Congress Center Basel, Switzerland
6 to 8 December 2023

Light blue coloured sessions will be live streamed to online delegates (on-demand access available until 6 March 2024)

WEDNESDAY 6 DECEMBER

SESSION 1 JOINT OPENING SESSION	
08.30 – 08.35	Welcome **– A Al-Chalabi (UK) and T Curry (UK)**
08.35 – 08.45	Welcome from Host Association/Dignitary
08.45 – 09.30	**Stephen Hawking Memorial Lecture:** Mapping the CNS: From cells to networks – ***R Costa (USA)***
09.30 – 10.00	International Alliance Humanitarian Award International Alliance Forbes Norris Award
10.00 – 10.20	IPG Award and winner's research presentation

10.30 – 11.00 COFFEE

SESSION 2A GENETICS AND GENOMICS	SESSION 2B RESPIRATORY ASSESSMENT AND MANAGEMENT	SESSION 2C PERSPECTIVES ON ALS AND FTD: PHENOTYPES AND NEUROIMAGING
11.00 – 11.30 Exploring the non-coding genome ***J Quinn (UK)***	**11.00 – 11.20** Identifying needs in ALS respiratory care using weekly monitoring of pulmonary function ***A Geronimo (USA)***	**11.00 – 11.05** Introduction ***J van Swieten (Netherlands)***
11.30 – 11.45 The oligogenic structure of ALS ***A Iacoangeli (UK)***	**11.20 – 11.40** Improving measurement of lung function in ALS: the results of the Pulmonary Function via Impedance Tomography (PuFIT) ***C McIlduff (USA)***	**11.05 – 11.45** Clinical/cognitive phenotypes in ALS and FTD: You say tomatoes... ***S Abrahams (UK) and J Rohrer (UK)***
11.45 – 12.00 Genome-wide paired DNA-RNAseq analyses to discover intronic splice mutation hotspots in neurological disorders ***Y Wang (Netherlands)***	**11.40 – 12.00** Calculated maximal volume ventilation (cMVV) as a marker of early respiratory failure in ALS ***U Manera (Italy)***	**11.45 – 12.25** Neuroimaging in ALS and FTD ***J Kassubek (Germany) and H Rosen (USA)***
12.00 – 12.15 Genetic and epigenetic investigation of survival modifiers in Chinese ALS ***M Zhang (China)***	**12.00 – 12.15** Factors associated with emergency tracheostomy or early mortality in a population-based study of 170 subjects with ALS/MND ***P Cazzolli (USA)***	**12.25 – 12.40** DISCUSSION
12.15 – 12.30 An IGFBP7 promotor SNP is associated with the ALS Reversal phenotype – ***E Rampersaud (USA)***	**12.15 – 12.30** Giving breath to motor neurons: Non-invasive mechanical ventilation slows disease progression in ALS – ***M Grassano (Italy)***	

12.30 – 14.00 LUNCH

SESSION 3A *IN VIVO* MODELS	SESSION 3B TECHNOLOGY AND TELEMEDICINE	SESSION 3C PERSPECTIVES ON ALS AND FTD: BIOMARKERS, TRIALS AND PRODROMAL DISEASE
14.00 – 14.30 Mouse Models and Resources for ALS - What Models to use, When and Why ***C Lutz (USA)***	**14.00 – 14.30** Harnessing collaborative innovation to enhance quality of life in ALS/MND ***S Moss (UK)***	**14.00 – 14.30** Fluid biomarkers in ALS and FTD ***M Turner (UK) and J van Swieten (Netherlands)***
14.30 – 14.45 Severity of impaired motor unit recovery in ALS-associated KIF5A variant mice is inversely related to total soluble KIF5A protein levels ***S Kolb (USA***)	**14.30 – 14.45** Longitudinal remote monitoring of nocturnal physiology in people living with ALS ***M Crook-Rumsey (UK)***	**14.30 – 15.00** Prodromal ALS and FTD ***M Benatar (USA) and C McMillan (USA)***
14.45 – 15.00 Linking mechanisms of protein aggregation to neurodegeneration in vivo – the critical role of posttranslational modifications for condensate formation and aggregation of human TDP-43 ***M Morsch (Australia)***	**14.45 – 15.00** Evaluation of digital technologies for home-based assessment of people with ALS ***A Mueller (Switzerland)***	**15.00 – 15.30** Therapeutic trials in ALS and FTD ***L van den Berg (Netherlands) and A Boxer (USA)***
15.00 – 15.15 TARDBP Knock-In Zebrafish Models Display a Motor Phenotype and Present with Some Pathological Hallmarks of ALS ***G Armstrong (Canada)***	**15.00 – 15.15** Clinical use and comparative analysis of the self-explanatory ALS Functional Rating Scale (ALSFRS-R-SE) in a controlled multicenter study ***A Maier (Germany)***	
15.15 – 15.30 Reorganization of central carbon metabolism rescues TDP-43 proteostasis collapse in spinal motor neurons ***K Asakawa (Japan)***	**15.15 – 15.30** Site and participant perspectives on participating in an ALS trial designed to reduce burden: COURAGE-ALS ***S Rudnicki (USA)***	

