (Foster Building), Students' Union Café (Students' Union Building) and Harrington Kitchen (Harrington Building). Our catering outlets only accept card payments. You are welcome to bring packed lunches and we encourage you to bring a water bottle and fill this up at one of the many water fountains across campus.

#### Toilets and baby changing

Male, female and disabled toilet facilities are located in every University building. Gender-neutral toilets are available on the ground floor of the Students' Union Building. We also have baby changing facilities in Sir Tom Finney Sports Centre, Darwin Building (second floor, room 265) and the Oasis Faith and Spirituality Centre. In addition, there are two private baby feeding rooms available in Darwin Building (second floor, room 265) and the Oasis Faith and Spirituality Centre.

#### Quiet rooms

For groups or individuals with additional requirements we have designated quiet rooms away from the noise and crowds in the Oasis Faith and Spirituality Centre and Harris Building (ground floor, room 009).

#### Prayer room

Prayer rooms are available in the Oasis Faith and Spirituality Centre and Harris Building (ground floor, room 009).

### First aid

There are three first aid points; these are located at Sir Tom Finney Sports Centre, Harrington Building and at check-in on the University Square. You can also visit one of our Help Huts to request first aid or speak to any of our festival ambassadors. If you are unable to contact anyone, please call 01772 894288 for assistance, and a member of the festival events team will request a first aider to your location.

### Missing children

Safety ID wrist bands are available for all children at checkin, you can write an adult's name and phone number on the band and put this on your child's wrist. Please ask if you require one. If you discover your child is missing, please alert a festival ambassador (wearing yellow t-shirts) who will be able to assist you. Alternatively, call 01772 894288 and support will be dispatched to your location.



### Accessibility Bus

Two accessibility buses have been provided to assist those that require mobility support between the Blue Zone and the Green Zone. The Blue Zone bus stop can be found on Leighton Street, behind Foster Building. The Green Zone bus stop can be found on Victoria Street - see the festival map (pages 24 and 25). A bus will leave from each bus stop every 30 minutes starting at 9.30am. The last bus will depart at 4pm. Each bus has space for one wheelchair. Prams can be taken on to the bus, but they must be folded.

### British Sign Language (BSL) interpreters

Please make us aware at check-in if you have requested upon booking an interpreter or call 01772 894288 on arrival.

### Wellbeing Ambassadors

Please make us aware at check-in if you have requested a wellbeing ambassador upon booking to support you or call 01772 894288 on arrival.

### **Hearing System Provision**

Infrared hearing systems are in place in 10 of our main lecture theatres. To access the system, hearing aid or cochlear implant users will require a receiver device. Please speak to a festival ambassador at check-in for further information.

#### Accessible venues

All buildings and rooms are accessible and have reserved areas for visitors with mobility issues. If you require assistance, please speak to a festival ambassador.

#### Free Wi-Fi

To log on select 'UCLan-Open' and sign in using your email address. Share your conversations, photos and videos with #LancSciFest for a chance to win a Blackpool Pleasure Beach Family Pass. Find out more and see terms and conditions at lancashiresciencefestival.co.uk

### Photography and filming

Please be aware that throughout the duration of the festival there will be official photography and filming taking place for marketing and promotion of the Lancashire Science Festival, the University, partner institutions and the festival sponsors. Images or footage may be used in both online and offline publications, public relations and advertising (including social media, brochures, information leaflets, adverts and posters). If, for whatever reason, you or a member of your group does not wish to be filmed or photographed please make yourself known to the person filming or photographing in the area you are in. For more information, please contact lancscifest@uclan.ac.uk or 01772 894288 on the day.

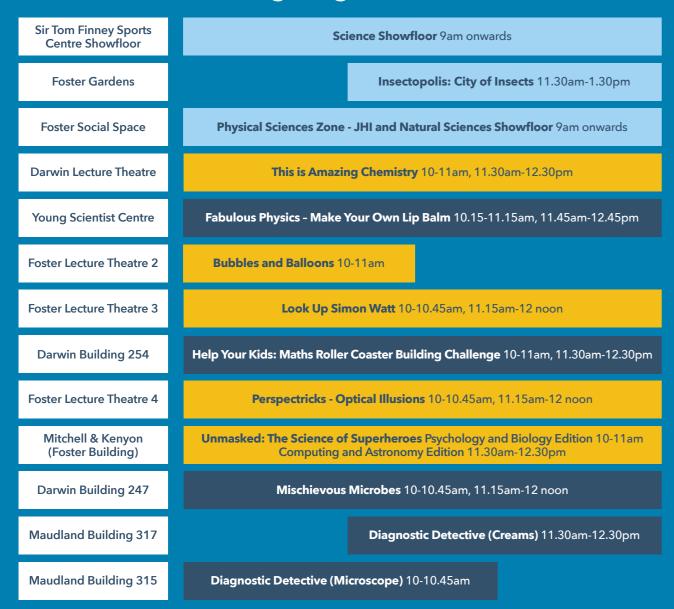
### Festival spirit

Our festival ambassadors, dressed in yellow t-shirts, are here to help you have a great day and answer any questions you may have.

