Welcome to Be Curious 2019 at the University of Leeds. Thank you for coming along and wanting to find out what we do. We teach students and we also do a lot of research. Today we want to give you a glimpse of the research that is taking place here.

We have lots of exciting activities happening in the Parkinson and Michael Sadler Buildings and in the School of Music throughout the day.

A tour of the microbial world inside your body – a treasure hunt for our younger guests

If you are between 5 and 12 years old you can pick up a treasure hunt booklet from stall 9 in Parkinson Court. Collect all the other microbe stickers from stalls in different buildings. Upon completion go back to the stall in Parkinson Court and collect a free memento of the event (*while stocks last).

Saturday 30 March 2019
10am – 4pm
University of Leeds
12. The art of a sustainable future
Are you worried about climate change? There is plenty to be concerned about, however, there are also reasons be hopeful about the future. Find out about research into renewable energy at the University of Leeds through a model city of the future developed in association with Cyclops Pedal Power.

9. A tour of the microbial world inside your body
Did you know that bacteria make up over half of the cells in your body? Come to our stall and we’ll go on a tour of the human body, discovering all the types of bacteria that grow inside of us!

8. Who wants to live in a ‘pop-up’ home?
If you could design your own home, what would it look like? Come and find out about the spread of ‘pop-up’ housing in the UK, and the social, environmental and political opportunities of moving away from traditional ‘bricks and mortar’ housing.

7. Visions of utopia
What is your vision of a brave new world? Take inspiration from writers of the past and share your own ideas for the future. Discover works such as Thomas More’s novel ‘Utopia’, famous for its playful account of an ideal society, and create your own perfect world to add to our picture.

6. Gluten and me: how gluten interacts with the human body
How long does it take to digest gluten? Why do some people react to gluten as if it is a virus? What is your opinion on the fortification of gluten-free foods as a strategy to improve nutrition? Come along to explore how gluten interacts with the human body.

5. Baxter’s sweet shop
Come and visit Baxter’s Sweet Shop, where human customers interact with a robotic waiter! Baxter can find a candy container with candies of different colours that human customers can order through an Android application.

4. Imaging a brave new world – research at NIHR Leeds Biomedical Research Centre
Ultrasound… MRI Scanning… Are you curious? Want to know how they work? Come and find out what we can see inside your body! Join in with our many fun activities showing how they work and how we use them in musculoskeletal research.

3. Better data, better cities
Come and investigate the benefits of using the data generated by you to improve everyday life. From transportation and emergency planning; to healthier lifestyles, increased sustainability and affordability; investigation of routinely generated data has a multitude of applications to the population.

2. The science of sound
Sound is all around us but how much do we really know about it and what it can do? The science of sound stand will relate ongoing research to a wide range of interactive objects which utilise sound waves to levitate, transform, vibrate and even see through solid objects.

1. Surgical robotics 101: Working with humans
Have you got what it takes to perform robotic surgery? Do you want to find out how robots are changing surgery? Explore our research into improving human/machine interfaces and surgical training methods. Test your skills on our surgical trainer and get a certificate for your wall.
of milk, fix their broken teeth and dress up like a superhero! You will help them find their teeth in a glass of milk. Fixing broken teeth commonly happens and what can we do to prevent it? Join our superheroes TRoy and UMA as they explain how breaking teeth commonly happens and what we can do to prevent it.

**HyperTerahertz: To the depths of the electromagnetic spectrum**

Through new technology, the Terahertz region of the electromagnetic spectrum is now available for us to use! Visit our interactive demonstrations, where you will learn about the electromagnetic spectrum, how terahertz waves can be used to identify materials, and how this may impact applications for language learning, education practices, and communication.

**Memory and language around the world:**

Navigating the way

Due to the number of international migrants continuing to grow rapidly worldwide, knowledge of other cultures is becoming increasingly important in enabling us to live harmoniously. We will be exploring how people understand, learn and remember other languages and how this may impact applications for language learning, education practices, and communication.

**New stars, new worlds**

Do you know how are stars and planets are born, and how molecules come together in space? How does space weather affect our Earth? Come and find out! We’ll show you using performances, holograms and downloadable apps.

**Grip strength matters**

Your ability to stay independent begins with your hands. A weak grip strength limits your ability to grab, hold and carry out everyday tasks. Grip strength matters for active, healthy and independent aging. Using cutting-edge technology, we intend to develop protocols to identify early decline to manage your grip strength.

**Regenerative Medicine is helping us find solutions for Doctoral Training in Tissue Engineering and 3D Printing**

Join us for a giant game of ‘Operation’ where you’ll find out how research from the Centre for Doctoral Training in Tissue Engineering helps us find solutions for degeneration relating to age and injury. Learn about joint replacements, tissue engineering and advanced imaging – as well as much more!

