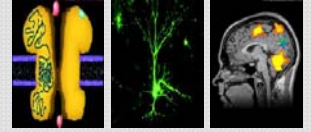


SFB 874 / IGSN

CONFERENCE



Cortical and subcortical representation of sensory and cognitive memory

April 28 - 29, 2015, Ruhr University Bochum

Tuesday,

April 28, morning (9:15 – 12:15)

Session 1:

The temporal lobe: locus for sensory and cognitive integration?

KATE JEFFERY

Department of Behavioural Neuroscience and Wellcome Trust Senior Investigator,
Division of Psychology and Language Sciences, UCL, UK

Maintaining a stable sense of direction – insights from single-neuron studies in rodents

One of the important functions of the medial temporal lobe is to take incoming sensory information and assemble it into a coherent representation of space, for use in navigation and also memory.

A critical foundation for the spatial sense is the "sense of direction". This signal is supported by a network of structures that pool information gathered from various sources including landmarks, environment geometry, self-motion cues etc.

We still know little about how this integration occurs but there are reasons to think that part of it happens in the extra-hippocampal cortex.

This talk will review the circuitry and explore ways in which this integration may occur.