### **Blue Zone**



### **Morning Programme** 9am onwards



### **Festival shop**

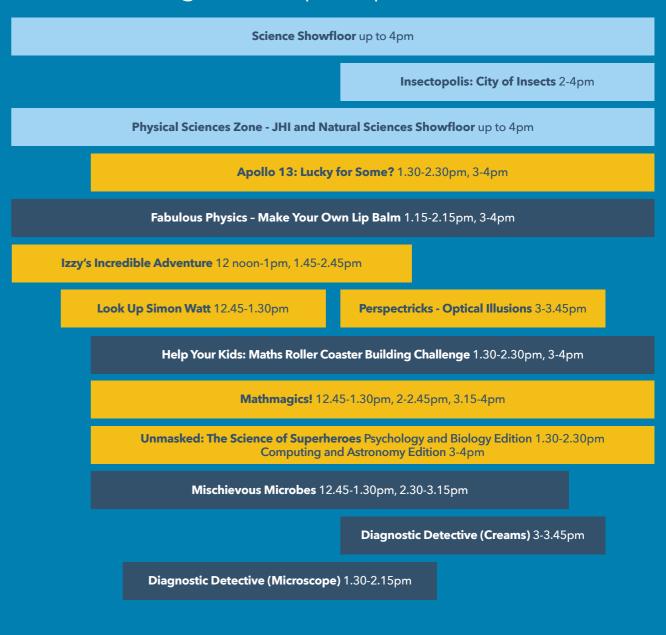
Located on the Sir Tom Finney Sports Centre and Harrington Building Science Showfloors, visit our festival shop and browse through some of the cool things for you to buy.

### **Campus Walkabouts**

Science Busking - David Price 10am-12 noon and 1-3pm

**Star Wars (99th Garrison)**10-11am
11.30am-12.30pm
1.30-2.30pm
3-4pm

### **Afternoon Programme** up to 4pm



### Key

Shows Drop-ins and Science Showfloors Workshops

See following pages for more details and age guidance ...

### **Blue Zone**

### Science Showfloor

Packed with exciting interactive activities the whole family can enjoy.

Venue: Sir Tom Finney Sports Centre

(Lower Ground Floor)

Times: 9am-4pm (last entry 3.45pm)

#### Star Wars - 99th Garrison (Walkabout)

Get up close and personal with some of your favourite Star Wars characters. Pose for pictures with jedi, stormtroopers, and more! Keep a look out for members of the 99th Garrison as you explore the festival and consider a donation for the Cystic Fibrosis Trust.

Charity number (England and Wales): 1079049.

### ABC - Adapting Buildings Effectively

A thought-provoking stand exploring the questions 'How do we want to live?' and 'How do we adapt the buildings we have to create Healthy Homes'. Looking at what we have now, the kinds of spaces we live in, could we not do things differently? Could we not design buildings that are joyful, waste nothing, generate their own power, cost nothing to run?

### Bricktopia

Bricktopia provides fun and imaginative activities and Brick Shows that enthuse, engage, and entertain with LEGO bricks.

### Catch the Culprit! - Preston College Science Department

Preston College science staff aren't happy...someone has been stealing all the biscuits! Criminal investigators use a wide range of scientific techniques to support the police in identifying a suspect from the evidence left behind at a crime scene. Put your investigative skills to the test to see if you can work out who our culprit is! And have a go at producing your own fingerprint keyring to take home.

### Comensus - Who are the people that care for us?

Comensus is the service user, carer, patient, and public department. Its vision is to develop outstanding future health and social care professionals, who exceed and excel in their fields, by including real life experiences from the public into teaching and learning.

#### **Electricity North West**

Spark your curiosity about the world around you and explore ways in which electricity works in your everyday lives. Come join Electricity North West to understand the basics of electricity safety and sustainability and learn all about circuits and how to build your own circuit.

#### **Eric Wright Group**

The Eric Wright Group is a leading property and construction management company that develops, builds and maintains the UK's infrastructure. Comprising of specialists in civil engineering, construction, facilities management and property management, the Group is 100% owned by the Eric Wright Charitable Trust.

### Fun with Nutrition and Exercise Science - School of Sport and Health Sciences

Exercise is fun, how good is your jump? How high can you jump? Can you top our leader board? Nutrition is a science: interactive games matching pots of sugar with the snacks. #NutritionIsAScience

### Handwashing and Health Check

A handwashing station to check how successfully you can clean your hands.