**From TV screens to Fairy Liquid – crystals that flow**

Liquid Crystals are an often-forgotten state of matter. Drop by and see the future technologies of these exciting materials. They have previously been used in applications as diverse as television screens and detergents, in addition to being fundamental in enabling life as we know it.

**Preparing for a brave new world: New innovations in global surgery**

We are working with non-governmental organisations and healthcare providers to improve access to safe surgery in low income countries. Find out about our innovative surgical equipment, and see if you could be the next top surgeon with our anatomy quiz and keyhole surgery challenge.

**New ways to eat up your greens**

Come and see our vegetable stand to explore research on complementary feeding and new, imaginative ways to encourage all children to eat more vegetables. We have added veg to milk during weaning and sensory play and storybooks with pre-school children to encourage liking and intake. We can eat up our greens!

**Extend your life**

Want to know how old you will get? Learn about telomeres and how they are related to ageing and function as a predictor of lifespan, or explore what factors contribute to ‘healthy ageing’. At this stall you can fish, play the jenga game, build your own telomeres or even dance!

**Brave new world of vegetables!**

New ways to eat up your greens

Come and see our vegetable stand to explore research on complementary feeding and new, imaginative ways to encourage all children to eat more vegetables. We have added veg to milk during weaning and sensory play and storybooks with pre-school children to encourage liking and intake. We can eat up our greens!

**Big mouth: Fixing broken teeth**

Join our superheroes TRoy and UMA as they explain how breaking teeth commonly happens and what we can do to prevent it. You will help them find their teeth in a glass of milk, fix their broken teeth and dress up like a superhero! You will help them find their teeth in a glass of milk. Fixing broken teeth commonly happens and what can we do to prevent it? Join our superheroes TRoy and UMA as they explain how breaking teeth commonly happens and what we can do to prevent it.

**Boost your language bravery. Find out how being bilingual makes you braver**

Discover more about being bilingual in today’s global world – and why learning languages is empowering and exciting. Try it out for yourself – learn 10 phrases in 10 minutes. Prizes for guessing different language scripts, or what languages lie behind famous phrases in English: don’t skive off, or get miffed – you’ll find it’s all tickety-boo!
How do we see the invisible? The human eye can only see objects not much smaller than the width of a human hair. This means that smaller objects such as cells in the body, bacteria and other organisms are invisible to the human eye. We will be looking at how microscopes can show us the detail we can't see and how they can make the invisible, visible.

**LG 19**

**Graph theory for kids!**

The town of Königsberg is separated by a river and has 7 bridges. Can you tour Königsberg crossing each bridge only once? This question was asked by the famous mathematician Leonard Euler. Find out the answer using graph theory! Create your colouring book with mathematical investigations, colourful numbers and magical properties!

**Visible colour generation in nanomaterials using invisible laser for medical imaging**

Do you want to find out how extremely small particles (nanoparticles) made up of rare earth elements can be used in important medical imaging procedures and other medical applications? Specific nanoparticles which have been made here in Leeds can produce a range of colours that are visible to the naked eye. How these nanoparticles are used in medical imaging will be demonstrated in front of YOUR eyes!

**INVISIBLE WORLDS PERFORMANCE**

presented by Marty Jopson (BBC One Show Resident Scientist), 1pm in Rupert Beckett Theatre, Michael Sadler Building

**Target audience:** adults and families

This performance is free but requires a ticket. If you booked online please exchange your confirmation for a ticket at the desk at the entrance of Parkinson Building. If you did not book online, please go to the above desk and collect a ticket on a first come first served basis. The desk will close at 12.50pm.

Take a journey from everyday life, down into the realm of microscopic wonders. The adventure begins with things you can almost see but soon you will find yourself in a world totally invisible to the unaided eye. Marty will take you from the very beginnings of microscopy, through hugely magnified insects, bacteria and plants to the most up to date fluorescent techniques demonstrated live on the stage. This show is supported by Zeiss, global leaders in the manufacture of microscopes. A cloakroom is located behind the theatre where pushchairs can be left during the performance.

**LG 17**

**Washing and recycling nuclear fuel**

In a world looking for low carbon energy, we must be brave and embrace nuclear power to keep our fridges and data centers running 24/7! Come and see how we are tackling recycling and a circular fuel cycle. Visit our mini power plant and bicycle separator and get your hands on mixing liquids and separating them!

**LG 19**

**Hercules’ twelve labours today**

In ancient myth, Hercules made people safe from monsters. Recently he has been re-imaged as a coloniser and a political leader. Today, you decide how Hercules would improve the world by referring to these images and drawing a new Labour on a postcard, which will be combined into a poster.

**LG 19**

**Graph theory for kids!**

The town of Königsberg is separated by a river and has 7 bridges. Can you tour Königsberg crossing each bridge only once? This question was asked by the famous mathematician Leonard Euler. Find out the answer using graph theory! Create your colouring book with mathematical investigations, colourful numbers and magical properties!

