



Anglia Ruskin
University

Chelmsford Science Festival

11-15 March 2019

Programme of events

Book your free tickets at
anglia.ac.uk/communityevents



**science
festival**
CHELMSFORD 2019

With the exciting announcement that we are hosting the BSA British Science Festival in September 2020, we are delighted to bring to you Chelmsford's first week-long Science Festival in March 2019.

Join us for a whole range of **FREE events** exploring the science of Medicine, Engineering, Psychology, Sport, Chelmsford's scientific heritage and much more.

We're delighted to host award-winning presenter and comic Robin Ince, presenter of the BBC radio show *The Infinite Monkey cage* during the festival.

All events start at 7.30pm and are free to attend (excluding Robin Ince). **Booking is essential**, as tickets are limited.

To book your **FREE** tickets please visit anglia.ac.uk/communityevents or call **01245 68 4715**

Anglia Ruskin University, Bishop Hall Lane, Chelmsford, CM1 1SQ

Monday, 11 March

It's been emotional: Managing suffering in organ donation

Stephanie Parsons  Talk, 7.30pm

This talk provides an insight into the emotional management of organ donation and the findings from Dr Parsons research, which examines the relationships formed officially and unofficially between organ recipients, donor families and expert staff.

Marconi's and Hoffmann's past - the legacy of the Frederick Roberts archive of industrial history

Dr Catherine Pearson  Talk, 7.30pm

Explore the contribution of Essex-based industrial manufacturers such as Marconi's and Hoffmann's to scientific developments, through Anglia Ruskin University's Frederick Roberts Archive of Industrial History.

Burgers, bacteria and heart disease: Making sense of the processed food debate

Dr Clett Erridge  Talk, 7.30pm

Join us for a thought-provoking examination exploring the latest scientific discoveries making unexpected connections between bacteria, processed foods and our risk of developing heart disease and type-II diabetes.

Advanced pharmaceutical 3D printing

Dr Basel Arafat  Practical demonstration, 7.30pm

This practical demonstration session sheds lights on this new technique and demonstrates the potential pharmaceutical applications of 3D printers in solid dosage forms. There will also be an opportunity to have a tour of our "superlab" facilities and to manufacture tablets via the conventional tableting process, comparing tablets from both technologies.

Book your free tickets at anglia.ac.uk/communityevents

Tuesday, 12 March

An introduction to citizen science

Ian Walker 12+ yrs Workshop, 7.30pm

Get hands on as we demonstrate online projects which you can start to get involved with immediately! Projects include Galaxy Zoo (a crowdsourced astronomy project) and Foldit (an online puzzle game contributing to research on protein folding).

How smart devices work? From computer networks to programming

Dr Erika Sanchez-Velazuez 11+ yrs Workshop, 7.30pm

Have you ever wondered how smart devices work? During this workshop, you will build a small home network with smart devices. We will use Python to program the behaviour of the smart devices and you will leave with the knowledge of how servers can be configured to allow the remote connection and control of those devices.

Lego® and artificial intelligence: How to use Lego to test artificial intelligence algorithms

Philip Payne 16+ yrs Talk, 7.30pm

Artificial Intelligence (AI) appears to be everywhere from mobile phones to the latest television sets, but how many people actually understand the principals behind AI? Using nothing but a collection of commonly available Lego® parts, this lecture will demonstrate three different AI algorithms that are used in research today. Based on a simple set of ideas, this lecture will give you the start you need to create your own AI systems at home.



Wednesday, 13 March



Robin Ince

**I'm a joke and so are you -
a comedian's take on what
makes us human**

In partnership with the Essex Book Festival

Booking: essexbookfestival.org.uk

7.00pm Tickets £10 / £8

**ESSEX
BOOK
FESTIVAL**

Award-winning presenter and comic Robin Ince examines the world through the eyes of the stand-up, exploring some of life's biggest questions. Birth, death, social anxiety, creativity and other meaty subjects are playfully picked apart, backed up by interviews with some of the world's top comedians, therapists, neuroscientists and psychologists.

Discovering the extremes of human nature

Dr Annelie Harvery, Dr Daragh McDermott, Dr Mick Finlay, Dr Magdalena Zawisza, Aneita Pringle

18+ yrs Panel discussion, 7.30pm

Join our team of social psychologists as they discuss the extremes of human nature from #WomenWhoVoteTrump, cross-cultural #homoprejudice, the derogation of the McCann's, social influence in mass suicides, to the use of restraints in mental health.



Wednesday, 13 March (cont.)

Karate kid vs. Rocky Balboa: The science of strength and power

Dr Dan Gordon  Talk, 7.30pm

Join Dr Dan Gordon as he discusses the principles of skeletal muscle physiology, from how training produces both gains in size along with speed of the muscle action.

Controlling light - biology, electronics and psychology

Scott Window  Talk and demo, 7.30pm

In partnership with Chelmsford Science and Engineering Society



Artificial lighting is key to modern living - how do we minimise the consequential energy consumption whilst at the same time improve our wellbeing and productivity?

Unveiling alcohol's true colours!

Dr Rudolph Schutte  Talk, 7.30pm



What are alcohol's true colours? Come along and explore 'The Good, the Bad and the Ugly' of the consumption of beer, wine and spirits - you be the judge!

Book your free tickets at anglia.ac.uk/communityevents

Thursday, 14 March

The sound of space exploration

Dr Domenico Vicinanza  Talk and performance, 7.30pm

Outer space may be silent but within the void lie music waiting to be heard. For years, scientists have tracked charged particles as they zoom through the cosmos, using deep space probes to measure the particles' paths and mapping algorithms to translate the data into musical scores. Discover how music can provide a precious tool to explore science and be an amazing source of inspiring art.

Books, machines and the first mechanics' institutes

Prof John Gardner  Talk, 7.30pm



Discover how engineering, literature and history were taught in the early nineteenth century at mechanics' classes and learn about how the men and women who attended and the opposition they faced as they demanded a broader education.

The science of jokes: What makes us laugh?

Dr Michelle Sheehan and Dr Vahid Parvaresh

 Workshop, 7.30pm

Join us for a LOL hands-on session that explores the science behind the art of humour. What makes us laugh and why?

Dads get sad too: A psychologist talks about postnatal depression

Prof Viren Swami  Talk, 7.30pm

Drawing on his own experience of becoming a new father and being diagnosed with postnatal depression, Prof Viren Swami tries to better understand why some dads get sad.

Friday, 15 March

Attraction explained: The science of how we form relationships

Prof Viren Swami  Talk, 7.30pm



Can science explain how we form relationships? This talk looks at how factors such as geography, appearance, personality, and similarity affect who we fall for and why.

Science Quiz Night

Ian Walker  Quiz, 7.30pm



Bring a bottle, nibbles and brain and put your science knowledge to the test! The quiz will cover scientific concepts, findings and common trivia with an emphasis on FUN. Prizes from the Natural History shop will be presented to the winning team.

Team Anglia Racing: Racing simulator

Andy Ferady  Workshop, 7.30pm

Do you feel the need for speed? Could you be the next Lewis Hamilton? Join our students and staff from our Anglia Racing team and compete against your friends in our PlayStation style F1 racing simulator.