



THE UNIVERSITY *of* EDINBURGH

## *News Release*

Issued: 1 March 2016

---

### **Leading prize for brain expert's insights into memory**

The most valuable research prize for brain science has been awarded to an Edinburgh academic.

Neuroscience Professor Richard Morris has received the award in recognition of his work to understand the mechanisms of memory.

Professor Morris shares the €1m euro Brain Prize with fellow neuroscientists Tim Bliss and Graham Collingridge.

This year's prize was awarded in recognition of their work to understand the brain mechanisms that underpin our ability to learn and remember.

Their discoveries have paved the way to better understanding of complex brain conditions that affect millions of people around the world. These include autism, schizophrenia, depression, chronic pain, epilepsy and addiction.

The research is also helping to understand dementia and normal age-related memory loss.

Richard Morris, professor of neuroscience at the University of Edinburgh:

"I am naturally honoured to receive a share of this prize. It has all been made possible through the longstanding support of the Medical Research Council, superb facilities in a fine University, great colleagues in the lab at the Centre for Cognitive and Neural Systems and in Edinburgh Neuroscience, who together constitute one of the finest neuroscience communities in the world".

The three neuroscientists have independently and collectively shown how connections between brain cells can be strengthened through repeated stimulation – a process called long-term potentiation (LTP).

In 1986, Richard Morris used a new method he had developed to show that LTP was necessary for rats and mice learn to find their way around a new environment.

This began a long programme of research to establish the role of LTP in memory. The findings have revolutionised our understanding of how memories are formed, retained and lost.

Professor Morris said that much of the work on LTP has been driven by curiosity about how the brain stores memories. However, it is inevitable that knowledge of these basic

---

*Ranked among the top universities in the world*

mechanisms will help develop treatments for symptoms of memory loss and dementia, which are becoming increasingly prominent in our ageing society.

The Brain Prize is awarded annually by the Grete Lundbeck European Brain Research Foundation in Denmark and is widely regarded as the equivalent of the Nobel Prize for neuroscientists.

Professor Sir Timothy O'Shea, Principal of the University of Edinburgh, said: "We are delighted that Professor Richard Morris has won The Brain Prize. This is a very worthy recognition of Professor Morris' pioneering research into the mechanisms of learning and memory in the brain. I am sure that the award of this prize will act as an inspiration to scientists at Edinburgh and beyond."

**Jen Middleton Ph.D**

Press & PR Officer (College of Medicine and Veterinary Medicine)

University of Edinburgh | 5 Forrest Hill | Edinburgh | EH1 2QL

T 0131 650 6514 | M 07795 640662 | E [jen.middleton@ed.ac.uk](mailto:jen.middleton@ed.ac.uk) | @EdinUniMedia

---

*Ranked among the top universities in the world*