

# Programme for the 112th Meeting of the British Neuropathological Society Institute of Child Health, London, UK

## 5–7 January 2011

### WEDNESDAY 5 JANUARY 2011

- 13:15 Registration  
**SYMPOSIUM: NEW PERSPECTIVES IN MULTIPLE SCLEROSIS**  
Chair: Professor Kenneth Smith
- 14:00 **Welcome**
- 14:05 **The role of cortical grey matter lesions and neurodegeneration in the progression of multiple sclerosis**  
Professor Richard Reynolds, London, UK
- 14:35 **Assessment of multiple sclerosis pathology using MRI**  
Dr Klaus Schmierer, London, UK
- 15:05 **Mitochondrial changes in multiple sclerosis**  
Dr Don Mahad, Newcastle, UK
- 15:35 TEA
- 16:00 **Potential roles for hypoxia in neuroinflammatory disease?**  
Professor Kenneth Smith, London, UK
- 16:30 **Advances in remyelination**  
Professor Robin Franklin, Cambridge, UK
- 17:00 BREAK
- 17:30 **THE ALFRED MEYER MEMORIAL LECTURE**  
**Mechanisms of tissue injury in multiple sclerosis**  
Professor Hans Lassmann, Brain Research Institute, Department of Neuroimmunology, University of Vienna, Austria
- 18:45 RECEPTION

### THURSDAY 6 JANUARY 2011

- 08:00 Registration
- 08:50 **Opening of meeting** – Professor James Ironside  
**FIRST SCIENTIFIC SESSION**  
Chair: Professor Kenneth Smith
- 09:00 **Mitochondrial dysfunction and remyelination failure** 001  
*I. Ziabreva, G.R. Campbell, J. Zambonin, P. Wei, C. French-Constant, D.M. Turnbull, R.J. Franklin, D.J. Mahad,*
- 09:15 **Evidence that hypoxia and energy insufficiency play a role in central inflammation** 002  
*R.A. Desai, A.L. Davies, K.J. Smith*
- 09:30 **Mitochondrial defects within choroid plexus in multiple sclerosis** 003  
*G.R. Campbell, I. Ziabreva, J. Zambonin, K.J. Krishnan, R. Reynolds, J. Newcombe, K. Khrapko, D.M. Turnbull, D.J. Mahad*

