Boyden Awarded Inaugural International Prize

LONDON, May 2, 2012 — Professor Ed Boyden received the first international A. F. Harvey Engineering Research Prize from the Institution of Engineering and Technology (IET) for his pioneering research in medical engineering.

The £300,000 (approximately $485,000) award will be given annually to exceptional individual researchers for their achievements and promising future research. The prize money will be used to support further investigations led by the recipient in specific areas of engineering and technology.


Ed Boyden

Boyden leads the Synthetic Neurobiology Group at MIT, which develops tools for controlling and observing the dynamic circuits of the brain. He uses neurotechnologies to understand how cognition and emotion arise from brain network operation, and how brain disorders can be repaired.

He has developed genetically encoded molecular tools that, when expressed in defined sets of neurons in the brain, enable them to be electrically activated or silenced using light pulses. These optogenetic tools — proteins known as opsins — serve photosynthetic or photosensory roles, transforming light into electrical signals.

Boyden will use the prize money to exploit his advances in optogenetics to detect and suppress epileptic seizures.

“Over the last several years, we’ve developed a suite of molecular tools that make neurons activatable or silenceable by pulses of light,” Boyden said. “These tools are in widespread use in science because they let you turn brain cells on or off, thus revealing what the cells do in the brain. We’re eager to keep expanding this toolbox, and also to help figure out clinical uses for the tools as novel therapeutics.”

Boyden will receive his prize from professor Lord Winston and give a lecture about his optogenetic research June 19 at the IET: Savoy Place in London.

For more on his research, see: Optogenetics: A Conversation with Ed Boyden

For more information, visit: www.theiet.org/harvey

VIDEO WHITEPAPERS BUYERS' GUIDE

MORE VIDEOS >>

ARTICLE DISCUSSION

You must be Logged In to comment on this article.
Please Log In or Register.

Subject:

Body:

Submit

Tags: Americas, Biophotonics, Business, Europe, Optics & Optical Coatings, A F Harvey Prize, biophotonics, brain disorders, Ed Boyden, England, epileptic seizures, genetically encoded molecular tools, Institution of Engineering and Technology, Lord Winston, medical engineering, MIT, neurotechnologies, opsin, optics, optogenetic tools,

More Business

Bielitz Joins Dymax as Engineering Manager

Remote Sensing Program Open for Submissions

eMagin Receives $3M Follow-On Order

Aerospace Veteran Helmlinger Joins Labsphere

You May Also Like

LED-like Solar Cell Absorbs, Emits Light

Mode-Locked Laser Is Ultrafast, Ultrasmall

Nearly Lightless Laser Has Bright Future

MIT Triggers Total Fear Recall in Mice

More News By Category

Products

ERS2010 Earthquake Restraint System
iCure IRT200, iCure TCK200

Research & Technology

Femtolaser Reveals Cell's Inner Life
Nanophotonic Detector Targets Nuclear Terrorism

Technology

Attosecond laser takes aim at "holy grail" of chemistry research
Lab lightning strikes same place more than twice

Web Exclusives

Bringing a Laser to Life
Tiny Optics Continue to Roll Forward

Biophotonics

BiOptix Expands into Surface Plasmon Resonance
VHX-2000 Digital Microscope

Green Photonics

New LED Design Drops the Droop
A New Wrinkle in Solar Panel Power

POPULAR TOPICS

Nanomaterial Yields Many Laser Colors

A New Wrinkle in Solar Panel Power

Protective Polymers Pave Way for Plastic Solar Cell

Material's Structure Hints at More Efficient Solar Cell

LED-like Solar Cell Absorbs, Emits Light

Single-Neuron Observations Reveal Alzheimer Stages

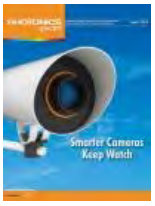
Coupling Microlasers Leads to 'Blackout'

What do you think is the most scientifically relevant application of LIDAR?

- Agriculture
- Archeology
- Geology
- Meteorology
- Law enforcement
- Military
- Surveying
- Transportation
- Wind farm optimization

Submit << PREV NEXT >>

MAGAZINE ARCHIVES



Apr 2012

May 2012

NEW ARRIVALS

PRODUCTS	CLICK FOR MORE INFO	ARRIVALS
CAMERAS		Arrived
DETECTORS		Arrived
LIGHT SOURCES		Arrived
IMAGE SENSORS		Arrived

HAMAMATSU

Laurin Publishing provides comprehensive worldwide coverage of the photonics industry: optics, lasers, imaging, fiber optics, electro-optics, and photonic component manufacturing.

© 1996-2012 Laurin Publishing. All rights reserved.
Photonics.Com is Registered with the U.S. Patent & Trademark Office.
Privacy Policy | Terms and Conditions of Use
Reproduction in whole or in part without permission is prohibited.
webmaster@laurin.com