



Wednesday 11 March Cancer Awareness Evening

An evening organised jointly by GENIE (Centre of Excellence in Teaching and Learning in Genetics) and 'Hope Against Cancer' a local charity making an impact on local cancer research.

There will be talks on topics such as the role of diet in causing cancer and hands-on activities where experts will demonstrate some of the basic things that can lead to cancer.

For further information contact Annette Cashmore
E: genie@le.ac.uk

- 18:00 – 21:00

For instructions about finding the University
www.le.ac.uk/portals/maps/maps.html

Wednesday 11 March

Faculty of Science Annual Lecture

King Coal: Time for restoration of the mucky monarch

Prof. Paul Younger, Newcastle University

Old King Coal has had – and continues to have – a very bad press. Opencast developments that are relatively modest compared to those previously undertaken in Britain arouse storms of controversy, and the handful of remaining deep mines struggle to expand even when market prices for coal reach historic heights. So isn't Old King Coal dead and buried? And isn't it a case of 'good riddance'? This provocative lecture will argue otherwise.

Admission is free, but by ticket only. To book contact Mrs Chris Goddard on 0116 252 3403 or email science@le.ac.uk

- 19:00 Ken Edwards Lecture Theatre 1

Thursday 12 March

DNA and Proteins – The Chemicals of Life

A hands-on taster day full of fun activities – with opportunities to prepare DNA and see how scientists can use the information it holds, find out what enzymes do in our bodies and what this can do in the laboratory!

Jointly organised by GENIE and the Department of Chemistry

This event is aimed at 11-12 year olds

For further details contact Cas Kramer

E: ck53@le.ac.uk

- 10.00 – 14.00

Thursday 12 March

Café Biotechnique

Aimed at 6th form students, this is an opportunity to discuss topical breakthroughs in biomedical science with international scientists in an informal setting whilst enjoying pizza and other refreshments. This session will be led by Prof. Mark Jobling from the Department of Genetics, and the discussion will be around 'Personal DNA testing: curse, con or harmless fun?'

For further details contact Annette Cashmore

E: genie@le.ac.uk

- 17:00 – 18:30

Thursday 12 March

Searching for Supermassive Black Holes

Emeritus Prof. Ken Pounds,
Department of Physics and Astronomy

Many galaxies are seen to have a bright, star-like nucleus which, in extreme cases, can dominate the light of the host galaxy. Observations with the Ariel 5 satellite in the 1970s first showed that the nuclei in such 'active galaxies' are powerful sources of X-radiation. Subsequent observations have provided definitive evidence that gas falling onto a massive black hole is driving the enormous energy output of these active galactic nuclei (AGN).

Within the past few years X-ray observations have revealed another important property of AGN, where the

gas in-fall is limited by radiation pressure causing excess matter to be ejected at relativistic speeds. The latter process is now offering an insight into why the growth of supermassive black holes and their host galaxies appear to be so closely linked.

This event is free and open to all

- 17:30 Ken Edwards Lecture Theatre 1

Saturday 14 March 2009

Science in the Community

A fun interactive community-based event organised and run by GENIE (Centre for Excellence in Teaching and Learning in Genetics) to encourage parents to take an active role in supporting their children to pursue science subjects.

This free event will consist of workshops, debates and hands-on activities focussed on science and health-related topics, including: healthy eating and exercise, body anatomy, forensic science, DNA and genetics and the ethics of science. Come and join us on the day in Highfields Community Centre.

Supported by a National Science and Engineering Week East Midlands Grant.

This event is open to the general public but especially to parents and children.