15.30 – 16.00 COFFEE

SESSION 4A CELL BIOLOGY AND PATHOLOGY	SESSION 4B CAREGIVERS AND FAMILIES	SESSION 4C PERSPECTIVES ON ALS AND FTD: PATHOLOGY, MODELS AND TARGETS
16.00 – 16.20 Dysregulated lipid metabolism is an early contributor to neurodegeneration in C9orf72 ALS/FTD ***A Cammack (UK)***	**16.00 – 16.30** Informal caregiving in ALS: Difficulty and benefit – ***M Galvin (Ireland)***	**16.00 – 16.30** Genetics, pathology and selective vulnerability in ALS and FTD ***M Neumann (Germany)***
16.20 – 16.40 Disruption of the angiopoietin-like protein system correlates with lipid homeostasis in ALS ***S Krishnamurthy (Canada)***	**16.30 – 16.45** Making end of life decisions about home mechanical ventilation: Patient and family perspectives ***E Wilson (UK)***	**16.30 – 17.00** ALS-FTD: Models and therapeutic targets ***A Isaacs (UK)***
16.40 – 17.00 Transcriptomic analysis of amyotrophic lateral sclerosis patient brain regions with differential pTDP-43 neuropathology ***N Grima (Australia)***	**16.45 – 17.00** Health communication guidance for the ALS disease course: Evidence from patient and family focus groups and ALS healthcare professionals. Outcomes of the ALS Talk Project ***W Johnston (Canada)***	**17.00 – 17.30** Gene therapy strategies for ALS and FTD ***C Shaw (UK)***

17.00 – 17.15 UNC13A Loss and TDP-43 Dependent Mis-splicing Drives Synaptic Dysfunction in FTD and ALS ***S Hinckley (Quralis)***	**17.00 – 17.15** What, how and when do families communicate about ALS? A qualitative exploration of parents' and children's perceptions ***M Sommers-Spijkerman (Netherlands)***	**17.30 – 17.45** DISCUSSION
17.15 – 17.30 TDP-43 subcellular mislocalisation is correlated with loss of optineurin binding for FTD and ALS-associated TBK1 missense variants ***C Dobson-Stone (Australia)***	**17.15 – 17.30** Factors predicting anticipatory grief in family carers currently supporting people living with MND ***A Trucco (UK)***	

17.45 – 19.45 - POSTER SESSION A

THURSDAY 7 DECEMBER

SESSION 5A PROTEOSTASIS AND PROTEOTOXICITY	SESSION 5B NUTRITIONAL ASSESSMENT AND MANAGEMENT	SESSION 5C NON-CME INDUSTRY SESSION (details to follow)
08.30 – 09.00 Prion-like properties of ALS associated proteins ***M Hasegawa (Japan)***	**08.30 – 08.50** A multi-centre evaluation of the post-gastrostomy management in patients with MND (PostGas) ***T Stavroulakis (UK)***	
09.00 – 09.15 Phosphorylation alters TDP-43 protein-protein interactions and aggregation ***E Kellett (Australia)***	**08.50 – 09.10** Tube feedings: Assessment of the decision making for patients with ALS ***K Tran (USA)***	
09.15 – 09.30 Cyclin F influences the proteostasis of TDP-43 ***S Rayner (Australia)***	**09.10 – 09.30** Higher glycemic index diet is associated with slower disease progression in ALS ***I Lee (USA)***	
09.30 – 09.45 Identifying synaptic interactors of FUS reveals novel functions ***S Taconellli (UK)***	**09.30 – 09.45** Investigating the role of anthropometric measurements to assess nutritional state in MND: a pilot study ***S Roscoe (UK)***	
09.45 – 10.00 The neuroanatomical distributions and morphologies of SOD1 inclusions segregate into different patterns in ALS patients carrying SOD1 mutations ***K Forsberg (Sweden)***	**09.45 – 10.00** Central pathways of appetite control in MND: fMRI evidence of altered brain responses to visual food stimuli ***J Chang (Australia)***	