### How Germs Spread - School of Medicine

How far does a sneeze spread? How fast is a cough? Join us to understand how infections can spread; how far, how fast and in what. You will learn how we pick up and transmit infectious agents. You will also learn how important micro-organisms are for our health. They're not all bad!

### f @LancSciFest #LancSciFest

#### Institution of Mechanical Engineers - Improving the world through engineering

Discover the exciting world of engineering and how it affects everyone's lives and everything around you, from designing racing cars to being cooled by an inherently safe domestic fan. Also see how Sterling's 19th century technology can be reinvented in the 21st century to supply free energy, and how you can boil water at room temperature!

#### Lancashire Forensic Science Academy (LFSA)

The Lancashire Forensic Science Academy is the result of a strategic partnership between UCLan, Lancashire Constabulary and the Police Crime Commissioner for Lancashire. Come and join us at the Lancashire Science Festival 2021 for a forensic treasure hunt where you become the investigator and find the clues to solve our mystery.

#### **Papermaking**

Come and experience one of China's four great inventions and make your own chinese paper with the team from UCLan Confucius Institute.

#### Science Grrl

Why do men have bigger brains? Why can't women read maps? Science Grrl explores these and other urban myths using hands-on experiments.

### Sugar and Skulls - School of Dentistry

Come and learn about how much sugar is in some of your favourite foods and drinks! Can you think about some healthier alternatives? Can you guess the animal simply by looking at its skull? The shape of the teeth might give you a clue....

### Training your Brain - British Neuroscience Association (BNA)

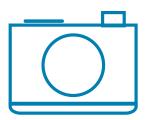
The aim is to demonstrate different types of memory via illusions, memory tests and any other interactive brain training games we can develop to further emphasise our point. The preserved brain and interactive 3D brain tablets will be utilised to demonstrate the complexity and compartmentalisation of the brain.

#### Take part in a research project!

Most of the science you see at the Lancashire Science Festival has come from people doing research to find innovative new ways of doing things. Now we would like to invite YOU to take part in our very own festival research project! We are trying to find out more about what our visitors think about science and scientists. Come along and answer a few quick questions and help us to understand more about how we can make science accessible and fun for everybody (Adult visitors only).

#### Vision to Fly

Children will be introduced to aerospace engineering and be given a chance to control drones using joysticks. You can virtually help firefighters (SaveMe) by virtually flying a drone on a simulator to figure out which flats have civilians present during a fire breakout. You can also take part in a virtual police car chase (CatchMe). Using a remote-control car, children will use a TV screen to fly their drones to catch the remote-control car and figure out the car's number plate.



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### **Blue Zone**

### Science Showfloor (Physical Sciences Zone)

Venue: Foster Building, Foster Social Space (Ground Floor)

Times: 9am-4pm (last entry 3.45pm

Jeremiah Horrocks Institute, Natural Sciences and Preston and District Astronomical Society (PADAS) Showfloor (U). Packed with exciting interactive activities the whole family can enjoy.

### Preston and District Astronomical Society (PADAS) (U)

Amateur astronomy in Lancashire, observing the night sky from home or local dark sky sites, safe solar observing weather permitting, telescope display, meteorites, astrophotography images.

**Venue: Foster Social Space (Ground Floor)** Times: 9am-4pm (last entry 3.45pm)

### **Badge Competition**

From stars to planets, telescopes to extra-terrestrial life, create a badge design to inspire future space explorers! How creative are you? If you are aged 5 to 16, why don't you use your artistic skills to design a Space Badge for UCLan's Alston Observatory? The winning design will be turned into a real badge that visitors to the observatory will receive!

Awesome prizes up for grabs from a £30 Amazon Voucher and book for the winner. We have two runners up prizes too. The competition is open from 1-31 October 2021. Visit the stand to get your entry form and get involved. For terms and conditions, please email alstonspacebadge@uclan.ac.uk

### **Drop-ins**

Discover something new or get handson with an experiment. Unless stated otherwise, these sessions are available for you to drop-in throughout the day.

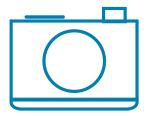
#### Insectopolis: City of Insects (U)

Can we rethink gardens, towns and cities to provide more spaces for nature? Insectopolis: City of Insects introduces you to our friendly giant insects to discover all the work they do for you and what you can do for them.

**Venue: Foster Gardens** 

Times: 11.30am-1.30pm, 2-4pm

Please return your festival lanyard using the lanyard bins located around the festival



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### **Shows**

Take a seat and enjoy a live performance or demonstration. You do not need to pre-book; please arrive at the venue 15 minutes before the start time to receive a queue number.