09:45	<p><b>Capillary CAA defines a subtype of Alzheimer's disease while pericapillary A<math>\beta</math> is a type of early A<math>\beta</math> depositio</b></p> <p><i>J. Attems, E. Ghebremedhin, A. Papassotiropoulos, T.C. Saido, W.S.T. Griffin, R.E. Mrak, H. Koelsch, K. Del Tredici, H. Yamaguchi, D.R. Thal</i></p>	004
10:00	<p><b>Perivascular drainage of solutes is impaired in the ageing mouse brain and in the presence of cerebral amyloid angiopathy</b></p> <p><i>C.A. Hawkes, W. Hartig, J. Kacza, R. Schliebs, R.O. Weller, J.A. Nicoll, R.O. Carare</i></p>	005
10:15	<p><b>LRP-1-mediated uptake of A<math>\beta</math> by cerebrovascular smooth muscle cells: relationship to cytotoxicity</b></p> <p><i>W.A. Ruzali, P.G. Kehoe, S. Love</i></p>	006
10:30	<p>COFFEE</p> <p><b>SECOND SCIENTIFIC SESSION</b></p> <p>Chair: Professor Seth Love</p>	
11:00	<p><b>Brain biopsy in dementia: clinical indications and neuropathological diagnostic approach</b></p> <p><i>T. Revesz, J.M. Schott, L. Reiniger, M. Thom, J.L. Holton, J. Grieve, S. Brandner, J.D. Warren</i></p>	007
11:15	<p><b>Tangle dominant dementia – comparison with classical Alzheimer disease</b></p> <p><i>K. Jellinger, J. Attems</i></p>	008
11:30	<p><b>Hippocampal neuronal densities and volumes in ageing related dementias and post-stroke survivors</b></p> <p><i>E. Gemmell, H. Bosomworth, A. Khundakar, A.E. Oakely, A. Thomas, T.M. Polvikoski, R.N. Kalaria</i></p>	009
11:45	<p><b>Neuronal immunoreactivity to beta-amyloid precursor protein in the hippocampus and temporal lobe following traumatic brain injury</b></p> <p><i>D.W. Smith, V.E. Johnson, J.E. Stewart, D.H. Smith, W. Stewart</i></p>	010
12:00	<p><b>The semi-quantitative assessment of subcortical small vessel disease pathology in elderly subjects: an initiative from the UK BD collaboration</b></p> <p><i>M. Esiri, J. Attems, I. Bodi, V. Deramecourt, T. Hortobagyi, C. Joachim, R.N. Kalaria, A. King, D.M. Mann, J.H. Morris, J. Neal, A. Oulhaj, S. Al-Sarraj</i></p>	011
12:15	<p><b>Prion protein-induced tau phosphorylation: insight into a universal mechanism triggered by cerebral amyloid</b></p> <p><i>L. Reiniger, A. Lukic, J. Linehan, P. Rudge, J. Collinge, S. Mead, S. Brandner</i></p>	012
12:30	<p>LUNCH</p>	
13:00	<p>POSTER DISCUSSION</p> <p><b>THE CAVANAGH PRIZE LECTURE</b></p> <p>Chair: Professor Seth Love</p>	
14:00	<p><b>Models for the pathology of neural stem cells in tumour formation and epilepsy</b></p> <p><i>Dr Thomas Jacques, London, UK</i></p> <p><b>THIRD SCIENTIFIC SESSION</b></p> <p>Chair: Professor Caroline Sewry</p>	
14:45	<p><b>Validation and clinical testing of a standardised assessment of juvenile dermatomyositis muscle biopsy</b></p> <p><i>L.R. Wedderburn, H. Varsani, S.C. Charman, S. Marie, A.A. Amato, B. Banwell, K.E. Bove, A.M. Corse, A. Emslie-Smith, T.S. Jacques, I.E. Lundberg, C. Minetti, I. Nenesmo, E.J. Rushing, C. Sewry, C.A. Pilkington, J.L. Holton</i></p>	013

15:00	<b>Heterogeneities of muscle pathology from ALS/MND patients</b> <i>S. Al-Sarraj, M. Cleveland, P.F. Pradat, A. Corse, J. Rothstein, P.N. Leigh, S. Bates, J. Wurthner, V. Meninger</i>	O14
15:15	<b>Mitochondrial changes in patients without muscle disease: association with age and muscle group</b> <i>S. Ball, K. Sleight, D. Hilton</i>	O15
15:30	TEA	
15:45	Business Meeting	
17:00–18:00	Professional Affairs Meeting	
19:15	Society Dinner	

**FRIDAY 7 JANUARY 2011**

**FOURTH SCIENTIFIC SESSION**

Chair: Professor Sebastian Brandner

09:00	<b>The anterior cingulate (BA24c, BA32), ectorhinal (BA36) and triangular (BA45) cortices in autism: a stereological investigation of deep cortical layers and sub-cortical white matter</b> <i>J.S. Dunham, E.M. Del Valle Suarez, C. Schmitz, P.L. Gabbott, P. Rezaie</i>	O16
09:15	<b>Infant cortical vein thrombosis</b> <i>W. Squier, F. Sheerin</i>	O17
09:30	<b>101 DNTs: histological subtypes, molecular genetics and clinical correlations in an adult epilepsy series</b> <i>M. Thom, S. An, L. Martinian, S.M. Sisodiya, A. Dean, A. McEvoy, S. Brandner, A. Toma</i>	O18
09:45	<b>Multiplex ligation-dependent probe amplification (MLPA) in the diagnosis of 1p/19q deletions in oligodendroglial tumours</b> <i>M. Grobler, M. Vast, K. Elderfield, S. Butler, K. Marks, R. Taylor, L.R. Bridges</i>	O19
10:00	<b>Combination of immunocytochemistry for MGMT and H9 (mutated IDH1 protein) with assessment of MGMT promoter methylation in predicting glioblastoma outcome: the Glasgow protocol</b> <i>S.L. Bell, N. Muir, Z. Hanzely, J. Stewart, M. Mackinnon, B. Clark, R. Rampling, W. Stewart</i>	O20
10:15	<b>MGMT promoter methylation and immunorexpression in aggressive pituitary adenomas and carcinomas</b> <i>F. Salehi, B.W. Scheithauer, J.M. Kros, Q. Lau, M. Fealey, D. Erickson, K. Kovacs, E. Horvath, R.V. Lloyd Introduced by Dr Federico Roncaroli</i>	O21