10.00 – 10.30 COFFEE

SESSION 6A PRECLINICAL THERAPEUTIC STRATEGIES	SESSION 6B CLINICAL TRIALS	SESSION 6C NEUROIMAGING
10.30 – 10.45 Modulation of the mevalonate pathway restores TDP-43-mediated STMN2 deficiency. ***M Nolan (USA)***	**10.30 – 10.50** COURAGE-ALS: Results of the Phase 3 clinical trial of reldesemtiv in ALS ***J Shefner (USA)***	**10.30 – 10.50** Along-tract texture analysis of magnetic resonance images in the corticospinal tract and corpus callosum in ALS ***P Parnianpour (Canada)***

10.45 – 11.00 Antisense oligonucleotides rescue UNC13A expression after TDP-43 loss of function ***M Keuss (UK)***	**10.50 – 11.10** Harnessing biomarkers to understand clinical outcomes in RCTs: The Modifying Immune Responses and Outcomes in ALS Study (MIROCALS) ***A Malaspina (UK)***	**10.50 – 11.10** Defining the core white-matter disease signature of ALS through state-of-the-art diffusion-weighted imaging and fixel based analysis ***S Tu (Australia)***
11.00 – 11.15 An intravenous AAV-RNAi approach targeting Atxn2 for sporadic ALS ***G Murlidharan (USA)***	**11.10 – 11.30** Pridopidine for the treatment of ALS: Top line results from the Phase 2 Healey ALS platform trial ***J Shefner (USA)***	**11.10 – 11.30** Brain connectome alterations across King's stages in ALS ***E Spinelli (Italy)***
11.15 – 11.30 Development of an AAV gene therapy for C9orf72 ALS by targeting the repeat expansion containing C9orf72 transcripts ***Y Liu (Netherlands)***	**11.30 – 11.50** Safety profile, biological and clincal effects of colchisine in ALS: Results form a Phase 2 multicenter, randomized controlled double-blind clinical trial ***J Mandrioli (Italy)***	**11.30 – 11.50** Use of brain 2-[18F]FDG-PET to discriminate ALS and ALS-mimics ***A Canosa (Italy)***
11.30 – 11.45 Novel peptides based on thioredoxins are protective in cellular, zebrafish and two mouse models of ALS ***J Atkin (Australia)***	**11.50 – 12.10** Two-year results from the open-label extension of VALOR: Tofersen in adults with SOD1 ALS ***M Cudkowicz (USA)***	**11.50 – 12.10** A proof of mechanism study to evaluate the effect of sotuletinib (BLZ945) on neuroinflammation as measured by [11C]-PBR28 PET imaging in participants with ALS ***R Miller (Switzerland)***
11.45 – 12.00 Therapeutic mitigation of the toxic phenotype induced by TDP-43 in animal models of ALS ***C Droppelman (Canada)***	**12.10 – 12.30** Results of a double blind, placebo-controlled clinical trial of AIT-101 (LAM-002A) in C9orf72 ALS: A biomarker driven Phase 2A clinical trial targeting PIKfyve inhibition ***S Babu (USA)***	**12.10 – 12.30** Premorbid brain structural variations influence risk of ALS ***A Thompson (UK)***
12.00 – 12.15 Novel pharmacological approaches in stimulating protein clearance for therapeutic targeting of cytoplasmic TDP-43 pathology in ALS models ***S Keating (Australia)***		
12.15 – 12.30 ATH-1105, a small molecule positive modulator of the neurotrophic hepatocyte growth factor system, is neuroprotective when administered prophylactically, therapeutically or in combination with riluzole in the prp-TDP-43 A315T mouse model of ALS ***K Church (USA)***		

12.30 – 14.00 LUNCH

SESSION 7A IMMUNITY, INFLAMMATION AND NEURODEGENERATION	SESSION 7B IMPROVING CLINICAL PRACTICE	SESSION 7C NON-CME INDUSTRY SESSION (details to follow)
14.00 – 14.30 Astrocyte-neuron interaction in health and disease ***L Ferraiuolo (USA)***	**14.00 – 14.20** Mapping the natural history of ALS: Time-to-event analysis of clinical milestones in the pan-European, population-based PRECISION-ALS cohort - ***H McDonough (Ireland)***	

14.30 – 14.45 Focal corticospinal tract degeneration below the brainstem of ALS patients suggests a dying back of upper motor neurons. ***H Cropper (USA)***	**14.20 – 14.40** A randomised controlled trial examining clinical and cost effectiveness of Acceptance and Commitment Therapy plus usual care for improving psychological health in people living with MND in comparison to usual care alone. ***R Gould (UK)***	
14.45 – 15.00 TBK1 loss-of-function is associated with cell autonomous microglial dysfunction. ***O Peters (UK)***	**14.40 – 15.00** A multicentre evaluation of excessive saliva management in people living with MND. ***S Boddy (UK)***	
15.00 – 15.15 Type I interferon response propagates TDP-43 pathogenesis in ALS. ***C Yu (Australia)***	**15.00 – 15.15** Evidence-based consensus guidelines for ALS genetic testing and counselling ***J Roggenbuck (USA)***	
15.15 – 15.30 Single-cell RNA sequencing identifies a cytotoxic NK subpopulation associated with ALS ***O Dols Icardo (Spain)***	**15.15 – 15.30** Quinine for the treatment of muscle cramps in ALS: A randomized placebo controlled double-blind cross-over trial. ***N Braun (Switzerland)***	

