

# Science Community Focus



## Wide Eyed with Wonder: University of Nottingham Open their Doors to the Community

Elizabeth Cass, External Relations, University of Nottingham

Vikings battling, experiments with liquid nitrogen and a blindfolded bike challenge were just some of the activities on offer at an interactive community day held at the University of Nottingham. Around 7,000 visitors descended onto University Park Campus on a sunny Saturday in June for the inaugural Wonder 2017 – a free family day designed to; ‘amaze and inspire curious minds’.



A young visitor is impressed by a demonstration

Wonder, previously known as MayFest, is the University's largest community engagement event. Using some of the 300 beautiful acres of University Park visitors enjoyed an action-packed schedule of displays, talks and hands-on activities. The event is devised by staff and students at the University with more than 800 being involved in various roles from leading activities to manning information points.

The newly-opened David Ross Sports Village proved a popular attraction, with a queue for the climbing wall forming well before the doors even opened and the Veterinary Science's teaching dogs were never short of attention.



A group of children give a dog a health check, with guidance from the Vet School

Climbing Wall Manager Mike Smith said: “Many of the parents expressed at how amazing the wall was and some had made it their first activity of the day. As the day progressed there was a steady stream of children who had been at other activities and they were all very excited with what they had already done. I think we had well over 200 people try the wall of which 95% were children. There were a few who actually queued twice in order to get a second go.



The climbing wall in the newly opened David Ross Sports Village had a steady stream of visitors

The volunteers who helped throughout the day were all students at the University and they worked tirelessly to ensure everyone who tried the wall got up as high as possible. Overall the wall was a brilliant success.”

### Smashing fun

Over in Engineering visitors had the chance to watch as everyday materials such as cakes, glass and t-shirts, were burnt, cut and smashed in a series of live and loud experiments.

Dr John Turner, Assistant Professor in Engineering, said: “The event's theme was based around the properties of different materials, properties that we get from nature and how we manufacture new materials to enhance their natural properties and what we can use them for.

“One of the demonstrations involved dropping a heavy bolt onto a glass sheet and taking a run at a shatterproof glass sheet with a sledge hammer, which aims to showcase what the different outcomes are when the properties of glass are strengthened.”

### Under Pressure

In the School of Physics ‘How to Make a Cloud’ proved popular with visitor Hannah Webster taking to twitter to comment; ‘one to show the children Monday morning’.

The 45 minute show covered pressure and temperature – making an instant indoor rain cloud using liquid nitrogen and boiling water and producing pops, bangs and levitation.



Audiences learn about how to make a cloud with the School of Physics

## Time Travel

Large crowds were transported 1,000 years back in time to witness Vikings and Anglo-Saxons clash in a thrilling battle.

The groups were fighting to control the territory of England for most of the ninth and tenth centuries. Students at the university study the history, archaeology and literature of this time with world-famous scholars and researchers. They use authentic reproduction weapons and clothing to reproduce as closely as possible the appearance and conditions of warriors in historical battles; and they use historical records to guide their re-enactment of the fighting strategies that were used in such battles.

Dr Paul Cavill, Assistant Professor in English, said: "While children made replica Viking ships, or wrote their names in runes, we often had detailed conversations with parents about history, language and place-names. The re-enactments sparked lots of interest in the construction and use of weapons, armour and clothing, and our students were able to talk about their research and how they came to know so much about a millennium-old culture."



Vikings and Anglo Saxons clash in a thrilling battle led by the School of English

"At the younger end, the main question visitors asked was 'Can I have a go with the sword or helmet?'—and they were delighted to be able to handle the artefacts. Older visitors were intrigued by the Scandinavian presence in this area, and keen to know more about how their culture made an impact."

## MRI

Over in the Clive Granger Building a series of talks covered topics from bears roaming the Peak District to seeing inside your own body with MRI scanners.