COFFEE

**FIFTH SCIENTIFIC SESSION**

Chair: Dr Maria Thom

11:00	<b>Analysis of INI1 / SMARCB1 in schwannomatosis</b> <i>U. Pohl, K.S.J. Allison, D.G. O'Donovan, A.F. Dean, J. Gutmann, H.L. Low, V.P. Collins</i>	O22
11:15	<b>A feasibility study of real-time central pathology review (CPR) and molecular diagnostics for medulloblastoma in the UK</b> <i>S.L. Nicholson, D.K. Robson, S.B. Wharton, T.S. Jacques, A.M. Michalski, B. Pizer, N.P. Bown, S.C. Clifford</i>	O23
11:30	<b>The development of the National Brain and CNS Tumour Registry</b> <i>J. Rashbass, V.P. Collins, S.B. Wharton</i>	O24
11:45	<b>Diagnostic Slide Session (incorporating EQA)</b> <i>Dr Olaf Ansorge</i>	

13:00	LUNCH	
13:30	POSTER DISCUSSION	
	<b>SIXTH SCIENTIFIC SESSION</b>	
	Chair: Professor James Ironside	
14:30	<b>FUS mutations and FUS pathology in frontotemporal lobar degeneration</b>	O25
	Q. Hu, S. Rollinson, N. Halliwell, J. Robinson, J. Snowden, D. Neary, Y. Davidson, S. Pickering-Brown, D. Mann	
14:45	<b>TARDBP mutations, amyotrophic lateral sclerosis and alternative splicing</b>	O26
	R. Highley, J. Kirby, J.A. Jansweijer, P.R. Heath, P.J. Shaw, P.G. Ince	
15:00	<b>The role of transcription factor c-Jun in SOD1 G93A-mediated amyotrophic lateral sclerosis</b>	O27
	A. Acosta-Saltos, M. Makwana, A. Gilchrist, D. Yilmaz, J. Davis, C. Acosta-Saltos, C. DaCosta, A. Behrens, G. Raivich Introduced by Dr Tibor Hortobagyi	
15:15	<b>Investigating the role of oligodendroglial precursor cells in multiple system atrophy and progressive supranuclear palsy</b>	O28
	Z. Ahmed, Y.T. Asi, A.J. Lees, T. Revesz, J.L. Holton	
15:30	<b>The role of 4E-BP1, a putative LRRK2 interactor in the pathology of IPD and in G2019S LRRK2 mutation cases</b>	O29
	R. Bandopadhyay, A. Mamais, T. Lashley, C. Griffiths, N. Goswami, J.L. Holton, T. Revesz, A.J. Lees	
15:45	<b>Is Lewy body formation responsible for the nigral neuronal loss in Parkinson's disease?</b>	O30
	L. Parkkinen, S.S. O'Sullivan, C. Collins, A. Petrie, J.L. Holton, T. Revesz, A.J. Lees	
16:00	<b>Announcement of the poster prize winners and close of meeting</b>	
	Professor James Ironside	