**Visible colour generation in nanomaterials using invisible laser for medical imaging**

Do you want to find out how extremely small particles (nanoparticles) made up of rare earth elements can be used in important medical imaging procedures and other medical applications? Specific nanoparticles which have been made here in Leeds can produce a range of colours that are visible to the naked eye. How these nanoparticles are used in medical imaging will be demonstrated in front of YOUR eyes!

**INVISIBLE WORLDS PERFORMANCE**

presented by Marty Jopson (BBC One Show Resident Scientist), 1pm in Rupert Beckett Theatre, Michael Sadler Building

**Target audience:** adults and families

This performance is free but requires a ticket. If you booked online please exchange your confirmation for a ticket at the desk at the entrance of Parkinson Building. If you did not book online, please go to the above desk and collect a ticket on a first come first served basis. The desk will close at 12.50pm.

Take a journey from everyday life, down into the realm of microscopic wonders. The adventure begins with things you can almost see but soon you will find yourself in a world totally invisible to the unaided eye. Marty will take you from the very beginnings of microscopy, through hugely magnified insects, bacteria and plants to the most up to date fluorescent techniques demonstrated live on the stage. This show is supported by Zeiss, global leaders in the manufacture of microscopes. A cloakroom is located behind the theatre where pushchairs can be left during the performance.
Disability Access – Lifts/Trails
There is lift access to all our venues throughout the campus. If you have access issues, please raise this with a student guide (red T-shirt) and they will help and show you the disabled access route.

Toilets and Baby Changing Facilities
There are toilets located across campus, which are highlighted in each venue. The main toilets in Parkinson Court are on the lower ground floor and can be accessed by the stairs or lift on either end of the court.
Baby changing facilities are located in the toilets in Parkinson Court and Baines Wing.

Safety
Adults bringing children under the age of 18 are reminded that they must stay with them throughout the event.

We are not expecting a fire alarm test today, therefore if you hear the alarm, please follow either the student guides or members of staff out of the building via the nearest fire exit and do not return to the building until instructed to do so.

If you require first aid assistance at any time throughout the event, please inform a student guide (red T-shirt) or a member of staff and they will assist you. If this is not possible, please phone University Security on 0113 3432222 and explain where you are and they will assist you.

Information points
The main information point is located in the centre of Parkinson Court. Should you need any assistance, additional student helpers can be found in Michael Sadler building and Baines Wing. Student guides are on hand throughout the day, you can identify them by their red T-shirts with a University of Leeds logo.

Feedback
We are keen to hear what you think of Be Curious 2019 today and you can let us know on your return to the feedback desk in Parkinson Foyer.
The data we gather is to make sure we understand the success of our marketing and whether we achieve our aims with this event. We will not pass on or share data we collect today.

Café
There is a café open in Parkinson Court where you may purchase drinks and snacks during the event.

Parking on Campus
If you have parked your car on campus you need to pay the required fee at the payment machine on level 1 of the multi storey car park before you exit. This must be paid by debit/credit card. If you fail to pay, you will receive a fine through the post as registration plate recognition cameras are active on all car park exits.

Thank you to the Wellcome Trust and other collaborators across the city and region for kindly supporting this event and to all the staff and students involved in coordinating and delivering the event together.

University Galleries
The Stanley & Audrey Burton Gallery is an oasis of calm, inspiration and art, just a short walk from the city centre. The Gallery offers innovative temporary exhibitions and displays treasures from the University Art Collection. The Collection includes stunning examples of European and British painting, drawings and prints, dating from the 17th century up to the present day.

If you like Be Curious, why not try our other free offers and opportunities?

Free online courses and programs
The University of Leeds offers over 55 free online programs and courses on a diverse range of topics. From anatomy, climate change, World War I and theatre history to atmospheric chemistry and transport systems, there is at least one course you may like. Search our offer on the FutureLearn platform and explore a new and different way of being curious.

www.futurelearn.com/partners/university-of-leeds

International Concert Series
A rich and varied programme of music offering students, staff and members of the public the opportunity to hear a range of the finest classical and contemporary music. The Concert Series is committed to quality and continues to employ high-calibre professional musicians. Concerts are directly related to the teaching and research outputs of the School of Music and other areas of the University. All concerts take place in the Clothworkers Centenary Concert Hall unless otherwise stated and the vast majority of concerts are free. See our current programme at concerts.leeds.ac.uk/whats-on/

Around Campus
The University of Leeds is a creative community with a rich cultural life, offering many opportunities for you to get involved or immerse yourself in the arts. Check out our Public Art trail, our theatres, museums and all other events at www.leeds.ac.uk/aroundcampus

News
And if you want to keep abreast with the research here at Leeds, why not make it a habit to read our news?

www.leeds.ac.uk