#### This is Amazing Chemistry (6-8+)

Prepare for your senses to be overloaded and your enthusiasm for chemistry to be ignited in this exciting showcase by Dr Anna Kirkham and students from the School of Natural Sciences. These demonstrations will introduce you to chemical clocks, cold clocks, whoosh bottles and so much more! This show could include bright flashes.

Venue: Darwin Building,

Darwin Lecture Theatre (Ground Floor) Times: 10-11am, 11.30am-12.30pm

### Apollo 13: Lucky for Some? (6-8+)

On the 13th April 1970, when the spacecraft Apollo 13 was over 200,000 miles from Earth heading towards the Moon, a catastrophic failure occurred. Dr Kevin Bowman takes you back in time to learn what really happened and why. Encounter the scientists and engineers who designed and built the spacecraft, as both humans and machine are pushed to their limits.

#### Unmasked: The Science of Superheroes - Psychology and Biology Edition (11+)

Join Professor Robert Walsh and Dr Nicky Danino as they explore computer science and astrophysics in the world of superheroes. Based on the book, Unmasked: The Science of Superheroes, Robert and Nicky will decode the mystery of alien life and almost human computers. Book signing is available after each show.

Venue: Foster Building, Mitchell and Kenyon Lecture

Theatre (Ground Floor)
Times: 10-11am, 1.30-2.30pm

## Unmasked: The Science of Superheroes, Computing and Astro Edition (6-8+)

Join Dr Sarita Robinson and Dr Cat Tennick as they explore the psychology and biology of our favourite superheroes. Based on the book, Unmasked: The Science of Superheroes, Sarita and Cat will show you how to test and discover your own superpowers and special abilities. Book signing is available after each show.

Venue: Foster Building, Mitchell and Kenyon Lecture Theatre (Ground Floor)

Times: 11.30am-12.30pm, 3-4pm

Continued on page 12 ...



### **Blue Zone**



#### Look Up Simon Watt (6-8+)

Get out of this world with Simon as he shares the science behind space exploration. Lots of willing audience astronauts are needed to join in with the curious experiments to learn about what you can see if you only look up!

Venue: Foster Building, Lecture Theatre 3 (Ground Floor) Times: 10-10.45am, 11.15am-12 noon, 12.45-1.30pm

### Perspectricks - Optical Illusions (8+)

Science Magician Matt Pritchard shares a host of perplexing optical illusions, impossibilities, and ambiguous objects created from household items. Join him for a lot of wonder and wows before he shows his hand of science. You too will be able to make your own eye-popping magic.

Venue: Foster Building, Lecture Theatre 4 (Ground Floor)

Times: 10-10.45am, 11.15am-12 noon

Venue: Foster Building, Lecture Theatre 3 (Ground Floor)

Times: 3-3.45pm

### Mathmagics! (6-8+)

Get whisked away with the many wonders of maths from across the globe and through time. Join David Hall for a collection of interactive stories and tricks to astound your family.

Venue: Foster Building, Lecture Theatre 4 (Ground Floor)

Times: 12.45-1.30pm, 2-2.45pm, 3.15-4pm

#### Bubbles and Balloons (6-8+)

Can you make a bubble last forever? Make it square? Bubbles and Balloons is bursting with astonishing science of soap, water, air, forces and energy. Discover how to make rubber bubbles, a balloon helicopter and much more.

Venue: Foster Building, Lecture Theatre 2 (Ground Floor)

**Times: 10-11am** 

### Izzy's Incredible Adventure (U)

Meet Izzy. She's on an adventure to see a friend but needs lots of help to get there. Can you help her? What types of shape make a boat float the best? And do you know how a hot air balloon flies? Accompany this interactive, investigative journey across land, overseas and up, up and away!

Venue: Foster Building, Lecture Theatre 2 (Ground Floor)

Times: 12 noon-1pm, 1.45-2.45pm

### Workshops

All our workshops are fully booked today. If you have pre-booked on to a workshop, please arrive at the venue at least 5 minutes before the advertised start time. Late arrivals may not be admitted.

#### Fabulous Physics: Make Your Own Lip Balm (7+)

Head to the UCLan and Young Scientist Centre to explore the properties of materials and states of matter. Make a lip balm by investigating melting and boiling points using liquid nitrogen and dry ice, then melting wax and oil together. You will be able to personalise your lip balms using flavours, colours, and designs for your pot.

Venue: Darwin Building,

Young Scientist Centre (Ground Floor) Times: 10.15-11.15am, 11.45am-12.45pm,

1.15-2.15pm, 3-4pm

### Help Your Kids: Maths - Roller Coaster Building Challenge (U)

Mathematics is an amazing subject that is filled with challenge. However, this challenge can often be a little intimidating for children and adult helps alike. This interactive workshop will help your young ones focus on a new challenge as they are set to create and market their own rollercoaster. The final part of the session incudes a 15 minute demonstration for adults who are looking for ways to help maths be embraced rather than feared.

