

## Poster Program

### Poster Session

Thursday, October 20th 2016, 13:00-14:00

Friday, October 21st 2016, 13:30-14:00

[P.001]	<p><b>Changes in the sympathetic innervation of the gut in rotenone-treated mice as a possible early biomarker for Parkinson's disease</b></p> <p>M. Arnhold<sup>2</sup>, Y.F. Dening<sup>1</sup>, M. Chopin<sup>3</sup>, E. Arévalo<sup>2</sup>, M. Schwarz<sup>2</sup>, H. Reichmann<sup>2</sup>, G. Gille<sup>2</sup>, R.H.W. Funk<sup>2</sup>, F.J. Pan-Montojo<sup>*1</sup>, <sup>1</sup>Klinikum Universität München, Germany, <sup>2</sup>TU-Dresden, Germany, <sup>3</sup>University of Melbourne, Australia</p>
[P.002]	<p><b>How does white matter connectivity differ between the vascular and degenerative pre-dementia?</b></p> <p>Y.Y. Yu<sup>1,2</sup>, L.X. Liang<sup>3</sup>, X.Y. Xie<sup>4</sup>, C.G. Chen<sup>4</sup>, L.X. Li<sup>4</sup>, W.X. Wang<sup>4</sup>, S.Y. Sun<sup>2</sup>, Y.C. Yin<sup>1</sup>, G.G. Gong<sup>3</sup>, H.Y. Han<sup>*2,4</sup>, <sup>1</sup>Hongqi Hospital of Mudanjiang Medical University, China, <sup>2</sup>Beijing Institute for Brain Disorders, China, <sup>3</sup>Beijing Normal University, China, <sup>4</sup>XuanWu Hospital of Capital Medical University, China</p>
[P.003]	<p><b>Frequency-dependent changes in the amplitude of low-frequency fluctuations in mild cognitive impairment with depression</b></p> <p>Y.X. Li<sup>1</sup>, B. Jing<sup>1</sup>, H. Liu<sup>1</sup>, Y. Han<sup>*1</sup>, <sup>1</sup>Tangshan Gongren Hospital, China, <sup>2</sup>XuanWu Hospital of Capital Medical University, China</p>
[P.004]	<p><b>Disrupted white matter structural connectome in individuals with subjective cognitive decline</b></p> <p>W.X.N. Wang<sup>1</sup>, S.N. Shu<sup>2,3</sup>, B.Q.H. Bi<sup>2,3</sup>, H.Y. Han<sup>*1,4</sup>, <sup>1</sup>XuanWu Hospital of Capital Medical University, China, <sup>2</sup>Beijing Normal University, China, <sup>3</sup>Cognitive Neuroscience and Learning &amp; IDG/McGovern Institute for Brain Research, China, <sup>4</sup>Beijing Institute for Brain Disorders, China</p>
[P.005]	<p><b>Olfactory impairment and traumatic brain injury in blast-injured combat troops: a prospective, controlled clinical trial</b></p> <p>M.S. Xydakis<sup>*1,2</sup>, L.P. Mulligan<sup>2,1</sup>, A.B. Smith<sup>1,2</sup>, C.H. Olson<sup>1</sup>, D.M. Lyon<sup>1</sup>, L. Belluscio<sup>3</sup>, <sup>1</sup>Uniformed Services University, USA, <sup>2</sup>Walter Reed National Military Medical Center, USA, <sup>3</sup>National Institutes of Health, USA</p>
[P.006]	<p><b>EEG activity of chronic cerebral hypoperfusion rats at different time points and cholinergic versus non-cholinergic contributions</b></p> <p>N. Azam, Z. Hassan*, <i>Universiti Sains Malaysia, Malaysia</i></p>
[P.007]	<p><b>Quantitative T2, T2* and T2'-MRI in patients with ischaemic leukoaraiosis for detection of microstructural changes and chronic hypoxia</b></p> <p>M. Wagner<sup>*3</sup>, M. Helfrich<sup>3</sup>, O.C. Singer<sup>1</sup>, R. Deichmann<sup>3</sup>, A. Jurcoane<sup>2</sup>, E. Hattingen<sup>2</sup>, <sup>1</sup>Helios Dr. Horst-Schmidt-Kliniken Wiesbaden, Germany, <sup>2</sup>University Hospital Bonn, Germany, <sup>3</sup>University Hospital Frankfurt, Germany</p>
[P.008]	<p><b>Altered metabolism of N-acetyl-aspartyl-glutamate in the cingulate cortex in autism spectrum disorders: a target for understanding the aetiology of neurodegenerative diseases</b></p> <p>C. Jiménez-Espinoza<sup>*1,2</sup>, F. Marcano<sup>1</sup>, N. Padilla<sup>1,2</sup>, U. Åden<sup>1,2</sup>, J.L. González-Mora<sup>1</sup>, <sup>1</sup>University of La Laguna, Spain, <sup>2</sup>Karolinska Institut, Sweden</p>
[P.009]	<p><b>Tracking regional connectivity dynamics in patients with mild cognitive impairment and Alzheimer's disease</b></p> <p>Y.S. Sun<sup>1,2</sup>, Z.J.Z. Zhu<sup>3</sup>, X.Y.L. Li<sup>1,2</sup>, H.J.N. Niu<sup>3</sup>, Y.H. Han<sup>*1,2</sup>, <sup>1</sup>Xuan Wu Hospital of Capital Medical University, China, <sup>2</sup>Beijing Institute for Brain Disorders, China, <sup>3</sup>Beijing Normal University, China</p>
[P.010]	<p><b>CSF and blood biomarkers in presymptomatic frontotemporal dementia</b></p> <p>J.C. van Swieten<sup>*1,2</sup>, H.H. Meeter<sup>1</sup>, J.L. Panman<sup>1</sup>, E.G.P. Doppler<sup>1</sup>, C. Barro<sup>3</sup>, J. Kuhle<sup>3</sup>, C.E. Teunissen<sup>2</sup>, J.D. Rohrer<sup>4</sup>, A. On behalf of the Genetic Frontotemporal dementia Initiative (GENFI)<sup>4</sup>, <sup>1</sup>Erasmus MC, The Netherlands, <sup>2</sup>VU University Medical Center, The Netherlands, <sup>3</sup>Univeristy Hospital Basel, Switzerland, <sup>4</sup>University College London, UK</p>
[P.011]	<p><b>Substantia nigra diffusion parameters in newly diagnosed Parkinson's patients: should fractional anisotropy be considered a biomarker?</b></p> <p>T. Rolheiser*, K. Good, R. Leslie, J. Fisk, R. McKelvey, K. Rockwood, M. Khan, K. Schoffer, B. Rusak, H. Robertson, <i>Dalhousie University, Canada</i></p>
[P.012]	<p><b>Non-Gaussian diffusion MRI reveals white matter alteration in subjective cognitive decline</b></p> <p>W.C. Wu<sup>*1,2</sup>, T.F. Chen<sup>2</sup>, Y.F. Chen<sup>2</sup>, <sup>1</sup>National Taiwan University, Taiwan, <sup>2</sup>National Taiwan University Hospital, Taiwan</p>
[P.013]	<p><b>Frequency-dependent changes in the amplitude of low-frequency fluctuations in mild cognitive impairment with depression</b></p> <p>Y.X. Li<sup>1,2</sup>, B. Jing<sup>3</sup>, Y. Han<sup>*2</sup>, <sup>1</sup>Tangshan Gongren Hospital, China, <sup>2</sup>XuanWu Hospital of Capital Medical University, China, <sup>3</sup>Capital Medical University, China</p>

<b>[P.014]</b>	<b>Epigenetic signatures and early detection of neurodegenerative diseases</b> M. Salter <sup>1</sup> , W. Elvidge <sup>1</sup> , A. Ramadass <sup>1</sup> , H. Womersley <sup>1</sup> , F. Grand <sup>1</sup> , J. Green <sup>1</sup> , L. Kent <sup>2</sup> , L. Ossher <sup>2</sup> , M. Turner <sup>2</sup> , K. Talbot M.Cudkowicz <sup>3</sup> , J. Green <sup>1</sup> , E. Hunter <sup>1</sup> , A. Akoulitchev <sup>1</sup> , <sup>1</sup> Oxford BioDynamics Ltd, UK, <sup>2</sup> University of Oxford, John Radcliffe Hospital, UK, <sup>3</sup> Neurological Clinical Research Institute, Massachusetts General Hospital, ALS Clinic, USA
<b>[P.015]</b>	<b>Accelerated disruption of brain structural connectome with aging in amnesic mild cognitive impairment</b> T-D. Zhao <sup>1</sup> , C. Sheng <sup>2</sup> , N. Shu <sup>1</sup> , Y. Han <sup>*2</sup> , <sup>1</sup> Beijing Normal University, China, <sup>2</sup> XuanWu Hospital of Capital Medical University, China
