

FRIDAY AFTERNOON, JULY 12, 2013

Invited Address:

Functional Heterogeneity for Memory of the Medial Temporal Lobes and their Connections

Presenter: Andrew Mayes

12:00–1:00 p.m.

A. MAYES. Functional Heterogeneity for Memory of the Medial Temporal Lobes and their Connections.

Organic amnesia typically involves impaired recall and recognition of both pre- and post-morbidly encountered facts and experiences. It is caused by lesions to the medial temporal lobes (MTL) or of structures, such as parts of the midline diencephalon, basal forebrain, or retrosplenial cortex, with which the different parts of the MTL have extensive structural connections. The impaired memory functions depend on many processes, but disagreement still persists about which of them are disrupted in amnesia and which impaired processes are mediated by which MTL and other 'amnesia-related' structures. In particular, dispute continues about whether different structures in the MTL help mediate recall- and familiarity-based memory. Although strongly connected, the cytoarchitecture of the palaeocortical hippocampus differs considerably from that of the neocortical perirhinal and parahippocampal cortices so it probably processes its inputs differently from the other two structures and there is evidence that all three receive different inputs.

There is now also extensive lesion and fMRI evidence relevant to this dispute. So, my talk will consider this long-standing dispute about whether the kinds of memory indicated by recall and familiarity depend on distinct MTL structures and their extra-MTL functional connections, but it will also consider the evidence that these structures differentially mediate other memory-related processes.

Correspondence: *Andrew Mayes., AL. E-mail: Andrew.Mayes@manchester.ac.uk*

**Paper Session 6:
Oncology**

12:00–1:30 p.m.

F.W. BOELE, M. ZANT, E.C. HEINE, N.K. AARONSON, M.J. TAPHOORN, J.C. REIJNEVELD, J.J. HEIMANS & M. KLEIN. Associations Between Cognitive Functioning and Health-Related Quality of Life in Glioma Patients.

Objective: Patients with a malignant brain tumor (e.g. glioma) are not only confronted with the diagnosis and treatment of cancer, but also with changes in cognitive and neurological functioning that can profoundly affect their daily lives. We aim to explore the associations between cognitive functioning and health-related quality of life (HRQOL) of both low-grade and high-grade glioma (LGG and HGG) patients.

Participants and Methods: Patients and healthy matched controls underwent neuropsychological testing and completed self-report measures