Venue: Darwin Building, Room 254 (Second Floor)

Times: 10-11am, 11.30am-12.30pm,

1.30-2.30pm, 3-4pm

#### Mischievous Microbes (6-8+)

Come join Megan to investigate mischievous microbes, and how they cause diseases. This workshop provides fun hands-on activities and demonstrations dedicated to understanding how some different types of microbes can make us ill and the how and why around different ways they are treated.

Venue: Darwin Building, Room 247 (Second Floor)

Times: 10-10.45am, 11.15am-12 noon,

12.45-1.30pm, 2.30-3.15pm

### Diagnostic Detective (Microscopes) (6-8+)

Diagnostic Detective (Microscopes) invites you take part in lab experiments by preparing slides, understanding cell structure, and using a microscope.

Venue: Maudland Building, Room 315 (Third Floor)

Times: 10-10.45am, 1.30-2.15pm

#### Diagnostic Detective (Creams) (6-8+)

Diagnostic Detective (Creams) invites you to crush tablets to prepare your own pharmaceutical cream.

Venue: Maudland Building, Room 317 (Third Floor)

Times: 11.30am-12.15pm, 3-3.45pm

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the festival

### **Orange Zone**



### **Morning Programme** 10am onwards

Meet Matilda Rocket Builder 10.15-11am, 11.30am-12.15pm

Engineering Humans 10.30-11.30am

**Fire Lab** 10-10.30am, 11-11.30am

Media Factory 010

**EIC Building 313** 

Adelphi Lecture Theatre 1

Adelphi Lecture Theatre 4

Computing and Technology Building 017

Computing and Technology Building 019

The Musical Video Games 10.15am-12.45pm

Minecraft Alex Explores the World of Phosphorus 10.30-11am, 11.15-11.45am

### **Afternoon Programme** up to 4pm

Meet Matilda Rocket Builder 1-1.45pm, 2.30-3.15pm

**Engineering Humans** 2.30-3.30pm

**Fire Lab** 12.30-1pm, 1.30-2pm, 2.30-3pm, 3.30-4pm

Into Our Skies: The Show 12.30-1pm, 2-2.30pm, 3.30-4pm

**The Musical Video Games** 1.30-4pm

Minecraft Alex Explores the World of Phosphorus 12 noon-12.30pm, 1.15-1.45pm, 2-2.30pm, 2.45-3.15pm, 3.30-4pm

### Key

**Shows** 

Drop-ins and Science Showfloors

Workshops

### **Festival shop**

Located on the Sir Tom Finney Sports Centre and Harrington Building Science Showfloors, visit our festival shop and browse through some of the cool things for you to buy.

### **Campus Walkabouts**

Science Busking - David Price 10am-12 noon and 1-3pm

Star Wars (99th Garrison)

10-11am 11.30am-12.30pm 1.30-2.30pm 3-4pm

See following pages for more details and age guidance ...



### **Orange Zone**

### **Drop-ins**

Discover something new or get handson with an experiment. Unless stated otherwise, these sessions are available for you to drop-in throughout the day.

#### The Musical Video Games (11+)

Come along to code and create your very own musical video game. Other people's games are fun but explore new possibilities with your own avatar in your custom world. Join the Conductive Music team who will guide you using browser-based platform Microsoft Arcade.

Venue: Computing and Technology Building 017 (Ground Floor)

Times: 10.15am-12.45pm, 1.30-4pm

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### **Shows**

Take a seat and enjoy a live performance or demonstration. You do not need to pre-book; please arrive at the venue 15 minutes before the start time to receive a queue number.

#### Engineering Humans (11+)

Join Dr Matt Dickinson to learn about how scientific advancements now allow us to engineer humans: from wearable robotic arms to wearable robotic suits. These exoskeletons can help us, protect us, and even make us feel better. View exoskeleton demonstrations and examine their range of uses in different environments.

Venue: Adelphi Building, Lecture Theatre 4 (First Floor)

Times: 10.30-11.30am, 2.30-3.30pm

#### Into Our Skies: The Show (6-8+)

Join a curious astro-explorer conducting her experiments in deep space and exploring the vast regions of the Universe. Journey with our brave adventurer as she dances Into Our Skies. Experience her astonishment and delight as she observes merging galaxies, tiptoes across constellations, and discovers a Solar System we may find familiar. This performance includes strobe lighting and flashing lights.