<b>[P.016]</b>	<b>Intelligence and steady-state response in the gamma range to audiovisual stimulation</b> A. Horwitz <sup>*1</sup> , M. Klemp <sup>2</sup> , H. Horwitz <sup>3,1</sup> , M.D. Thomsen <sup>4</sup> , M. Lauritzen <sup>1,4</sup> , K. Benedek <sup>4</sup> , <sup>1</sup> University of Copenhagen, Denmark, <sup>2</sup> Brown University, USA, <sup>3</sup> Bispebjerg Hospital, University of Copenhagen, Denmark, <sup>4</sup> Rigshospitalet – Glostrup, Denmark
<b>[P.017]</b>	<b>Dysfunction of prefrontal networks in REM sleep behaviour disorder and established Parkinson's disease</b> J.C. Klein, L. Griffanti, M. Rolinski, C. Ruffman, F. Baig, T. Barber*, C.E. Mackay, M.T. Hu, <i>Oxford University, UK</i>
<b>[P.018]</b>	<b>BiomarkersNeuroinflammation and changes in serotonin metabolism in presymptomatic Huntington's disease gene carriers: a dual tracer PET study</b> I. Trender-Gerhard, K. McDonald, P. Talbot, D. Craufurd, A. Gerhard*, <i>The University of Manchester, UK</i>
<b>[P.019]</b>	<b>Presymptomatic changes in gray matter volume, white matter integrity and neuropsychological assessment in C9orf72 mutation carriers</b> J.L. Panman <sup>*1,2</sup> , L.C. Jiskoot <sup>1,2</sup> , H.H. Meeter <sup>1</sup> , E.G.P. Dopper <sup>1,2</sup> , S.A.R.B. Rombouts <sup>2</sup> , T. den Heijer <sup>4</sup> , S. Franzen <sup>1</sup> , Y.A.L. Pijnenburg <sup>3</sup> , J.C. van Swieten <sup>1,3</sup> , J.M. Papma <sup>1</sup> , <sup>1</sup> Erasmus Medical Center, The Netherlands, <sup>2</sup> Leiden University Medical Center, The Netherlands, <sup>3</sup> VU Medical Center, The Netherlands, <sup>4</sup> Sint Franciscus Gasthuis, The Netherlands
<b>[P.020]</b>	<b>MRI biomarkers to access the substantia nigra damage in idiopathic rapid eye movement sleep behaviour disorder</b> N.P. Pyatigorskaya <sup>*1,3</sup> , R.G. Gaurav <sup>1</sup> , S.L. Leu-Semenescu <sup>2</sup> , D.A. Arnaldi <sup>4</sup> , M.V. Vidailhet <sup>2,3</sup> , I.A. Arnulf <sup>2,3</sup> , S.L. Lehericy <sup>1,3</sup> , <sup>1</sup> Institut du Cerveau et de la Moelle épinière – ICM, France, <sup>2</sup> Pitié-Salpêtrière Hospital, France, <sup>3</sup> Sorbonne University, France, <sup>4</sup> University of Genoa, Italy
<b>[P.021]</b>	<b>Mixed-effects modeling of neurodegenerative disease biomarker progression</b> B.D. Low, A. Pai*, S. Sommer, M. Nielsen, <i>University of Copenhagen, Denmark</i>
<b>[P.022]</b>	<b>Regional FDDNP uptake in relation to professional fight exposure</b> S.J. Banks <sup>*1</sup> , V. Kepe <sup>1</sup> , F. DiFilippo <sup>1</sup> , J. Barrio <sup>1</sup> , C.B. Bernick <sup>1</sup> , <sup>1</sup> Cleveland Clinic, USA, <sup>2</sup> UCLA, USA
<b>[P.023]</b>	<b>Transition of pure autonomic failure to Lewy body dementia: red flags of evolution to a widespread alpha synucleinopathy.</b> F. Valerio-Silva <sup>*1,2</sup> , A. Owens <sup>1,3</sup> , E. Vichayanrat <sup>1</sup> , L. Watson <sup>1</sup> , C.J. Mathias <sup>4</sup> , V. Iodice <sup>1,3</sup> , <sup>1</sup> The National Hospital for Neurology and Neurosurgery, Queen Square, UCLH, UK, <sup>2</sup> The University of Sao Paulo, Brazil, <sup>3</sup> University College London, UK, <sup>4</sup> Autonomic & Neurovascular Medicine Unit, Hospital of St John and St Elizabeth, UK
<b>[P.024]</b>	<b>The feasibility of measuring fatigability in early-stage Parkinson's disease using functional MRI</b> Y.X. Xing <sup>*1</sup> , N.B. Bajaj <sup>2</sup> , S.T.S. Schwarz <sup>1</sup> , D.P.A. Auer <sup>1</sup> , <sup>1</sup> University of Nottingham, Nottingham, UK, <sup>2</sup> Nottingham University Hospitals, UK
<b>[P.025]</b>	<b>APOE-induced differences on the brain amyloid time-course</b> M. Bossa <sup>*1,2</sup> , S. Olmos <sup>1,2</sup> , <sup>1</sup> University of Zaragoza, Spain, <sup>2</sup> Aragon Institute for Health Research, Spain
<b>[P.026]</b>	<b>Epigenetics footprints for autoimmune and neurodegenerative conditions: a comparative analysis</b> E. Hunter*, A. Ramadass, H. Womersley, A. Akoulitchev, <i>Oxford BioDynamics Ltd, UK</i>
<b>[P.027]</b>	<b>Clinical utility of CSF biomarkers in Alzheimer's disease in a geriatric consultation</b> S. Salmerón <sup>*1</sup> , M. Fernández-Sánchez <sup>2</sup> , I. Soler-Moratalla <sup>2</sup> , M. López-Utiel <sup>2</sup> , I. Huedo <sup>2</sup> , S. Lozoya Moreno <sup>2</sup> , P. Abizanda <sup>2</sup> , <sup>1</sup> Hospital General de Villarrobledo, Spain, <sup>2</sup> Complejo Hospitalario Universitario de Albacete, Spain
<b>[P.028]</b>	<b>Domain-specific mnemonic discrimination in ageing and early stages of Alzheimer's disease</b> D. Berron <sup>*1,2</sup> , K. Neumann <sup>2</sup> , H. Schütze <sup>1</sup> , K. Fliessbach <sup>3,4</sup> , S. Teipel <sup>5,6</sup> , F. Jessen <sup>4,7</sup> , E. Düzel <sup>1,2</sup> , <sup>1</sup> Otto-von-Guericke University Magdeburg, Germany, <sup>2</sup> German Center for Neurodegenerative Diseases Magdeburg (DZNE), Germany, <sup>3</sup> University Hospital Bonn, Germany, <sup>4</sup> German Center for Neurodegenerative Diseases Bonn (DZNE), Germany, <sup>5</sup> University Medicine Rostock, Germany, <sup>6</sup> German Center for Neurodegenerative Diseases Rostock (DZNE), Germany, <sup>7</sup> University of Cologne, Germany
<b>[P.029]</b>	<b>The serum protein-based application of sCD40L and VEGF levels for the detection of Alzheimer's disease: a case-control study</b> S. Yu.*, Y.P. Liu., Y.H. Liu., S.S. Jiao., L. Liu., Y.J. Wang., W.L. Fu., <i>The Third Military Medical University, China</i>
<b>[P.030]</b>	<b>A prognostic gene signature for amyotrophic lateral sclerosis associated with TDP-43 pathology</b> J. Cooper-Knock <sup>*1</sup> , G. Altschuler <sup>1</sup> , W. Wei <sup>1</sup> , C. Green <sup>1</sup> , J. Kirby <sup>1</sup> , P. Heath <sup>1</sup> , B. Traynor <sup>3</sup> , A. Pons <sup>1</sup> , P.J. Shaw <sup>3</sup> , W. Hide <sup>1,2</sup> , <sup>1</sup> University of Sheffield, UK, <sup>2</sup> Harvard School of Public Health, USA, <sup>3</sup> National Institutes of Health, USA

[P.031]	<b>Using event related potentials to investigate aging in adults with Down's syndrome, with a view to identifying potential markers of Alzheimer's disease</b> S. Jennings <sup>*1</sup> , S. Chennu <sup>1</sup> , T. Bekinschtein <sup>1</sup> , V. Noreika <sup>1,2</sup> , A. Holland <sup>1</sup> , H. Ring <sup>1</sup> , <sup>1</sup> University of Cambridge, UK, <sup>2</sup> Medical Research Council Cognition and Brain Sciences Unit, UK