## POSTERS

<b>A quantitative analysis of synaptophysin immunoreactivity within the cerebral cortex in autism</b>	P01
N. Nesaratnam, J.S. Dunham, P.L. Gabbott, S. Mason, C. Schmitz, P. Rezaie	
<b>Neprilysin protects against cerebral amyloid angiopathy and A<math>\beta</math>-induced degeneration of cerebrovascular smooth muscle cells</b>	P02
S. Miners, P. Kehoe, S. Love	
<b>Small vessel disease assessment in the brains of elderly subjects at autopsy and the relation of small vessel disease to cognition and other in-life variables</b>	P03
A.N. Smallwood, A. Oulhaj, A.D. Smith, M.M. Esiri	
<b>Quantitative assessment of the hippocampal microvasculature in ageing-related dementias and post-stroke survivors</b>	P04
M.J.C. Burke, J.Y. Slade, R. Hall, A.E. Oakley, R.N. Kalaria	
<b>The role of hypoxia-inducible factor-1<math>\alpha</math> in unilateral cases of hippocampal sclerosis using human post-mortem tissue. Is it neuroprotective?</b>	P05
A. Feast, M. Thom, S. Sisodiya, L. Martinian	
<b>Parry-Romberg syndrome with Rasmussen's encephalitis and monoclonal B cell proliferation on brain biopsy</b>	P06
N. Teran-Villagra, J. Gomez-Roman, P. Isaacson, R. Elwes, M. Honavar, I. Bodi	
<b>Neuropathology of Dravet syndrome</b>	P07
J.Y.W. Liu, C.B. Catarino, I. Liagkouras, R. Labrum, M. Davis, C. Woodward, J.H. Cross, T.S. Jacques, M. Koeppe, L. Martinian, M. Thom, S.M. Sisodiya	

<b>The influence of meningeal B cells on spinal cord pathology in multiple sclerosis</b>	P08
C. Reali, A. Kirresh, O. Howell, R. Reynolds	
<b>Adult onset leukodystrophy with neuroaxonal spheroids and demyelinating plaque-like lesions</b>	P09
E. Martinez-Saez, S. Fleminger, S. Connor, G. Finnerty, I. Bodi	
<b>The distribution of B-cell follicle-like structures in the cerebral meninges and their association with extensive inflammation and demyelination in multiple sclerosis</b>	P10
O.W. Howell, C. Reeves, D. Carassiti, R. Nicholas, B. Radotra, S. Gentleman, F. Roncaroli, F. Aloisi, R. Magliozzi, R. Reynolds	
<b>Encephalitis associated with primary immunodeficiency disease</b>	P11
P. Pal, R. Antrobus, M. Helbert	
<b>An immunohistochemical investigation of oxygenation in normal and inflamed rat optic nerves</b>	P12
P.R. McIntosh, R. Fairless, S.K. Williams, R. Diem, K.J. Smith	
<b>How does neuroinflammation impair function?</b>	P13
W. Lee, D. Morsali, K.J. Smith	
<b>Acquired rippling muscle disease- report of two cases</b>	P14
A. Shivane, D.A. Hilton, C.O. Hanemann	
<b>Brody disease: a rare case report</b>	P15
A. Shivane, D.A. Hilton, D. Hilton-Jones	
<b>The pathological spectrum associated with mutations in the skeletal muscle ryanodine receptor (RYR1) gene</b>	P16
C. Sewry, H. Jungbluth, L. Feng, F. Muntoni	
<b>Pathological features resembling congenital fibre type disproportion linked to a number of different genetic defects</b>	P17
L.H. Feng, P.R. hadke, S. Lillis, T. Cullup, D. Chambers, S. Abbs, F. Muntoni, C. Sewry	
<b>Abnormal TDP-43 immunopositivity is identified within the neocortex in cases of dementia pugilistica</b>	P18
A. King, S. Maekawa, C. Troakes, I. Bodi, S. Al-Sarraj	
<b>Research potential of archival fixed tissue: DNA preservation and immuno-reactivity</b>	P19
C. Troakes, V. pandoni, T. Hortobagyi, I. Bodi, A. King, S. Al-Sarraj	
<b>Visual hallucinations and occipital cerebral amyloid angiopathy in Parkinson's disease</b>	P20
I. Harrison, M.E. Kalaitzakis, R.K.B. Pearce, S.M. Gentleman	
<b>Cerebrospinal fluid alpha synuclein levels as a biomarker for Lewy body disease</b>	P21
P. Foulds, D. Allsop, D. Mann	
<b>Microarray analysis of the astrocyte transcriptome in the ageing brain: relationship to Alzheimer's pathology and ApoE genotype</b>	P22
J.E. Simpson, P.G. Ince, P.R. Heath, R. Raman, P.J. Shaw, C. Gelsthorpe, L. Baxter, G. Forster, F. Matthews, G. Savva, C. Brayne, S.B Wharton	
<b>Lower glycogen synthase kinase-3<math>\beta</math> load in Alzheimer's disease after A<math>\beta</math>42 immunisation</b>	P23
A.M. Baker, C. Holmes, S. Love, J.A. Nicoll, D. Boche	
<b>ET-1 is elevated in the brain in AD and its neuronal production and release are upregulated by A<math>\beta</math>1-42</b>	P24
J. Palmer, P.G. Kehoe, S. Love	
<b>Relationship between pSmad3 and phospho-tau in the soluble fractions of temporal cortex and putamen</b>	P25
K. Chalmers, S. Love	
<b>Extensive mineralization of neuritic plaques in an autopsycase of Alzheimer's disease</b>	P26
K. Allinson, J.H. Xuereb	

