



From Molecules to Man

Engaging with Edinburgh Neuroscience

Edinburgh Neuroscience has built up an exciting series of activities intended to challenge neuroscience researchers in Edinburgh to communicate their passion for research to the public. We have a well-developed programme that aims to reach all ages from primary school children to adults. We are also working with colleagues from across colleges and across disciplines to engage policy makers and Government in an effort to produce meaningful outcomes.

Brain Awareness Week Workshops



To celebrate International Brain Awareness Week (in March each year), we invite primary school P7 pupils from schools in Edinburgh into the University for a two-hour event, 'How we see the brain and what the brain sees'. This interactive workshop has been funded by the Dana Alliance for the Brain for 3 consecutive years and introduces students to the brain, what it is made from and how we can use modern technology to observe it working. In addition to the hand's-on activities, we are able to offer the unique experience of actually seeing a real human brain (which the class evaluation indicates is a real highlight). We also ask how the brain

sees and use optical illusions to illustrate how it can be tricked. This workshop brings together lecturers and students from across Edinburgh Neuroscience to deliver this event to almost 200 children and teachers each year. It is enormous fun!

www.edinburghneuroscience.ed.ac.uk/publicengagement/BAW

The Art of Science: Build-a-Brain workshops

This occasional workshop for Senior School pupils provides a more detailed examination of the structure of the brain. We are joined by Dr Lizzie Burns (Bringing Science to Life, Oxford) who helps pupils build their own brain from a specially created modelling material, providing information about what each part does as they build it structure by structure. We also run this workshop for MSc and PhD students and it is enormously popular. In 2008 this workshop reached 230 pupils and 60 university students in one day! Whenever Lizzie visits us, we always ensure she also runs a workshop at the Museum of Scotland as well.



www.edinburghneuroscience.ed.ac.uk/publicengagement/BuildaBrain

Edinburgh International Science Festival



Contributing to the University's 'Discover Science at the Museum', this hands-on exhibit 'Sense and nonsense: how we experience the world' looks at our senses and how we use them. Using illusions and activities we demonstrate how some senses are dominant and working with Royal Blind (Services for the Blind), we use Braille to illustrate how alternative senses can be harnessed. Finally, we provide a live research experiment for the public to participate in, looking at synaesthesia (the merging of sensory information), which is particularly popular with teenagers and adults.

www.edinburghneuroscience.ed.ac.uk/publicengagement/SciFest

getBRAINY Workshops for Schools

Designed to fit in with the school timetable and curriculum, these 'workshops-in-a-box' aim to get **B**usy **R**unning **A**ctivities **I**nspiring **N**euroscience in the **Y**oung (getBRAINY). Supported by a small project grant from Development & Alumni, the workshops have been developed for a variety of different age groups.

getCONNECTED for primary 7 pupils uses games to explain how neurones in the brain communicate using chemicals. These children are about to go through adolescence, so we discuss how changes in chemicals in the brain at this time make you feel different.

getEMOTIONAL was developed with the Scottish Imaging Network: a Platform for Scientific Excellence (SINAPSE) and is aimed at all ages, explaining how brain imaging research can help us understand how we experience emotions.

getBALANCED was developed with the Centre for Cognitive Ageing and Cognitive Epidemiology and is aimed at S3 pupils. It explains the structure of the brain and explores physical and functional body and brain symmetry using fun hands-on activities.

getREMEMBERING is the most advanced getBRAINY workshop; aimed at S5 and S6 biology and computing pupils it compares organic memory and artificial intelligence, asking how we store and retrieve memories and how this differs from the mechanisms used by computers. We also ask questions like 'how much of our brain could be artificial before we were no longer considered human?'

www.edinburghneuroscience.ed.ac.uk/publicengagement/getBRAINY



Encounters at Inspace



In collaboration with Informatics, Edinburgh Neuroscience launched a monthly series of public encounters in October 2009 at the new Inspace Centre. Encounters aims to be surprising; it brings together experts from very diverse areas and involves the audience in a dialogue with them by restricting the time each invited speaker is allowed to present their work. By advertising these events to High Schools and via Facebook, we are attempting to engage a young adult audience.

www.edinburghneuroscience.ed.ac.uk/publicengagement/Inspace

Brain Imaging and its Impact on Society

Working with the Scottish Imaging Network – a Platform for Scientific Excellence (SINAPSE), the Joseph Bell Centre for Forensic Statistics and Future Forums, Scottish Parliament, Edinburgh Neuroscience has submitted an application to the Institute for Advanced Studies, University of Strathclyde for a series of events in 2010 examining the potential future uses of brain imaging technology. The development of research using functional brain imaging is rapid and is outstripping ethical and legal considerations. These IAS events will bring together neuroethicists, lawyers and brain imaging researchers from around the world to seek public opinion, discuss these issues and shape a framework for discussion. The final event will be a discussion with policymakers and MSP's about the need for regulatory guidelines. This event has the potential to have a big impact on Society with truly measurable outcomes in the shape of professional guidelines and parliamentary legislation if necessary.

website and resources

Edinburgh Neuroscience has a comprehensive website explaining all our public engagement activities and advertising when events are taking place. These web pages are used by the public and by teachers selecting the getBRAINY workshops they would like to book for their classes, There is also an online resource of useful neuroscience website links suitable for the general public and teachers.

www.edinburghneuroscience.ed.ac.uk/publicengagement/resources

Contact

Edinburgh Neuroscience
The University of Edinburgh
1 George Square
Edinburgh EH8 9JZ
Tel: 0131 650 3522,
edinburgh.neuroscience@ed.ac.uk,
www.edinburghneuroscience.ed.ac.uk

Director: Prof Peter Sandercock
Administrator: Dr Jane Haley