[P.032]	<b>Objective measures of parkinsonism in REM sleep behaviour disorder</b> T.R. Barber <sup>*1,4</sup> , S. Arora <sup>1</sup> , M. Rolinski <sup>1</sup> , M. Lawton <sup>2</sup> , F. Baig <sup>1,4</sup> , C. Ruffmann <sup>1,4</sup> , A. Gornall <sup>1</sup> , J. Klein <sup>1,4</sup> , Z. Zaiwalla <sup>1,4</sup> , T. Quinnell <sup>3</sup> , <sup>1</sup> University of Oxford, UK, <sup>2</sup> University of Bristol, UK, <sup>3</sup> Papworth Hospital NHS Foundation Trust, UK, <sup>4</sup> Oxford University Hospitals NHS Foundation Trust, UK
[P.033]	<b>Biomarkers in CSF and medial temporal memory in the elderly</b> M. Fernández-Sánchez, S. Salmerón*, P. Zagarra, M. Lopez-Utiel, I. Huedo, S. Lozoya-Moreno, P. Abizanda, <i>Complejo Hospitalario Universitario de Albacete, Spain</i>
[P.034]	<b>Clinical markers of prodromal Parkinson's disease in 22q11 deletion syndrome</b> E. Buckley, A. McNeill*, <i>University of Sheffield, UK</i>
[P.035]	<b>In vivo detection of microstructural correlates of brain pathology in preclinical and early Alzheimer's disease with MRI</b> Y. Zhao, M.E. Raichle, J. Wen, T.L. Benzinger, A.H. Fagan, J. Hassenstab, A.G. Vlassenko, J.C. Morris, D.A. Yablonskiy*, <i>Washington University in St. Louis, USA</i>
[P.036]	<b>Correlation of sFIDA readout and concentration of stabilised Abeta oligomers in buffer, CSF, and blood plasma down to a femtomolar range</b> K. Kühbach <sup>*1</sup> , M. Hülsemann <sup>1</sup> , Y. Herrmann <sup>1</sup> , K. Kravchenko <sup>1</sup> , A. Kulawik <sup>1</sup> , C. Linnartz <sup>1</sup> , L. Peters <sup>1</sup> , K. Wang <sup>1</sup> , J. Willbold <sup>1</sup> , A.W.J.W. Tepper <sup>2</sup> , A.P.H. Scheefhals <sup>2</sup> , D. Willbold <sup>1,3</sup> , O. Bannach <sup>1,3</sup> , <sup>1</sup> Forschungszentrum Jülich, Germany, <sup>2</sup> Crossbeta Biosciences B.V., The Netherlands, <sup>3</sup> Heinrich-Heine-Universität Düsseldorf, Germany
[P.037]	<b>Heart rate variability as a potential marker of cognitive decline in amnesic mild cognitive impairment</b> L. Mah <sup>*2,1</sup> , J.J. Chen <sup>2,1</sup> , A. Ali <sup>2,1</sup> , Y. Borezky <sup>2</sup> , <sup>1</sup> University of Toronto, Canada, <sup>2</sup> Rotman Research Institute, Canada
[P.038]	<b>CSF distribution differences between Alzheimer's disease and idiopathic normal-pressure hydrocephalus</b> S. Yamada*, M. Ishikawa, Y. Iwamura, K. Yamamoto, <i>Rakuwakai Otowa Hospital, Japan</i>
[P.039]	<b>Predictive accuracy of the MDS research criteria for prodromal Parkinson's disease for incident Parkinson's disease: a 10-year longitudinal, population-based study</b> P. Mahlknecht <sup>*1</sup> , A. Gasperi <sup>2</sup> , A. Djamshidian <sup>1</sup> , S. Kiechl <sup>1</sup> , H. Stockner <sup>1</sup> , J. Willeit <sup>1</sup> , G. Rungger <sup>2</sup> , W. Poewe <sup>1</sup> , K. Seppi <sup>1</sup> , <sup>1</sup> Innsbruck Medical University, Austria, <sup>2</sup> Hospital of Bruneck, Italy
[P.040]	<b>Combination of arterial spin labelling images and dopamine transporter images for diagnosing Parkinson's disease with dementia</b> K. Abe*, K. Fukushim, K. Ando, Y. Maeda, R. Ishikura, H. Yoshikawa, <i>Hyogo College of Medicine, Japan</i>
[P.041]	<b>Cognitive, postural, and morphometric MRI study of an Italian cohort of people with premanifest Huntington's disease</b> L. Nanetti <sup>*1</sup> , S. Nava <sup>1</sup> , V. Contarino <sup>1</sup> , S. Frittoli <sup>1</sup> , A. Ciammola <sup>2</sup> , A. Castaldo <sup>1</sup> , M. Giavazzi <sup>3</sup> , A.C. Bachoud-Levi <sup>3</sup> , M. Grisoli <sup>1</sup> , C. Mariotti <sup>1</sup> , <sup>1</sup> Fondazione IRCCS Istituto Neurologico Carlo Besta, Italy, <sup>2</sup> IRCCS Istituto Auxologico Italiano, Italy, <sup>3</sup> INSERM U 421, France
[P.042]	<b>A 4-year longitudinal posturography study in preclinical SCA1 and SCA2 mutation carriers</b> L. Nanetti <sup>1</sup> , D. Alpini <sup>2</sup> , A. Mongelli <sup>1</sup> , V. Mattei <sup>2</sup> , A. Castaldo <sup>1</sup> , G. Brenna <sup>1</sup> , E. Rizzo <sup>1</sup> , C. Gellera <sup>1</sup> , C. Mariotti <sup>*1</sup> , <sup>1</sup> Fondazione IRCCS Istituto Neurologico Carlo Besta, Italy, <sup>2</sup> ENT-Otoneurology Service Scientific Institute S. Maria Nascente "don Carlo Gnocchi", Italy
[P.043]	<b>In vivo assessment of the human locus coeruleus using neuromelanin-sensitive MRI</b> M.J. Betts <sup>*1</sup> , A. Cardenas-Blanco <sup>1,2</sup> , M. Kanowski <sup>2</sup> , K. Fließbach <sup>3,1</sup> , S. Teipel <sup>4,1</sup> , F. Jessen <sup>1,5</sup> , E. Düzel <sup>1,2</sup> , <sup>1</sup> German Center for Neurodegenerative Diseases (DZNE), Germany, <sup>2</sup> Otto-von-Guericke-University Magdeburg, Germany, <sup>3</sup> University Hospital Bonn, Germany, <sup>4</sup> University Medicine Rostock, Germany, <sup>5</sup> University of Cologne, Germany
[P.044]	<b>Relation of PET tau and amyloid-beta differ to age, cognition, and fluid biomarkers: a multi-centre study in early Alzheimer's disease</b> I. Koychev <sup>*1</sup> , R. Gunn <sup>2,3</sup> , A. Firouzian <sup>2</sup> , J. Lawson <sup>1</sup> , G. Zamboni <sup>1</sup> , B. Ridha <sup>3</sup> , B.J. Sahakian <sup>4</sup> , J.B. Rowe <sup>4</sup> , A. Thomas <sup>5</sup> , S. Lovestone <sup>1</sup> , <sup>1</sup> University of Oxford, UK, <sup>2</sup> IMANOVA Ltd, UK, <sup>3</sup> Imperial College, UK, <sup>4</sup> Cambridge University, UK, <sup>5</sup> Newcastle University, UK, <sup>6</sup> King's College London, UK, <sup>7</sup> University College London, UK
[P.045]	<b>Mapping of brain oscillations and connectivity for Alzheimer-type dementia</b> E. Tülay*, A. Düzgün, E. Basar, <i>Istanbul Kultur University, Turkey</i>
[P.046]	<b>Brain oscillations and coherences in search of biomarkers in diseases</b> E. Basar*, E. Tülay, A. Düzgün, <i>Istanbul Kultur University, Brain Dynamics, Cognition and Complex Systems Research, Turkey</i>

[P.047]	<p><b>Pharmacokinetic modelling with an arterial input function for assessing white matter as a reference region for quantification of SUV<sub>R</sub> changes in a cross-sectional study of healthy control, amnesic mild cognitive impairment, and Alzheimer's disease subjects</b></p> <p>J. Ottoy*<sup>1</sup>, J. Verhaeghe<sup>1</sup>, E. Niemantsverdriet<sup>1</sup>, L. wyffels<sup>2</sup>, C. Somers<sup>1</sup>, E. De Roeck<sup>3</sup>, H. Struyfs<sup>3</sup>, S. Deleye<sup>1</sup>, S. Ceysens<sup>2</sup>, S. Stroobants<sup>2</sup>, S. Staelens<sup>1</sup>, <sup>1</sup>University of Antwerp, Belgium, <sup>2</sup>Antwerp University Hospital, Belgium, <sup>3</sup>Hospital Network Antwerp Hoge Beuken and Middelheim, Belgium</p>
[P.048]	<p><b>Combining neuroimaging and cognitive markers in predicting future dementia: 6-year follow-up of a population-based sample</b></p> <p>N. Payton*, G. Kalpouzos, D. Rizzuto, L. Fratiglioni, M. Kivipelto, L. Bäckman, E.J. Laukka, <i>Karolinska Institutet, Sweden</i></p>
