

The Francis Crick Memorial Conference

Consciousness in Human and Non-Human Animals

JULY 7th, 2012, University of Cambridge, UK

Leading researchers presenting data-driven perspectives on the neural correlates of consciousness

Using advanced quantitative techniques to measure and monitor consciousness, researchers explore a range of topics from investigating the properties of neurons deep in the brainstem, to assessing global cerebral function in comatose patients. The notion that humans do not alone possess the neurological faculties that constitute consciousness will be contended through the presentation of evidence from studies on rodents, flies, octopuses, birds, dolphins, elephants, non-human primates and humans.

Presentations will include works by Christof Koch, Stephen Hawking and Philip Low, Donald Pfaff, Bruno van Swinderen, Ryan Remedios, Nikos Logothetis, Christoph Kayser, David Edelman, Irene Pepperberg, Harvey Karten, Diana Reiss, Franz Vollenweider, Naotsugu Tsuchiya, Melanie Boly, Steven Laureys, Ed Boyden

<http://fcmconference.org/>



Lead sponsor:

NEUROVIGIL

"The Entry of the Animals into Noah's Ark"
Jan Brueghel the Elder (1613)
The Getty Center Los Angeles

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Christof Koch

Allen Institute for Brain Science, Caltech

Studying the Murine Mind

Stephen Hawking

University of Cambridge

~ *and* ~

Philip Low

NeuroVigil, Stanford, MIT

Towards Establishing Neural Correlates
of Intended Movements and Speech

Irene Pepperberg

Brandeis University, Harvard University,
The Alex Foundation

Human-like Consciousness in Non-
Humans: Evidence from Grey Parrots

Bruno van Swinderen

The University of Queensland

Neural Correlates of Unconsciousness in
Drosophila

David B. Edelman

The Neurosciences Institute,
The Scripps Research Institute

Through the Eyes of an Octopus: An
Invertebrate Model for Consciousness
Studies

Edward Boyden

MIT

Optogenetics, Robotic Physiology, and
Other Neural Circuit Tools

Diana Reiss

Hunter College and City University of
New York

Mirror Self-recognition: A Case of
Cognitive Convergence in Humans and
other Animals

Donald Pfaff

The Rockefeller University

The Properties of Neurons at the Root of
Consciousness

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Ryan Remedios

Caltech

The Claustrum and the Orchestra of
Cognitive Control

Harvey Karten

The University of California San Diego

Commonalities in Brain Microarchitecture
and Behavior in Humans and Birds: A
coincidence?

Franz X. Vollenweider

University of Zürich School of Medicine,
Heffler Research Centre

Neuronal Correlates of Psychedelic Drug-
Induced Imagery in Humans

Naotsugu Tsuchiya

RIKEN, ATR, Japan, Caltech, Monash
University

Visual Consciousness Tracked with
Intracranial Recording from Early Visual
Cortices

Melanie Boly

University of Liège, University of
Wisconsin

Cerebral Connectivity in Disorders of
Consciousness

Steven Laureys

Cyclotron Research Center, University of
Liège, FNRS

Identifying the Brain's Awareness System:
Lessons from Coma and Related States