For further details contact Heena Patel

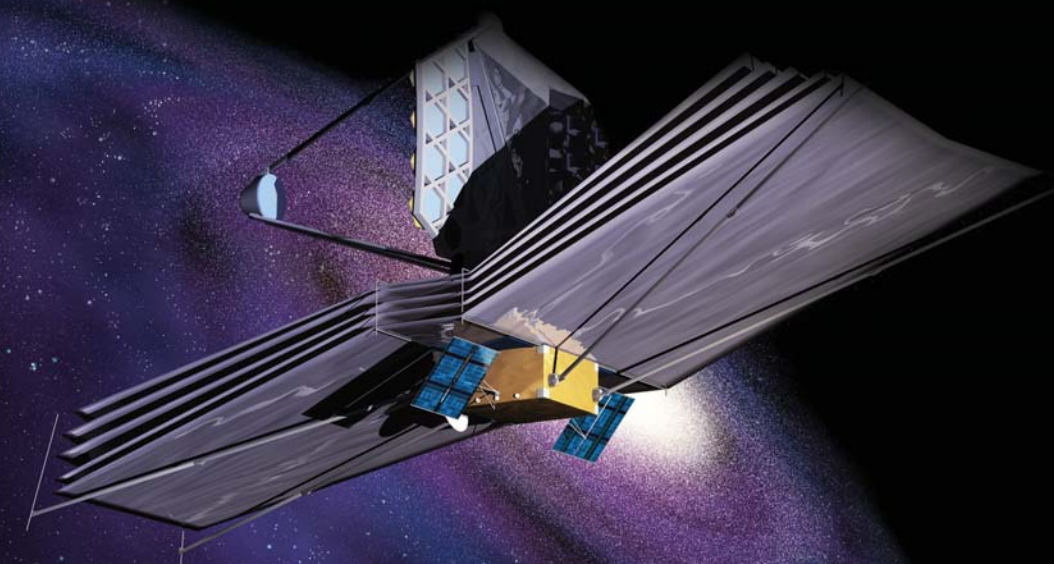
E: genie@le.ac.uk

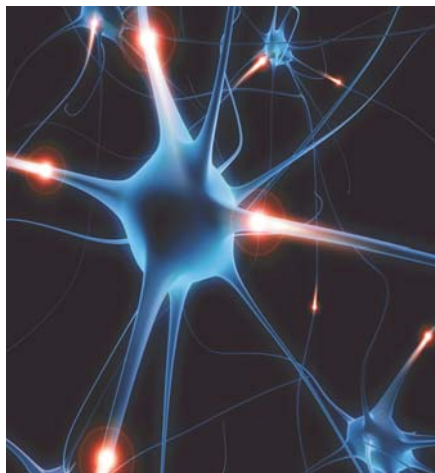
- 11:00 – 15:00

National Science and Engineering Week

6 – 14 March 2009

Celebrating International Year of Astronomy and Darwin200





Friday 6 March

The Jennifer Aniston neuron

Prof. Rodrigo Quian Quiroga,
Department of Engineering

A fascinating question in science is to study how information about what we see, hear, touch and our own memories, emotions are represented by neurons in the brain. Research has shown that one neuron fired to, for instance, Jennifer Aniston, another one to Halle Berry, another one to the Sydney Opera House, etc.

The responses were abstract, the neuron firing to Halle Berry responded to several different pictures of her and even to the letters of her name, but not to other people or names.

The role of these neurons for conscious perception and the formation of new memories will be discussed.

Free and open to all.

- **17:30 Frank & Katherine May Lecture Theatre, Henry Wellcome Building**



Saturday 7 March

Science Activity Day

For people of all ages interested in science.

There will be exciting, interactive activities from a range of science departments. Why not come along to find out how to solve a crime using DNA and much more!

The day will include the conclusion of the Leicester Invents competition with the presentation of awards in the Bennett building foyer.

This event is free and open to all.

For more information contact
E: genie@le.ac.uk

Registration on the day will be in the Maurice Shock Medical Sciences Building

- **10:00 – 16:00**



Monday 9 March

What makes DNA so dynamic? – DNA technology taster

A hands-on DNA technology taster session organised and run by GENIE, whereby 6th form students will become Forensic Scientists. Students will amplify and analyse DNA samples taken from a crime scene using state-of-the-art technology and laboratory equipment. Using the 'DNA fingerprints' can they solve the crime?

This event is open to 6th form students.

For further details contact Cas Kramer
E: ck53@le.ac.uk

- **9.30 – 13.30**

Monday 9 March

Business Applications from the Sciences

Is your company looking for ways to enhance profitability? Come along and discover how to gain commercial benefits by collaborating with academia.

This is a unique opportunity to find out about a host of specialist knowledge and resources at the University of Leicester which can have a direct and positive impact on business performance.

You will hear how the University can support business growth and development. Plus, you can pick from three parallel interactive sessions which showcase Leicester's expertise and innovation in the fields of Microscopy, Molecular Cell Biology and Health and Earth Observation.

For further details contact Elain Crewe
E: leadingedge@le.ac.uk

- **15:00**

Monday 9 March

A Rough Guide to Diarrhoea

Prof. Julian Ketley, Department of Genetics

Funny, but often fatal, diarrhoeal disease affects both the rich and poor. After considering how diarrhoea occurs, we will look at some of the bacteria that cause it.

- **17:30 Frank & Katherine May Lecture Theatre, Henry Wellcome Building**

Tuesday 10 March

Tracing Networks: Craft Traditions in the Ancient Mediterranean and Beyond

Prof. Lin Foxhall Department of Archaeology and Ancient History

How do we gather knowledge about how societies came to operate the way they do? And, how can this help us address pressing questions and issues we face today? We can't travel in time and observe how complex networks evolved, but we can collect, organise and interpret the remains of ancient networks.

Combining archaeology, archaeological science and computer science, we investigate networks across and beyond the Mediterranean region, encompassing Greek, Punic and other peoples, from the late bronze age through classical times (c.1500-c.200 BCE). We focus on crafts-people, asking how and why traditions, techniques and technologies changed and crossed cultural boundaries.

By analysing a wide range of objects, using both archaeological methodologies and a range of scientific techniques, we can discover how artefacts were made, who used them, and where they came from and travelled to. We will apply our understanding of knowledge transfer in antiquity to propose new computing paradigms.

This event is free and open to all

- **17:30 Frank & Katherine May Lecture Theatre, Henry Wellcome Building**



Wednesday 11 March

Is there Life on Mars? Mars Lander event

How do you prepare to go to Mars? How do you communicate with your Martian robot? How do you collect Martian soil samples? How do you get those samples safely back to Earth and analyse them?

Using maps of the Martian surface 6th form students will be able to direct robotic rovers to one of the areas of simulated Martian terrain. Collected soil and rock samples will then be analysed in Chemistry and Genetics laboratories to find out crucial information.

Jointly organised by the Departments of Physics, Engineering, Chemistry and GENIE.

This event is open to 6th form students.

For further details contact Cas Kramer
E: ck53@le.ac.uk

- **10.00-15.30**