[P.049]	<p><b>CSF biomarkers in a cohort of patients with Down syndrome</b></p> <p>M. Carmona-Iragui*<sup>1,2</sup>, B. Benejam<sup>2</sup>, D. Alcolea<sup>1</sup>, L. Videla<sup>2</sup>, S. Fernández<sup>2</sup>, S. Videla<sup>2</sup>, R. Blesa<sup>1</sup>, A. Lleó<sup>1</sup>, J. Fortea<sup>1,2</sup>, <sup>1</sup>Hospital de la Santa Creu i Sant Pau. Biomedical Research Institute Sant Pau. UAB., Spain, <sup>2</sup>Fundació Catalana Síndrome de Down, Spain</p>
[P.050]	<p><b>Brain imaging findings in idiopathic REM sleep behavior disorder</b></p> <p>J. Heller, N. Brcina, F. Holtbernd, I. Dogan, J. Schulz, J. Schiefer, K. Reetz*, <i>RWTH Aachen University, Germany</i></p>
[P.051]	<p><b>Alzheimer's disease in Down syndrome: structural and metabolic correlates</b></p> <p>E. Vilaplana<sup>1</sup>, M. Carmona-Iragui<sup>1,2</sup>, F. Sampedro<sup>1</sup>, B. Benejam<sup>2</sup>, L. Videla<sup>2</sup>, S. Fernández<sup>2</sup>, S. Videla<sup>2</sup>, R. Blesa<sup>1</sup>, A. Lleó<sup>1</sup>, J. Fortea*<sup>1,2</sup>, <sup>1</sup>Hospital de la Santa Creu i Sant Pau. Biomedical Research Institute Sant Pau. UAB., Spain, <sup>2</sup>Fundació Catalana Síndrome de Down, Spain</p>
[P.052]	<p><b>A new approach for biomarker discovery in Alzheimer's disease</b></p> <p>L.M. De Plano*<sup>1</sup>, S. Carnazza<sup>1</sup>, D. Franco<sup>1</sup>, A. Nicoletti<sup>2</sup>, M. Zappia<sup>2</sup>, S. Conoci<sup>3</sup>, S. Petralia<sup>3</sup>, S.P.P. Guglielmino<sup>1</sup>, <sup>1</sup>University of Messina, Italy, <sup>2</sup>University of Catania, Italy, <sup>3</sup>STmicroelectronic, Italy</p>
[P.053]	<p><b>Automatic detection of parkinsonian gait based on inertial sensors and machine learning</b></p> <p>R. Matias*<sup>1,2</sup>, R. Bouça<sup>2</sup>, R. Martins<sup>2</sup>, D. Guerreiro<sup>3</sup>, J.J. Ferreira<sup>2,3</sup>, R. Costa<sup>1</sup>, <sup>1</sup>Champalimaud Foundation, Portugal, <sup>2</sup>University of Lisbon, Portugal, <sup>3</sup>CNS – Campus Neurológico Sénior, Torres Vedras, Portugal</p>
[P.054]	<p><b>Do serum BDNF levels reflect progression toward symptomatic <math>\alpha</math>-synucleinopathies in patients with REM sleep behaviour disorder?</b></p> <p>K.C. Smith, A. Gonzalez, R. Wright, A. Actor, J. Suescun, D. Bick, M.C. Schiess*, <i>University of Texas Health Science Center at Houston, USA</i></p>
[P.055]	<p><b>Magnetonanoparticles in MRI of Alzheimer's disease</b></p> <p>M. Akhtari, <i>UCLA, USA</i></p>
[P.056]	<p><b>Clinical biomarkers of blood-brain barrier dysfunction and progression to neurodegeneration in Alzheimer's disease</b></p> <p>B.W. Festoff*<sup>1,2</sup>, R. Sajja<sup>3</sup>, L. Cucullo<sup>3</sup>, <sup>1</sup>PHLOGISTIX LLC, USA, <sup>2</sup>University of Kansas Medical School, USA, <sup>3</sup>Texas Tech University Health Sciences Center, USA</p>
[P.057]	<p><b>Serum protein marker for early detection of Alzheimer's disease</b></p> <p>A.P. Singh*, R. Kumar, A.B. Dey, S. Dey, <i>All India Institute of Medical Sciences, India</i></p>
[P.058]	<p><b>Homoaggregates and heteroaggregates as biomarkers in neurodegenerative disorders</b></p> <p>O. Bannach*<sup>1,2</sup>, C. Zafiu<sup>1</sup>, L. Peters<sup>1</sup>, D. Willbold<sup>1,2</sup>, <sup>1</sup>Forschungszentrum Jülich GmbH, Germany, <sup>2</sup>Heinrich-Heine-Universität Düsseldorf, Germany</p>
[P.059]	<p><b>Automation of sFIDA yields sub-femtomolar limit of detection for A<math>\beta</math> aggregates</b></p> <p>Y. Herrmann*<sup>1</sup>, A. Kulawik<sup>1</sup>, K. Kühbach<sup>1</sup>, P. Luriano<sup>1</sup>, C. Zafiu<sup>1</sup>, O. Bannach<sup>1,2</sup>, D. Willbold<sup>1,2</sup>, <sup>1</sup>Forschungszentrum Jülich GmbH, Germany, <sup>2</sup>Heinrich-Heine-Universität Düsseldorf, Germany</p>
[P.060]	<p><b>Consistency of diagnosis of probable REM-sleep behaviour disorder with the RBD screening questionnaire: a population-based 2-year follow-up study</b></p> <p>A. Stefani*<sup>1</sup>, P. Mahlkecht<sup>1</sup>, K. Seppi<sup>1</sup>, M. Nocker<sup>1</sup>, K.J. Mair<sup>1</sup>, A. Hotter<sup>1</sup>, H. Stockner<sup>1</sup>, J. Willeit<sup>1</sup>, S. Kiechl<sup>1</sup>, G. Rungger<sup>2</sup>, <sup>1</sup>Medical University of Innsbruck, Austria, <sup>2</sup>Hospital of Bruneck, Italy</p>
[P.061]	<p><b>Diffusion tensor profiles of reversible versus irreversible injury changes in normal pressure hydrocephalus</b></p> <p>N.C. Keong*<sup>1,2</sup>, A. Pena<sup>3</sup>, S.J. Price<sup>2</sup>, M. Czosnyka<sup>2</sup>, Z. Czosynka<sup>2</sup>, E.E. DeVito<sup>5,4</sup>, C.R. Housden<sup>4</sup>, B.J. Sahakian<sup>4</sup>, J.D. Pickard<sup>2</sup>, <sup>1</sup>Duke NUS medical school, Singapore, <sup>2</sup>University of Cambridge, UK, <sup>3</sup>SDA Bocconi School of Management, Italy, <sup>4</sup>Department of Psychiatry and MRC/Wellcome Trust Behavioural and Clinical Neuroscience Institute, UK, <sup>5</sup>Department of Psychiatry, Yale University School of Medicine, New Haven, USA</p>
[P.062]	<p><b>Blood and CSF neurofilament L as a progression and treatment response biomarker in proteopathic neurodegenerative diseases</b></p> <p>L.F. Maia*<sup>2,3</sup>, M. Bacioglu<sup>1,2</sup>, O. Preische<sup>1,4</sup>, J. Schelle<sup>1,2</sup>, A. Apel<sup>1,2</sup>, S.A. Kaeser<sup>1,2</sup>, M. Schweighauser<sup>1,2</sup>, T. Eninger<sup>1,2</sup>, M. Lambert<sup>1,2</sup>, A. Pilotto<sup>1</sup>, <sup>1</sup>German Center for Neurodegenerative Diseases (DZNE), Germany, <sup>2</sup>Hertie Institute for Clinical Brain Research, Germany, <sup>3</sup>Hospital Santo António-CHP, Portugal, <sup>4</sup>University of Tuebingen, Germany, <sup>5</sup>Novartis Institutes for BioMedical Research, Novartis Pharma AG, Switzerland, <sup>6</sup>University of Tuebingen, Germany, <sup>7</sup>University Hospital Basel, Switzerland</p>

[P.063]	<b>A fast automated diagnosis system for autism spectrum disorders based on eye tracking technology</b> A. China Manrique de Lara <sup>1</sup> , C. Jimenez-Espinoza <sup>2</sup> , J.L. González-Mora <sup>*2</sup> , <sup>1</sup> University of Massachusetts, USA, <sup>2</sup> University of La Laguna, Spain
[P.064]	<b>Down Alzheimer Barcelona Neuroimaging Initiative (DABNI) project: a trial ready cohort to study Alzheimer biomarkers in Down syndrome.</b> M. Carmona-Iragui <sup>*1,2</sup> , L. Videla <sup>2</sup> , S. Fernández <sup>2</sup> , B. Benejam <sup>2</sup> , V. Camacho <sup>1</sup> , S. González-Ortiz <sup>3</sup> , A. Lleó <sup>1</sup> , R. Blesa <sup>1</sup> , S. Videla <sup>2</sup> , J. Fortea <sup>1,2</sup> , <sup>1</sup> Hospital de la Santa Creu i Sant Pau. Biomedical Research Institute Sant Pau. UAB., Spain, <sup>2</sup> Fundació Catalana Síndrome de Down, Spain, <sup>3</sup> Hospital del Mar, Spain