<b>Co-existence of phosphorylated TDP-43 and tau pathology in MND and related neurodegenerative conditions compared to normal ageing</b>	P27
<i>J. Topping, A. King, C. Troakes, S. Al-Sarraj, I. Bodi</i>	
<b>Oxidative nucleic acid damage in motor neuron disease</b>	P28
<i>J. Simpson, K. Richardson, P. Heath, S. Wharton</i>	
<b>Ubiquitinated, p62 immunopositive cerebellar cortical inclusions in TDP-43 proteinopathies</b>	P29
<i>A. King, S. Maekawa, I. Bodi, C. Troakes, S. Al-Sarraj</i>	
<b>FOXRED1 mutations are a novel cause of mitochondrial complex I deficiency</b>	P30
<i>E. Fassone, A.J. Duncan, J.W. Taanman, A.T. Pagnamenta, M.I. Sadowski, T. Holand, W. Qasim, P. Rutland, S.E. Calvo, V.K. Mootha, M. Bitner-Glindzicz, S. Rahman</i> Introduced by Dr Janice Holton	
<b>Malignant meningioma with rhabdoid, papillary and carcinomatous elements</b>	P31
<i>E. Martinez-Saez, A. King</i>	
<b>Solitary fibrous tumour of the central nervous system</b>	P32
<i>J. Cryan, M. Jansen, J.P. Ti, I. Yousef, C. Faul, F.M. Brett, M. Farrell</i>	
<b>Classical Hodgkin lymphoma presenting as an extradural mass with granulomatous vasculitis</b>	P33
<i>R. Phadke, J.F. Martinez-Canca, P. Isaacson, A. Ramsay, T. Wilhelm, N. Dorward</i>	
<b>Synovial sarcoma of nerve</b>	P34
<i>B. Scheithauer, A.I. Silva, K.K. Amrami, A.L. Folpe, M.A. Edgar, J.M. Woodruff, A.D. Levi, R.J. Spinner</i> Introduced by Dr Federico Roncaroli	
<b>Malignant infantile granular cell tumor. The youngest patient so far reported with successful treatment</b>	P35
<i>P. Molnar, E. Kiss, I. Szegedi, E. Berenyi, B.W. Scheithauer</i>	
<b>Primary meningeal histiocytic sarcoma: a report of two cases</b>	P36
<i>S.L. Bell, Z. Hanzely, L.M. Alakandy, R. Jackson, W. Stewart</i>	
<b>Pathologic features of an unusual case of secondary gliosarcoma</b>	P37
<i>A. Shivane, P. Fewings</i>	
<b>Rapidly progressive granular cell astrocytoma presenting as acute ischaemic stroke</b>	P38
<i>M. Jansen, W.O. Tobin, N. Tubridy, P.P. Molnar</i>	
<b>Vacuolar cerebellopathy, the molecular autopsy and multiple acyl-CoA dehydrogenase deficiency</b>	P39
<i>M. Jansen, W. Bourke, R. Howley, E. Crushell, K. Sheahan, M. Farrell</i>	
<b>Communicating the level of uncertainty in diagnosis</b>	P40
<i>M. Galloway, T. Taiyeb</i>	