Venue: Media Factory, Room 010 (Ground Floor)

Times: 12.30-1pm, 2-2.30pm, 3.30-4pm



### Workshops

All our workshops are fully booked today. If you have pre-booked on to a workshop, please arrive at the venue at least 5 minutes before the advertised start time.

Late arrivals may not be admitted.

### Meet Matilda Rocket Builder (6-8+)

Join 10-year-old Matilda Musk as she asks the big question: Can I build my own spaceship? From what makes air breathable to how being 99% reliable isn't always a safe bet, you will discover the answers in this interactive journey with drawings, tape measures, and nappies! Join Dom Conlon and Heidi Cannon, the bemused boffins behind this super-space-saga.

Venue: Adelphi Building, Lecture Theatre 1 (Ground Floor) Times: 10.15-11am, 11.30am-12.15pm,

1-1.45pm, 2.30-3.15pm

## Fire Lab - How Fire Development is Affected by the Angle of the Fire Bed (12+)

Understanding fire development helps us reduce or prevent the effects of uncontrollable fires. We will demonstrate how changing the angle or slope of the surface the fire is burning on - the fire bed - affects how it behaves. Join us to form hypotheses, ask questions, and witness an incredible experiment!

Venue: Engineering Innovation Centre, Fire Laboratory, Room 313 (Third Floor) Times: 10-10.30am, 11-11.30am, 12.30-1pm, 1.30-2pm, 2.30-3pm, 3.30-4pm

### Minecraft Alex Explores the World of Phosphorus (a.k.a. bonemeal) (6-8+)

Join Minecraft's Alex to explore the world of phosphorus in a premade, interactive Minecraft world. In this computer-based workshop find out what phosphorus is, why is it so important to help us produce food and the problems it can cause in the environments around us.

Venue: Computing and Technology Building,

Room 019 (Ground Floor)

Times: 10.30-11am, 11.15-11.45am, 12 noon-12.30pm, 1.15-1.45pm, 2-2.30pm, 2.45-3.15pm, 3.30-4pm

### **Green Zone**



### Morning Programme 9am onwards



### **Festival shop**

Located on the Sir Tom Finney Sports Centre and Harrington Building Science Showfloors, visit our festival shop and browse through some of the cool things for you to buy.

### **Campus Walkabouts**

10am-12 noon and 1-3pm Star Wars (99th Garrison) 10-11am 11.30am-12.30pm 1.30-2.30pm 3-4pm

**Science Busking - David Price** 

See following pages for more details and age guidance ...

### Afternoon Programme up to 4pm

The Building Zone: Creative Innovation Zone Den Building up to 4pm Pyrotrickery 1-2pm Blowfish - Heavy Metal Marine Biology 1.15-2pm, 2.15-3pm, 3.15-4pm Teddy Bear Hospital Workshop 12.45-1.30pm, 2-2.45pm, 3.15-4pm Zoolab Animal Handling 12.45-1.30pm, 2.15-3pm Magic Hands Signing 2-2.45pm Chinese Pottery Making 1.45-2.30pm, 3-3.45pm Hands on Healthcare: Science in the Operating Theatre 1-1.45pm, 2-2.45pm, 3.15-4pm Hands on Healthcare: Children's Ward 2-4pm

### Key

**Shows** 

**Drop-ins and** Science Showfloors

Workshops



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### **Green Zone**

### Science Showfloor

Packed with exciting interactive activities the whole family can enjoy

Venue: Harrington Building, Harrington Social Space (Ground Floor)

Times: 9am-4pm (last entry 3.45pm)

### The Building Zone: Creative Innovation Zone Den Building

Can you build the biggest den? Or will you build the strongest? Or the most colourful? Through the skill of den building, we will be exploring how structures are made, while building confidence in our understanding of engineering. Elevation is project funded by the Royal Academy of Engineering and their Ingenious Award. The project has been facilitated by the University of Central Lancashire (UCLan) in partnership with STEM First, Newground Together and the National Festival of Making. The project aims to encourage engineers to embark on more public engagement activity, while changing perceptions of the industry. We have built dens in Shadsworth Community, Blackburn, and now we're coming to the Lancashire Science Festival to find the next best den builder in the county!

### Polydron

The chance to play and explore the world of Polydron. The only thing that can hold you back, is your imagination. Imagine, dream and build.

### Science Busking (Walkabout)

How did they do that? Find our science street buskers around the festival for a little bit of science trickery sure to impress your friends.

### **Drop-ins**

Discover something new or get handson with an experiment. Unless stated otherwise, these sessions are available for you to drop-in throughout the day.

### Hands on Healthcare: Children's Ward (U)

The Children's Nursing Team welcomes you to the Children's Ward! Here, you can assess your poorly teddy bear using our equipment, find your pulse, check your oxygen saturations, and so much more.