[P.065]	<b>Diagnosis of mild Alzheimer's disease with eye movement analysis during reading</b> G. Fernandez <sup>2,5</sup> , F. Manes <sup>2,3</sup> , D. Orozco <sup>4</sup> , M. Schumacher <sup>2,5</sup> , L. Castro <sup>1,5</sup> , O. Agamennoni <sup>*1,6</sup> , <sup>1</sup> Universidad Nacional del Sur, Argentina, <sup>2</sup> CONICET, Argentina, <sup>3</sup> INECO, Argentina, <sup>4</sup> Clinica Bahiense, Argentina, <sup>5</sup> III, Argentina, <sup>6</sup> CIC, Argentina
[P.066]	<b>Predictive value of MRI brain volumetric measures on neuropsychological scores of patients with mild cognitive impairment</b> N. Salvadori <sup>*1</sup> , L. Farotti <sup>1</sup> , L. Biscetti <sup>1</sup> , M. Russo <sup>1</sup> , P. Eusebi <sup>1</sup> , E. Chipi <sup>1</sup> , P. Floridi <sup>3</sup> , R. Tarducci <sup>2</sup> , P. Calabresi <sup>1,4</sup> , L. Parnetti <sup>1</sup> , <sup>1</sup> Section of Neurology, University of Perugia, Italy, <sup>2</sup> Perugia General Hospital, Medical Physics Unit, Italy, <sup>3</sup> General Hospital, Neuroradiology Unit, Italy, <sup>4</sup> IRCCS Fondazione Santa Lucia, Italy
[P.067]	<b>MIBG myocardial scintigraphy for identification of premotor Parkinson's disease during a negative DAT scan period</b> R. Sakakibara <sup>*</sup> , F. Tateno, M. Kishi, Y. Tuyusaki, Y. Aiba, H. Tateno, T. Ogata, Toho University, Japan
[P.068]	<b>Is the relationship between retinal nerve fibre layer thickness and cognitive performance explained by genetic or environmental factors? A twin study</b> C.J. Hammond <sup>*</sup> , E. Jones-Odeh, E. Yonova-Doing, E. Bloch, K.M. Williams, C. Steves, King's College London, UK
[P.069]	<b>Unrecognised influenza encephalopathy and subsequent neurodegeneration</b> A.M.W. Porter, retired, UK
[P.070]	<b>Childhood cognitive ability and incident dementia: follow up of participants in the 1932 Scottish Mental Survey into the tenth decade</b> T.C. Russ <sup>*1</sup> , J. Hannah <sup>2</sup> , G.D. Batty <sup>3,1</sup> , C.C. Booth <sup>1</sup> , I.J. Deary <sup>1</sup> , J.M. Starr <sup>1</sup> , <sup>1</sup> University of Edinburgh, UK, <sup>2</sup> Greater Glasgow & Clyde Nursing Homes Medical Practice, NHS Greater Glasgow & Clyde, UK, <sup>3</sup> Department of Epidemiology and Public Health, UCL, UK
[P.071]	<b>Radon exposure does not explain geographical variation in dementia risk in the Scottish Mental Survey 1932 cohort</b> T.C. Russ <sup>*1</sup> , T. Clemens <sup>1,2</sup> , J. Hannah <sup>3</sup> , G.D. Batty <sup>4</sup> , C.C. Booth <sup>1</sup> , C. Dibben <sup>1,2</sup> , I.J. Deary <sup>1</sup> , J.M. Starr <sup>1</sup> , <sup>1</sup> University of Edinburgh, UK, <sup>2</sup> Administrative Data Research Centre (Scotland), UK, <sup>3</sup> Greater Glasgow & Clyde Nursing Homes Medical Practice, NHS, UK, <sup>4</sup> University College London, UK
[P.072]	<b>Risk factors for vascular dementia in geriatric outpatients of a second-level hospital in northeastern Mexico: a case-control study</b> A. Barba-Marines <sup>1,2</sup> , S. Gomez-Garcia <sup>*1,3</sup> , J.C. Davila-Valero <sup>1</sup> , S. Sanchez-Lopez <sup>3</sup> , <sup>1</sup> Instituto Mexicano del Seguro Social, Mexico, <sup>2</sup> Universidad Autónoma de Nuevo León, Mexico, <sup>3</sup> Universidad de Monterrey, Mexico
[P.073]	<b>Neurodegenerative diseases and their relationship to neuropsychiatric symptoms in older adults: a cross-sectional study</b> J.R. Vazquez-Flores <sup>1</sup> , G. Guajardo-Alvarez <sup>1</sup> , S. Gomez-Garcia <sup>1,2</sup> , R.A. Sobrino-Martinez de Arredondo <sup>1</sup> , J.C. Davila-Valero <sup>1</sup> , S. Sanchez-Lopez <sup>*2</sup> , <sup>1</sup> Instituto Mexicano del Seguro Social, Mexico, <sup>2</sup> Universidad de Monterrey, Mexico
[P.074]	<b>Nodding syndrome: SSPE-like neurodegenerative disorder? An exploratory case-control study</b> P.S. Spencer <sup>*1</sup> , R. Mazumder <sup>2</sup> , V.S. Palmer <sup>1</sup> , <sup>1</sup> Oregon Health & Science University, USA, <sup>2</sup> University of California, Los Angeles, USA, <sup>3</sup> Makerere University, Uganda, <sup>4</sup> Gulu University, Uganda, <sup>5</sup> Oregon State University, Uganda
[P.075]	<b>Western Pacific ALS-PDC: a disappearing environmental neurodegenerative disease linked to cycad toxins</b> C.E. Garner <sup>1</sup> , G.E. Kisby <sup>2</sup> , V.S. Palmer <sup>3</sup> , P.S. Spencer <sup>*3</sup> , <sup>1</sup> Radikal Therapeutics, West Tilbury, USA, <sup>2</sup> Western University of Health Sciences, College of Osteopathic Medicine of the Pacific, USA, <sup>3</sup> Oregon Health & Science University, USA
[P.076]	<b>Relation between Parkinson's disease and migraine: focus on cognitive behavioral and neurophysiological shared aspects</b> M. Buonfiglio <sup>*</sup> , F. Di Sabato, University of Rome, Italy
[P.077]	<b>The clinical overlap of rapidly progressing neurodegenerative diseases</b> A. Papp <sup>*</sup> , A. Kovács, A. Horváth, A. Kamondi, A. Szűcs, National Institute of Clinical Neuroscience, Hungary

[P.078]	<p><b>The spectrum of concomitant disorders in Huntington's disease cohort differ from that of the general population</b></p> <p>D. Zielonka<sup>*1</sup>, B.M. Saleh<sup>2</sup>, G. De Michele<sup>3</sup>, P. Gorynski<sup>4</sup>, R.A.C. Roos<sup>5</sup>, F. Squitieri<sup>6</sup>, A.R. Bentivoglio<sup>7</sup>, J.T. Marcinkowski<sup>1</sup>, G.B. Landwehrmeyer<sup>8</sup>, <sup>1</sup>Poznan University of Medical Sciences, Poland, <sup>2</sup>Solumed Medical Center, Poland, <sup>3</sup>Dipartimento di Scienze Neurologiche, Università Federico II, Italy, <sup>4</sup>National Institute of Public Health, Poland, <sup>5</sup>Leiden University Medical Center (LUMC), Department of Neurology K5, The Netherlands, <sup>6</sup>IRCCS Casa Sollievo della Sofferenza Hospital, Mendel Institute of Human Genetics and LIRH Foundation, Italy, <sup>7</sup>Institute of Neurology U.C.S.C Policlinico "A.Gemeli", Italy, <sup>8</sup>Universitätsklinik Ulm, Abteilung Neurologie, Germany</p>
[P.079]	<p><b>An observational prospective cohort study on the effects of ballroom dancing on Filipino elderly patients with mild cognitive impairment</b></p> <p>M.C.O. Del Moral<sup>*1</sup>, J.C. Dominguez<sup>1</sup>, <sup>1</sup>St. Luke's Medical Center, The Philippines, <sup>2</sup>University of the Philippines, The Philippines</p>
[P.080]	<p><b>Our clinical experience relation to reducing dysarthria of voice therapy in Parkinson's disease</b></p> <p>A. aksoy gundogdu<sup>1</sup>, A.O. akidil<sup>1</sup>, D. kotan<sup>*2</sup>, <sup>1</sup>SB Sakarya University Research and Training Hospital, Turkey, <sup>2</sup>Sakarya University Medicine of Faculty, Turkey</p>