MRI was invented at the University of Nottingham by Sir Peter Mansfield, a Nobel Prize-winning physicist who passed away earlier this year. Precision Imaging is also one of the University's Beacons of Excellence and aims to drive the development of personalised therapies in mental health and other chronic diseases. At Wonder visitors could learn how super-powerful magnets, spinning atoms and radio waves are used to take pictures of bodies and how it contributes to research across the whole of the university.

Remarkable Respiratory gave another opportunity for children and families to understand the way our bodies work – this time looking at lungs and the University's research in respiratory medicine.

Rebecca Braybrooke, Research Facilitator and Project Manager in the School of Medicine,



Even Spiderman needs an MRI scan

said: "We made balloon lungs from bottles and fashioned DNA bracelets showing genes identified in the role asthma and showcased the interactive VIRTUALI-TEE t-shirt and app using ipads. This was a huge hit and allowed people to see inside the body and look at a healthy set of lungs at work."

"People will also had opportunities to use microscopes and pipettes to provide experience with real science laboratory equipment. We had a huge amount of engagement from the general public and people are generally very interested in seeing the type of work we do and the impact we hope this will have on improving respiratory health. Several people with lung disease visited our stand and wanted to find out what research we are doing and how they could possibly get involved and be part of it."

Visitors were keen to share their experiences. One person wrote in with their feedback. They said: "The staff and researchers were fantastic, their ability to engage young children and explain their research was fantastic, my children are four and six and they were engaged and interested in the activities because of the enthusiasm and knowledge of your staff."

"We were particularly impressed by your scientists, they were all brilliant, and particularly the ladies with the cheek cells experiment and the wound healing with the scaffolds and polymers."

"To people who live locally (in my opinion) the university has seemed - until now - a mysterious closed off place. The Wonder event made me feel proud to live in Nottingham with such talented people with all kinds of ideas to make the world a better place, proud to bring my children up here and know that they can be part of the university too when they grow up. I have two children desperate to be scientists now, thank you."

## Man with the X-Ray Eyes

Meanwhile Professor Todd Landman carried out a daring bike ride around Highfield's Lake – completely blind folded.

Professor Landman, Pro-Vice-Chancellor of the Faculty of Social Sciences, and an Associate of the Inner Magic Circle, took on the feat to raise money for the Children's Brain Tumour Research Centre at the University and in homage to Kuda Bux. In 1945 the Indian magician known as the Hindu Mystic and the 'Man with the X-Ray Eyes', skilfully rode a bicycle through a congested Times Square in New York City completely blindfolded.

Preparations were underway for some time with Professor Landman working hard on memorising a detailed map of the perimeter of Highfields Lake in front of the historic Trent Building at the University. But on the day ducks, prams and other lake-goers proved dangerous obstacles.

He said: "I was really pleased with the turnout for the event and the wonderful atmosphere in the theatre and around the lake. After all the preparation, I was pleased that I made it around the lake, but was a bit surprised at some of the perils that I sensed primarily through sound."

"Ducks provided a good clue, as did the feeling of the surface as I rode. The biggest risks involved people not knowing what was actually happening, especially through the narrowest parts of the course. Overall I was relieved and exhilarated once I completed the course. I raised more than £900 by the time of the event, and of course would be delighted for any additional support during Lifecycle 7."

The Lakeside was also a busy spot with the Hunter, a four foot Sinraptor, drawing a crowd. Hunter is part of the world-exclusive Dinosaurs of China exhibition taking place at Wollaton Hall and Nottingham Lakeside Arts over the summer.

Debbie Henthorn, Deputy Director of Campaign and Alumni Relations, and a team from across the University organised the day's activities: "Wonder was the largest and most ambitious community event that the University has ever delivered; it was also the hottest! It was fantastic to welcome so many local children and adults onto campus to engage with University staff and students and to participate in different activities, experiments and demonstrations. The top five words that our visitors used to describe Wonder were 'enjoyable', 'amazing', 'inspiring', 'fun' and 'exciting' – we hope that the success of the event will encourage members of our local community to come and explore the University campus more often."

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