Venue: Greenbank Building, Room 115 (First Floor)

Times: 10am-12.30pm, 2-4pm



### **f 9** @LancSciFest #LancSciFest



### **Shows**

Take a seat and enjoy a live performance or demonstration. You do not need to pre-book; please arrive at the venue 15 minutes before the start time to receive a queue number.

### Ensonglopedia of the Human (6+)

What does it mean to be human? Multi-award-winning science-singer-songwriter John Hinton has not one answer, but 26, one for each letter of the alphabet, and he's turned them all into a comedy song. Peer reviewed by scientists, academics and healthcare professionals. Suitable for all humans old enough to think and laugh at the same time. "A magical show, wonderfully performed by Hinton... with an energy the Duracell Bunny would be envious of" - The Reviews' Hub

Venue: Greenbank Building, Lecture Theatre (Ground Floor) Times: 10-11am, 11.30am-12.30pm

### Blowfish - Heavy Metal Marine Biology (6+)

Tom 'The Blowfish' Hird is here and ready to blow your minds, and your ears, with some incredible fishy facts! From snot to sharks, parrotfish to puke! It's a wild rock and roll ride into the watery world we live on.

Note - Not suitable for the very young, or children/adults who find loud noise disturbing.

Venue: Greenbank Building, Lecture Theatre (Ground Floor) Times: 1.15-2pm, 2.15-3pm, 3.15-4pm

#### Pyrotrickery (6+)

Experienced pyrotechnician and presenter Matthew Tosh examines the science behind some of the fiery tricks used on stage, on screen, and in the sky, designed to wow audiences but also to keep them safe. Join Matthew on this entertaining experience featuring flames, explosions and occasional chaos in a highly controlled environment which has some surprising science hidden within.

Venue: Harrington Building, Lecture Theatre (Ground Floor) Times: 10-11am, 1-2pm

### **Green Zone**

### Workshops

All our workshops are fully booked today. If you have pre-booked on to a workshop, please arrive at the venue at least 5 minutes before the advertised start time.

Late arrivals may not be admitted.

#### Teddy Bear Hospital Workshop (U)

Does your teddy bear or other stuffed animal need some TLC? Learn how to assess and bandage injuries like broken bones and teach your toys about healthy eating. Plus learn how to wash your hands - will they glow in the dark?

Venue: Harrington Building, Room 223 (Second Floor)

Times: 10.15-11am, 11.30am-12.15pm, 12.45-1.30pm, 2-2.45pm, 3.15-4pm

#### Zoolab Animal Handling (U)

Get up close and hands-on with exotic animals as we find out all about where and how animals have inspired and influenced scientists and engineers to make new materials and technology. Meet the likes of snakes, lizards and tarantulas as we learn about fascinating animal biology and up-to-date scientific work.

Venue: Harrington Building, Room 320 (Third Floor) Times: 11-11.45am, 12.45-1.30pm, 2.15-3pm

Please return your festival lanyard using the lanyard bins located around the festival

#### Hands on Healthcare: Science in the Operating Theatre (5+)

Hurry - time to get 'scrubbed up' and prepare the instruments for today's operation! Learn about how to oxygenate a patient's lungs and experience how patients are monitored and looked after during surgery with the Clinical Skills Team.

Venue: Greenbank Building, Room 111 (First Floor) Times: 10am-10.45am, 11.15am-12 noon, 1-1.45pm, 2-2.45pm, 3.15-4pm

#### Magic Hands' Signing (6+)

Learn a new skill with UCLan's British Sign Language expert. The whole family can join this workshop to learn some simple signs for weather, colours, animals and some short questions.

Venue: Harrington Building, Room 333 (Third Floor) Times: 11.30am-12.15pm, 2-2.45pm

### Chinese Pottery Making (U)

Travel back thousands of years to discover the early technology and art of pottery making in ancient China. Learn about these techniques and put them into practice by creating your own Play-doh pot, putting your craftmanship to the test.

Venue: Harrington Building, Room 333 (Third Floor) Times: 10.30-11.15am, 11.45am-12.30pm,

1.45-2.30pm, 3-3.45pm



Share your festival photos and videos with #LancSciFest on Twitter and Facebook to enter our exciting social media competition. We have two family passes for Blackpool Pleasure Beach up for grabs for the winners. Share on Twitter or Facebook with our hashtag, and don't forget to tag us @LancSciFest.

Terms and Conditions available on our festival website lancashiresciencefestival.co.uk













### **Our Amazing Sponsors**

We can only run the Lancashire Science Festival and keep our event free of charge with the support of our amazing sponsors. Learn more about our sponsors by visiting them on the Science Showfloors.