[P.081]	<p><b>Early cognitive deficits in type 2 diabetes: a population-based study</b></p> <p>A. Marseglia, L. Fratiglioni, E.J. Laukka, G. Santoni, N.L. Pedersen, L. Bäckman, W.L. Xu<sup>*</sup>, Karolinska Institutet, Sweden</p>
[P.082]	<p><b>Epidemiological study of Parkinson's disease in Chernivtsi region of Ukraine</b></p> <p>V.M. Pashkovskyy, O.B. Yaremchuk, B.V. Vivcharyk<sup>*</sup>, O.O. Filipets, I.I. Yaremchuk, Bukovinian State Medical University, Ukraine</p>
[P.083]	<p><b>Substance abuse leads to earlier age of onset of Huntington's disease: an epidemiological study of the Enroll-HD database</b></p> <p>J.S. Schultz<sup>*</sup>, P.C. Nopoulos, D.J. Moser, S.M. Feely, J.S. Paulsen, J.A. Kamholz, The University of Iowa Hospitals and Clinics, USA</p>
[P.084]	<p><b>A clinical precision medicine approach reduces Alzheimer's, dementia and vascular risk and improves cognition: a prospective cohort study from the Alzheimer's Prevention Clinic at Weill Cornell Medicine and NewYork-Presbyterian</b></p> <p>R.S. Isaacson<sup>*1</sup>, R. Krikorian<sup>5</sup>, K. Hackett<sup>1</sup>, C. Shih<sup>1</sup>, J.L. Chen<sup>1</sup>, J. Meléndez-Cabrero<sup>3</sup>, J. Shum<sup>1</sup>, M.W. Schelke<sup>1</sup>, M. Montgomery<sup>4</sup>, A. Seifan<sup>2</sup>, <sup>1</sup>Weill Cornell Medicine, USA, <sup>2</sup>Compass Health Systems, USA, <sup>3</sup>Alzheimer's Prevention Clinic and Research Center, Puerto Rico, <sup>4</sup>NewYork-Presbyterian Hospital, USA, <sup>5</sup>University of Cincinnati College of Medicine, USA</p>
[P.085]	<p><b>Impact on quitting smoking of cognitive disorders in stroke patients</b></p> <p>R. N'Gbo N'Gbo Ikazabo<sup>*1</sup>, J-C. Bier<sup>1</sup>, J. Jamart<sup>2</sup>, N. Mavroudakis<sup>1</sup>, <sup>1</sup>Université Libre de Bruxelles, Belgium, <sup>2</sup>Université Catholique de Louvain, Belgium</p>
[P.086]	<p><b>Antenatal taurine improves neural axon development in fetal rats with intrauterine growth restriction by inhibiting the activity of the Rho-ROCK signalling pathway</b></p> <p>J. Liu<sup>*</sup>, G. Guo, Z.L. Lu, J.P. Shi, X.X. Chen, Bayi Children's Hospital affiliated to the Army General Hospital of the Chinese PLA, China</p>
[P.087]	<p><b>Amylin-Aβ interaction in brains of patients with early-onset familial Alzheimer's disease</b></p> <p>H. Ly<sup>1</sup>, S. Sharma<sup>1</sup>, M. Liu<sup>1</sup>, N. Verma<sup>1</sup>, J. Chen<sup>1</sup>, H. Zhu<sup>1</sup>, M. Chow<sup>1</sup>, L. Hersh<sup>1</sup>, C. Troakes<sup>2</sup>, F. Despa<sup>*1</sup>, <sup>1</sup>University of Kentucky, USA, <sup>2</sup>Kings College, UK</p>
[P.088]	<p><b>The p53 Arg72Pro single nucleotide polymorphism determines amyloid-β neurotoxicity upon Cdk5-induced p53 stabilisation</b></p> <p>R. Lapresa<sup>1</sup>, J.P. Bolaños<sup>1</sup>, A. Almeida<sup>*1,2</sup>, <sup>1</sup>University of Salamanca, Spain, <sup>2</sup>Fundación Instituto de Estudios de Ciencias de la Salud de Castilla y León, Spain</p>
[P.089]	<p><b>Age-dependent neurovascular coupling and neuronal vulnerability in an Alzheimer's diseases transgenic model</b></p> <p>V.A. Baldassarro<sup>1</sup>, S. Sivilia<sup>1</sup>, F. Fernandez<sup>1</sup>, L. Giardino<sup>1,2</sup>, L. Calzà<sup>*1,2</sup>, <sup>1</sup>University of Bologna, Italy, <sup>2</sup>IRET Foundation, Italy</p>
[P.090]	<p><b>Co-occurrence of two SCA genes: a strange scenario for prognosis and genetic counselling</b></p> <p>A.K. Srivastava<sup>*1</sup>, M. Faruq<sup>2</sup>, S. Shakya<sup>1</sup>, D. Vibha<sup>1</sup>, G. Shukla<sup>1</sup>, K. Prasad<sup>1</sup>, <sup>1</sup>All India Institute of Medical Sciences, India, <sup>2</sup>CSIR Institute of Genomics and Integrative Biology, India</p>
[P.091]	<p><b>Genetic variability in SNCA is associated with REM sleep behavior disorder in Parkinson's disease</b></p> <p>L. Pihlstrøm<sup>*1,2</sup>, K.A. Bjørnarå<sup>3</sup>, E. Dietrichs<sup>1,2</sup>, M. Toft<sup>2</sup>, <sup>1</sup>University of Oslo, Norway, <sup>2</sup>Oslo University Hospital, Norway, <sup>3</sup>Drammen Hospital, Norway</p>
[P.092]	<p><b>Association of polymorphisms in the vitamin D receptor gene with multiple sclerosis in an Iran's central population</b></p> <p>S. Tahani<sup>*</sup>, I. Dehghani, m. Etemadifar, Isfahan University of Medical Sciences, Iran</p>

<b>[P.093]</b>	<b>Toxicity of extracellular alpha-synuclein is independent of intracellular alpha-synuclein</b> Y. Dening <sup>1,3</sup> , V. Ruf <sup>2</sup> , F. Schmidt <sup>2</sup> , I. Ramirez Alvarez <sup>1,3</sup> , J. Herms <sup>2,4</sup> , J. Levin <sup>1,4</sup> , A. Giese <sup>2</sup> , F. Pan-Montojo <sup>*1,3</sup> , <sup>1</sup> Klinikum Universität München, Germany, <sup>2</sup> Ludwig-Maximilians-Universität-Maximilian Universität, Germany, <sup>3</sup> Munich Cluster for Systems Neurology, Germany, <sup>4</sup> Deutsches Zentrum für Neurodegenerative Erkrankungen, Germany
<b>[P.094]</b>	<b>Ablation of p62 modulates levels of soluble and aggregated mutant huntingtin and delays end-stage disease in R6/2 mice</b> K. Sathasivam <sup>*1</sup> , C. Gomez Paredes <sup>1</sup> , K. Kuhlbrodt <sup>2</sup> , C. Thiede <sup>2</sup> , W. Reindl <sup>2</sup> , F. Herrmann <sup>2</sup> , K. Tillack <sup>2</sup> , D. Macdonald <sup>3</sup> , D. Marchionini <sup>3</sup> , G. Bates <sup>1</sup> , <sup>1</sup> UCL Institute of Neurology, University College London, UK, <sup>2</sup> Evotec, Germany, <sup>3</sup> CHDI Foundation Inc, USA
<b>[P.095]</b>	<b>Super-resolution fluorescence imaging of the seeding and polymerisation of Huntingtin exon 1 protein</b> Y. Zhou <sup>*1</sup> , L.J. Young <sup>2</sup> , A.S. Stephens <sup>2</sup> , C. Landles <sup>1</sup> , C. Kaminski <sup>2</sup> , G.S. Kaminski Schierle <sup>2</sup> , <sup>1</sup> University College London, UK, <sup>2</sup> University of Cambridge, UK
<b>[P.096]</b>	<b>Detection of the aberrantly spliced exon 1 - intron 1 HTT mRNA in post mortem brain tissue and fibroblast lines of patients with Huntington's disease</b> A. Neuder <sup>1</sup> , G.F. Osborne <sup>1</sup> , N. Ali <sup>1</sup> , A.C. Benjamin <sup>1</sup> , A.S. Papadopoulou <sup>1</sup> , S.J. Tabrizi <sup>1</sup> , R.L.M. Faull <sup>2</sup> , R.H. Myers <sup>3</sup> , C. Landles <sup>1</sup> , G.P. Bates <sup>*1</sup> , <sup>1</sup> University College London, UK, <sup>2</sup> University of Auckland, New Zealand, <sup>3</sup> Boston University, USA
<b>[P.097]</b>	<b>A PICALM, BIN1 and CLU genetic risk score and susceptibility to Alzheimer's disease</b> B. Ferencz <sup>*</sup> , E. Jonsson Laukka, G. Kalpouzos, C. Graff, M. Lövdén, L. Fratiglioni, L. Bäckman, Karolinska Institutet, Sweden
