

SELECTED WORKS

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SELF: MIND AND BRAIN SYMPOSIUM AT AARHUS UNIVERSITY HOSPITALS

On the occasion of
Professor Hans C. Lou's 70th Birthday, January 26th 2009



JANUARY 30th 2009
9.00 - 18.00
The Lake Auditoriums
Auditorium 4
Building 1252 (Room 310)

University of Aarhus

SELF: MIND AND BRAIN

is sponsored by

Aarhus and Copenhagen Universities
Center of Functionally Integrative Neuroscience
PET Center Aarhus
Danish Neuroscience Center
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Danish Society for Neuroscience



AARHUS UNIVERSITET

HANS C. LOU

by Albert Gjedde

Consciousness or conscious awareness has puzzled neuroscientists and philosophers alike for thousands of years.

One piece of the puzzle is the extent to which the onset of conscious awareness can be linked to specific brain events involving at the very least a change of neurotransmission in relevant parts of the brain, or possibly the entire cortical mantle. Supplementary issues include the dynamics of regional integration that accompanies the change of neurotransmission, and the associated changes of metabolism and circulation. The experimental approach to the puzzle is a combination of psychophysical measures and registration of signals from the brain by methods as diverse as magnetoencephalography (MEG), functional MRI (fMRI), and positron emission tomography (PET).

Professor Hans C. Lou has employed all of these methods to identify and establish the brain events associated with the onset of conscious awareness, in a major effort to reveal the functions and positions of the sense of self that is in the mind and of the brain. Hans Lou's colleagues now wish to review this important body of findings, with the aim of formulating a hypothesis of conscious awareness that can lead to further attempts at experimental verification or refutation, along the lines suggested by Hans Lou.



PROGRAM

MORNING SESSION I: CHAIR: MORTEN L. KRINGELBACH

- 09.00 - 09.10 Johannes Jakobsen, Aarhus University Hospitals, Denmark
Welcome from Danish Neuroscience Center
- 09.10 - 09.30 Albert Gjedde, Copenhagen University, Denmark
Introduction to the neurobiology of the hard problem
- 09.30 - 10.00 Pedro Rosa-Neto, McGill University, Canada
Imaging glutamate receptors:
The link between neurotransmission and brain function
- 10.00 - 10.30 Olaf B. Paulson, Copenhagen University, Denmark
From brain work to brain function

MORNING SESSION II: CHAIR: OLAF B. PAULSON

- 11.00 - 11.30 Ole Jensen, Donders Institute for Brain, Cognition and Behaviour, Nijmegen, The Netherlands
What is the brain doing when left to itself? -
Studying brain states reflected by oscillatory activity
- 11.30 - 12.00 Hartwig Siebner, Copenhagen University, Denmark
Frontal motor areas and action selection
- 12.00 - 12.30 Hugo Lagercrantz, Karolinska Institute, Stockholm, Sweden
Ontogeny of consciousness

AFTERNOON SESSION I: CHAIR: HUGO LAGERCRANTZ

- 14.30 - 15.00 Hans C. Lou, University of Aarhus, Denmark
Unity of consciousness
- 15.00 - 15.30 Julian Keenan, Montclair/Cooper Union, USA
Self-awareness and the brain: Almost right
- 15.30 - 16.00 Bruce Luber, Columbia University, USA
What transcranial magnetic stimulation can say about self and self awareness

AFTERNOON SESSION II: CHAIR: HANS C. LOU

- 16.30 - 17.00 Morten L. Kringelbach, Oxford University, UK, University of Aarhus, Denmark
The pleasures of consciousness
- 17.00 - 17.30 Troels Kjaer, Copenhagen University, Denmark
Altered states of consciousness: Meditation, sleep and hypnosis
- 17.30 - 18.00 James C. Harris, Johns Hopkins University, USA
Attention, consciousness, and the evolutionary emergence of empathy