If you are interested in being part of the festival next year, please contact the team on LancSciFest@uclan.ac.uk

The University is proud to produce and host the Lancashire Science Festival, encouraging the sharing of ideas, knowledge, creativity and the spark of learning.











### **Electricity North West**

Electricity North West own and operate the UK's original North West electricity distribution network.

### **Eric Wright Group**

An established leader within the building industry, the Eric Wright Group offer a wide range of services from construction and civil engineering, to property development and facilities management.

#### **Fort Vale**

Fort Vale Engineering is a market-leading global manufacturing company at the forefront of technological advances in its sector. Developments in science and engineering are an integral part of the company. Fort Vale is dedicated to encouraging young people into science and engineering through their apprenticeship scheme.

#### **InterFocus**

InterFocus is one of the UK's leading laboratory furniture manufacturers based in Cambridge. It has more than 25 years' experience of constructing and refurbishing labs, and work across the educational, healthcare, pharmaceutical and industrial sectors. The company prides itself on working with some of the most prestigious hospitals, universities and research facilities in the UK.

### Lancashire Science Festival



**Baby Change** 

**&** Baby Feeding Room

f Cash Machine

#### **Orange Zone**

AB Adelphi Building

**CM** Computing and Technology Building

**ME** Media Factory

OFS Oasis Faith and Spirituality Centre (Quiet Room and Prayer Room)

**SU** Students' Union

#### **Blue Zone**

EIC Engineering and Innovation Centre

**DB** Darwin Building

FB Foster Building

**HB** Harris Building

MB Maudland Building

STF Sir Tom Finney Sports Centre

#### **Green Zone**

**GR** Greenbank Building

**HA** Harrington Building

### c Check-in Point

First Aid Point

Food and Drink

H Help Huts

#### **Red Zone**

**SC** Student Centre

**US** University Square

#### **Car Parking**

#### University

(Free of Charge)

CP1 Fylde Road, PR1 2XN

**CP2** Computing and Technology, PR1 2XQ

CP3 Leighton, PR1 8RU

CP4 Vernon, PR1 7EX

CP5 Roeburn, PR2 2QQ

CP6 Victoria, PR1 7QS

### **Public Car Parking**

(Charges apply)

**CPWS** Walker Street Car Park, PR1 2RQ

### Walking times

STF to FB 5 to 10 mins FB to SU 5 to 10 mins

SU to HA/GR 5 to 10 mins

### f @LancSciFest #LancSciFest



### **Children's University**

#### Children's University Learning Destination

The Lancashire Science Festival is delighted to be a Children's University Learning Destination. You will receive stamps for attending the festival. Visit check-in to collect your stamps for your learning passport.

The Children's University is an international critically acclaimed charity which encourages all children aged 5 to 14 years to try new experiences, develop new interests and acquire new skills through participation in innovative and creative learning activities outside of the school day. Find out more at childrensuniversity.co.uk



### Interested in sponsoring the next Lancashire Science Festival?

By supporting the festival you will be helping to inspire the next generation of scientists, engineers and inventors. The festival is free of charge through the support of our sponsors and in-kind supporters. We reach a diverse audience a supporting the festival will not only help inspire the workforce of tomorrow but promote social mobility across the region. The festival has an extensive reach through visitors, social media and press exposure.

Get in touch! We'd love to have a conversation with you about the festival.

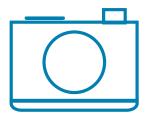
**Contact the Lancashire Science Festival Director,** Dr Liz Granger using the details below:

LancSciFest@uclan.ac.uk lancashiresciencefestival.co.uk





@LancSciFest #LancSciFest



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Terms and Conditions available on our festival website lancashiresciencefestival.co.uk













### **Comments Section**

### Let us know your thoughts on this year's Lancashire Science Festival

Once completed, please return with your lanyards using the lanyard bins located around the festival.

What did you think about the Science Showfloors?



Has the Lancashire Science Festival inspired you to learn more about Science, Technology, Engineering and Maths?



What did you think about the festival as a whole?



Your feedback will help us to shape the future of the Lancashire Science Festival.

### Thank you



# Our Festival Treasure Trail

Don't forget to complete your treasure trail card to be entered into our prize draw for a John Adams' science kit. The festival is full of real-life scientists and engineers who are excited to talk to you about the work they do. Keep an eye out for people wearing 'I'm a scientist/engineer, talk to me' badge and ask them a question.

Take your completed card to one of the festival shops in exchange for a festival prize and to enter the prize draw.

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your festival
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the festival





@LancSciFest #LancSciFest

We have made every effort to ensure that the information in this leaflet is as accurate as possible at the time of going to publication (October 2021), including but not limited to any accreditations cited. Some changes are likely to occur in the time between publication and the start date of each course.