<b>[P.098]</b>	<b>Diminished hippocampal oscillations in TgF344-AD rat model of Alzheimer's disease</b> M. Hajos <sup>*</sup> , C. Kelley, M. Stoilkovic, Yale School of Medicine, USA
<b>[P.099]</b>	<b>Calcium and calcium binding proteins in cell autonomous and non-cell autonomous degeneration of motor neurons</b> R. Patai <sup>*1</sup> , M. Paizs <sup>2</sup> , M. Tortarolo <sup>3</sup> , C. Bendotti <sup>3</sup> , L. Siklós <sup>1</sup> , <sup>1</sup> Biological Research Centre, Hungarian Academy of Sciences, Hungary, <sup>2</sup> University of Szeged, Hungary, <sup>3</sup> "Mario Negri" Institute for Pharmacological Research, Italy
<b>[P.100]</b>	<b>The belgian presenilin 1 families: an update anno 2016</b> T. Van den Bossche <sup>*1,2</sup> , S. Engelborghs <sup>2,4</sup> , P.P. De Deyn <sup>2,4</sup> , J-J. Martin <sup>2</sup> , P. Cras <sup>2,3</sup> , C. Van Broeckhoven <sup>1,2</sup> , <sup>1</sup> VIB Department of Molecular Genetics, Belgium, <sup>2</sup> University of Antwerp, Belgium, <sup>3</sup> Antwerp University Hospital, Belgium, <sup>4</sup> Hospital Network Antwerp (ZNA), Belgium
<b>[P.101]</b>	<b>Clinical evidence for disease anticipation in extended FTD - ALS pedigrees segregating a C9orf72 repeat expansion</b> S. Van Mossevelde <sup>*1,2</sup> , J. van der Zee <sup>1,2</sup> , I. Gijssels <sup>1,2</sup> , K. Slegers <sup>1,2</sup> , J. De Bleecker <sup>3</sup> , A. Sieben <sup>2,3</sup> , R. Vandenberghe <sup>4,5</sup> , T. Van Langenhove <sup>1,2</sup> , J. Baets <sup>1,6</sup> , O. Deryck <sup>7</sup> , P. Santens <sup>1</sup> , A. Ivanoiu <sup>1</sup> , C. Willems <sup>1</sup> , V. Bäumer <sup>1</sup> , M. Van den Broeck <sup>1</sup> , K. Peeters <sup>1</sup> , M. Mattheijssens <sup>1</sup> , P. De Jonghe <sup>1</sup> , P. Cras <sup>1</sup> , J-J. Martin <sup>1</sup> , M. Cruts <sup>1</sup> , P.P. De Deyn <sup>1</sup> , S. Engelborghs <sup>1</sup> , C. Van Broeckhoven <sup>1</sup> , <sup>1</sup> VIB - University of Antwerp, Belgium, <sup>2</sup> University of Antwerp, Belgium, <sup>3</sup> University Hospital Ghent, Belgium, <sup>4</sup> KU Leuven, Belgium, <sup>5</sup> University Hospital Leuven, Belgium, <sup>6</sup> Antwerp University Hospital, Belgium, <sup>7</sup> General Hospital Sint-Jan Brugge-Oostende, Belgium
<b>[P.102]</b>	<b>Functional tRNA fragments are deregulated at pre-motor and motor stages of Parkinson's disease</b> J. Pallarès-Albanell <sup>*1,2</sup> , M.T. Zomeño-Abellán <sup>1,2</sup> , X. Estivill <sup>1,2</sup> , E. Martí <sup>1,2</sup> , <sup>1</sup> Centre for Genomic Regulation (CRG), Spain, <sup>2</sup> Universitat Pompeu Fabra (UPF), Spain
<b>[P.103]</b>	<b>A novel presenilin 1 mutation (F176del) with in vitro confirmed pathogenicity causing typical Alzheimer's disease in a 40 year old male with a large family</b> J. Vöglein <sup>*1,2</sup> , S. Schönecker <sup>1</sup> , M. Willem <sup>1</sup> , C. Giudici <sup>1</sup> , H. Steiner <sup>1,2</sup> , C. Haass <sup>1,2</sup> , J. Levin <sup>1,2</sup> , <sup>1</sup> Ludwig-Maximilians-University Munich, Germany, <sup>2</sup> German Center for Neurodegenerative Diseases (DZNE), Germany
<b>[P.104]</b>	<b>Preservation of visual fields to kinetic testing in posterior cortical atrophy: a case for intracortical dissociation?</b> M-N. Maia da Silva <sup>*</sup> , M. James-Galton, G.T. Plant, University College London, UK
<b>[P.105]</b>	<b>Blood transcriptome replicates dysregulation found in human Huntington's disease brain and shares an immune signature with Alzheimer's disease.</b> D.J. Hensman Moss <sup>*1</sup> , K. Lo <sup>1</sup> , M.D. Flower <sup>1</sup> , J. Miller <sup>1</sup> , G-J. van Ommen <sup>2</sup> , P.A.C. Hoen <sup>2</sup> , T.C. Stone <sup>3</sup> , A. Guinee <sup>4</sup> , D. Langbehn <sup>5</sup> , L. Jones <sup>2</sup> , <sup>1</sup> UCL, UK, <sup>2</sup> Leiden University Medical Center, The Netherlands, <sup>3</sup> Cardiff University, UK, <sup>4</sup> University of Cambridge, UK, <sup>5</sup> University of Iowa, USA
<b>[P.106]</b>	<b>The neurovascular unit contributes to modulation in the expression of extracellular matrix proteins and adhesion molecules in an experimental model of neurodegeneration with inflammation</b> M.S. Thomsen, A. Burkhart, T. Moos <sup>*</sup> , Aalborg University, Denmark
<b>[P.107]</b>	<b>Hereditary atypical parkinsonism with novel mutation of the VPS35 and FBXO7 genes</b> K. Mensikova <sup>*1</sup> , T. Bartonikova <sup>1</sup> , L. Mikulicova <sup>1</sup> , R. Vodicka <sup>1</sup> , R. Vrtel <sup>1</sup> , M. Godava <sup>1</sup> , I. Dolinova <sup>2</sup> , P. Kanovsky <sup>1</sup> , <sup>1</sup> Palacky University, University Hospital, Czech Republic, <sup>2</sup> Technical University, Czech Republic

[P.108]	<b>Spinocerebellar ataxia type 12: a tremor ataxia syndrome or spinocerebellar degeneration</b> A.K. Srivastava <sup>*1</sup> , M. Faruq <sup>1</sup> , <sup>1</sup> All India Institute of Medical Sciences, India, <sup>2</sup> Institute of Genomics and Integrative Biology, India
[P.109]	<b>DNA repair pathways as a common genetic mechanism modulating the age at onset in polyglutamine diseases</b> C. Bettencourt <sup>1</sup> , D.J. Hensman Moss <sup>*1</sup> , M. Flower <sup>1</sup> , S. Wiethoff <sup>1,2</sup> , A. Brice <sup>3,4</sup> , C. Goizet <sup>3,5</sup> , G. Stevanin <sup>3,5</sup> , G. Koutsis <sup>7</sup> , G. Karadima <sup>7</sup> , M. Panas <sup>7</sup> , <sup>1</sup> UCL, UK, <sup>2</sup> Eberhard-Karls University, Germany, <sup>3</sup> Inserm, France, <sup>4</sup> University Hospital Pitie-Salpetriere, France, <sup>5</sup> CHU Pellegrin, France, <sup>6</sup> Ecole Pratique des Hautes Etudes, France, <sup>7</sup> University of Athens Medical School, Greece
[P.110]	<b>Genetic modifiers of Huntington's disease progression.</b> D.J. Hensman Moss <sup>*1</sup> , A.F. Pardinas <sup>2</sup> , M. Flower <sup>1</sup> , J. Miller <sup>1</sup> , K. Lo <sup>1</sup> , V. Plagnol <sup>1</sup> , P. Holmans <sup>2</sup> , L. Jones <sup>2</sup> , D. Langbehn <sup>3</sup> , S.J. Tabrizi <sup>1</sup> , <sup>1</sup> UCL, UK, <sup>2</sup> Cardiff University, UK, <sup>3</sup> University of Iowa, USA
[P.111]	<b>Potential implications of Apolipoprotein E in early brain injury after experimental subarachnoid haemorrhage: involvement in the modulation of blood-brain barrier integrity</b> P.J. Pang <sup>1</sup> , W.Y. Wu <sup>2</sup> , P.J. Peng <sup>1</sup> , Y.P. Yang <sup>1</sup> , K.L. Kuai <sup>1</sup> , M.V. Michael <sup>3</sup> , C.L. Chen <sup>1</sup> , S.X. Sun <sup>2</sup> , J.Y. Jiang <sup>*1</sup> , <sup>1</sup> the Affiliated Hospital of Southwest Medical University, China, <sup>2</sup> the First Affiliated Hospital of Chongqing Medical University, China, <sup>3</sup> Duke University Medical Center, USA
[P.112]	<b>Sub-clinical auditory neural deficits in patients with type 1 diabetes mellitus</b> A. AlJasser, K. Uus, R.J. Baker, C.J. Plack <sup>*</sup> , University of Manchester, UK
[P.113]	<b>Integration of remembering and hypermemory in healthy brains and broken brains: Alzheimer's and bipolar diseases</b> A. Düzgün <sup>*</sup> , E. Basar, Istanbul Kultur University, Turkey
[P.114]	<b>Toll-like receptor 3-agonists as promising candidates in Alzheimer's disease</b> L. Soraci <sup>*</sup> , P. La spina, M.E. Gambuzza, V. Sofo, F.M. Salmeri, University of Messina, Italy
[P.115]	<b>Open label clinical trial of hydrogen brain food for 91 patients with Alzheimer's disease</b> T. Hasegawa <sup>*1</sup> , Y. Uchida <sup>2</sup> , <sup>1</sup> Saga Woman College, Japan, <sup>2</sup> Saga Memorial Hospital, Japan
[P.116]	<b>A clinical trial to delay the onset of mild cognitive impairment due to Alzheimer's disease</b> F. Martenyi <sup>*1</sup> , K.A. Welsh-Bohmer <sup>2</sup> , B.L. Plassman <sup>2</sup> , H. Romero <sup>2</sup> , P. Harrigan <sup>1</sup> , C. Chiang <sup>3</sup> , J. O'Neil <sup>1</sup> , G. Runyan <sup>1</sup> , M. Culp <sup>1</sup> , K. Klehm <sup>1</sup> , M.W. Lutz <sup>2</sup> , E. Lai <sup>1</sup> , A.M. Saunders <sup>2</sup> , S. Haneline <sup>3</sup> , D. Yarnall <sup>3</sup> , D. Yarbrough <sup>1</sup> , C. Metz <sup>3</sup> , D.K. Burns <sup>3</sup> , A.D. Roses <sup>3</sup> , <sup>1</sup> Takeda Development Center Americas, Inc., USA, <sup>2</sup> Duke University Bryan ADRC, USA, <sup>3</sup> Zinfandel Pharmaceuticals, Inc., USA
[P.117]	<b>Effects of depression and exercise on health-related quality of life in patients with Parkinson's disease</b> G.W.K. Koutsouras <sup>*</sup> , K.L. Levine, N.D. Duroseau, C.C. Ciraco, V.C. Chan, K.P. Pergament, T.C. Chan, J.M. Mancini, A.L. Leder, B.K. Krishnamachari, New York Institute of Technology College of Osteopathic Medicine, USA
[P.118]	<b>Assessment of an m-health intervention to deliver self-management strategies in patients with multiple sclerosis</b> G. Bricchetto <sup>*1</sup> , I. De Vita <sup>2</sup> , A. Tacchino <sup>1</sup> , M. Bulgheroni <sup>2</sup> , E. d'Amico <sup>2</sup> , <sup>1</sup> Italian Multiple Sclerosis Foundation, Italy, <sup>2</sup> Ab.Acus srl, Italy
[P.119]	<b>Systemic administration of a novel AAV variant results in widespread and efficient gene transfer in R6/2 mice.</b> P. Farshim <sup>*1</sup> , B. Deverman <sup>2</sup> , G. Bates <sup>1</sup> , <sup>1</sup> University College London, UK, <sup>2</sup> California Institute of Technology, USA
[P.120]	<b>Secondary prevention of Alzheimer's disease: the EPAD and AMYPAD studies</b> F.R.D.R.K. Barkhof <sup>*1</sup> , C.R. Ritchie <sup>2</sup> , <sup>1</sup> UCL, UK, <sup>2</sup> UEDIN, UK
[P.121]	<b>Neuroprotective effect of omega-3 fatty acids on inflammatory and anti-oxidant status of brain in Streptozotocin-induced diabetic rats</b> N.F. Khedr, Tanta University, Egypt
[P.122]	<b>Controllability of healthy elderly functional brain networks at risk for Alzheimer's disease via a novel mnemonic strategic training protocol</b> I.T. Tarnanas <sup>*1</sup> , S.D. Dimitriadis <sup>2,5</sup> , M.W. Wiederhold <sup>4</sup> , B.W. Wiederhold <sup>4</sup> , M.T. Tsolaki <sup>3</sup> , <sup>1</sup> Health-IS Lab, Switzerland, <sup>2</sup> Cardiff University, UK, <sup>3</sup> Aristotle University of Thessaloniki, Greece, <sup>4</sup> Division of Cognitive and Restorative Neurology, Virtual Reality Medical Center, USA, <sup>5</sup> Cardiff University School of Medicine, UK
[P.123]	<b>A Study on optimal concentration of isodiospyrin putative inhibitory actions against exonic splicing enhancers of Dystrophin gene exon 53 skipping in Duchenne muscular dystrophy</b> H. Alzahrani <sup>*</sup> , R. Rashid, M. Mustapha, T.H. Sasongko, The Science University of Malaysia, Malaysia
[P.124]	<b>Oral administration of Gamma-tocotrienol for neuroprotection in a 6-hydroxydopamine rat model of Parkinson's disease</b> M. Kumari <sup>*1</sup> , P. Ramdas <sup>1,4</sup> , N. Haleagrahara <sup>2</sup> , M.K. Kutty <sup>3</sup> , A.K. Radhakrishnan <sup>1</sup> , <sup>1</sup> International medical university, Malaysia, <sup>2</sup> James cook University, Australia, <sup>3</sup> Universiti Teknologi MARA, Malaysia, <sup>4</sup> University Malaya, Malaysia

<b>[P.125]</b>	<b>Effectiveness of AlzU.org on Alzheimer's disease prevention clinical trial recruitment, registry enrolment, and advocacy</b> R.S. Isaacson <sup>*1</sup> , G. LaBelle <sup>1</sup> , C. Gaglio <sup>1</sup> , C. Shih <sup>1</sup> , J. Shum <sup>1</sup> , E. Caesar <sup>1</sup> , C. Haddock <sup>1</sup> , M. Lugavere <sup>1</sup> , B. Ly <sup>1</sup> , M. McInnis <sup>1</sup> , <sup>1</sup> Weill Cornell Medicine, USA, <sup>2</sup> Mayo Clinic, USA
<b>[P.126]</b>	<b>Ethical analysis of predictive genetic testing for clinical trials in Huntington Disease</b> C. Sampaio <sup>*1</sup> , J. Levey <sup>1</sup> , R. Klitzman <sup>1,2</sup> , <sup>1</sup> CHDI Management/CHDIFoundation inc, USA, <sup>2</sup> Columbia University Medical Center and New York State Psychiatric Institute, USA
<b>[P.127]</b>	<b>Caveolin-1 dysfunction contributes to pathology of alzheimer's like dementia through activation of beta-secretase in intracerebroventricular streptozotocin rat model</b> A. Gupta, R. Goyal, A. Sharma*, <i>Shoolini University, India</i>
<b>[P.128]</b>	<b>L-beta-N-methylamino-L-alanine (BMAA) nitrosation generates a cytotoxic DNA damaging alkylating agent: an unexplored mechanism for neurodegenerative disease.</b> G. Potjewyd, P.J. Day, G.P. Margison, A.C. Povey*, <i>University of Manchester, UK</i>
<b>[P.129]</b>	<b>Acetyl-L-Carnitine and Quercetin as PARP-1 Modulators: Implication on Alzheimer's Disease</b> P. Kumar <sup>1</sup> , B. Sindhu <sup>*1</sup> , K.S. Srigokul <sup>1</sup> , R.J. Naidu <sup>1</sup> , S. Manavalan <sup>2</sup> , N. Gopal <sup>2</sup> , <sup>1</sup> International Medical University, Malaysia, <sup>2</sup> National university of Health Sciences (NUHS), USA
<b>[P.130]</b>	<b>Impact of Poly(ADP-ribose)Polymerase (PARP-1) Modulators on the Biomarkers of Alzheimer's Disease in Aged Mice</b> B. Sindhu <sup>*1</sup> , P. Kumar <sup>1</sup> , K.S. Srigokul <sup>1</sup> , R.J. Naidu <sup>1</sup> , S. Manavalan <sup>1</sup> , N. Gopal <sup>1</sup> , <sup>1</sup> International Medical University, Malaysia, <sup>2</sup> National university of Health Sciences (NUHS), USA