15.30 – 16.00 COFFEE

SESSION 8A TDP - 43	SESSION 8B COGNITIVE CHANGE	SESSION 8C NON-CME INDUSTRY SESSION (details to follow)
16.00 – 16.30 Does TDP-43 constitute a viable therapeutic target? ***M Polymenidou (Switzerland)***	**16.00 – 16.15** Cognitive and behavioural impairment in ALS patients with TARDBP and SOD1 pathogenic variants: A domain analysis. ***A Chio (Italy)***	
16.30 – 16.50 Molecular signatures of TDP-43 dysfunction are age dependent, variable, and therapeutically targetable in authentic sALS and C9orf72 ALS/FTD patient iPSNs ***A Coyne (USA)***	**16.15 – 16.30** ALS 'non-specific' cognitive impairment frequently occurs and remains unnoticed in ALS: development of a new cognitive screening tool. ***A Michielsen (Netherlands)***	
16.50 – 17.10 Nuclear TDP-43 pathology detected by RNA aptamer is an early aggregation event that correlates with STMN-2 cryptic exon emergence and clinical phenotype***J Gregory (UK)***	**16.30 – 16.45** Directly measuring network function during social cognition in ALS using EEG during the Reading the Mind in the Eyes Task ***R McMackin (Ireland)***	
17.10 – 17.30 Discovery and optimization of the first-in-class TDP-43 PET tracer – ***E Vokali (Switzerland)***	**16.45 – 17.00** Cardiac autonomic dysfunction is associated with impaired cognition in patients with ALS ***Z Li (China)***	

	17.00 – 17.15 Relationship between plasma uric acid, white matter microstructure and cognitive function in ALS patients ***J Tang (China)***	
	17.15 – 17.30 Prevalence and motor-functional correlates of frontotemporal spectrum disorders in a large Italian cohort on non-demented ALS patients ***B Poletti (Italy)***	

17.45 – 19.45 POSTER SESSION B

FRIDAY 8 DECEMBER

SESSION 9A IV VITRO MODELS	SESSION 9B CLINICAL MANAGEMENT	SESSION 9C TISSUE BIOMARKERS
08.30 – 09.00 Whole Genome Screen for Nuclear and TDP-43 Import Regulators in Human iPSC-derived Neurons ***J Rothstein (USA)***	**08.30 – 09.00** Standards of care in an era of multiple treatments ***C Ingre (Sweden)***	**08.30 – 08.50** A robust microRNA ALS blood diagnostic test. ***S Banack (USA)***
09.00 – 09.15 C9orf72 patient-derived spinal cord organoids reveal key ALS phenotypes ***L Loh (Australia)***	**09.00 – 09.30** Developing guidelines for the management of cognitive and behavioural changes in ALS ***E Mioshi (UK)***	**08.50 – 09.10** Deep proteomics of cerebrospinal fluid implicates endoplasmic reticulum and inflammatory mechanisms in aggressiveness of ALS. ***E Dellar (UK)***
09.15 – 09.30 Loss of TDP43 affects neuronal survival and differentiation in a human stem cell 3D model of the cerebral cortex ***V Ramesh (UK)***	**09.30 – 10.00** How to break the news in ALS/MND: a primer for physicians and allied health professionals ***M Kavanaugh (USA)***	**09.10 – 09.30** Proteomics and mathematical modelling of longitudinal CSF differentiates fast versus slow ALS disease progression ***R Bowser (USA)***
09.30 – 09.45 Optogenetic stimulation reveals activity-dependent mechanisms of neurodegeneration in C9orf72-HRE ALS motor neurons and neuromuscular co-culture ***L Farrimond (UK)***		**09.30 – 09.45** Lipid-mediated resolution of inflammation and survival in ALS ***O Yildiz (UK)***
09.45 – 10.00 An optogenetic approach to recapitulate C9ORF72 DPR pathology in cellular models ***R Hodgson (UK)***		**09.45 – 10.00** Peripheral immunity relates to disease progression and prognosis in ALS ***Q Jiang (China)***

10.00 – 10.30 COFFEE

SESSION 10A TRANSCRIPTOMICS AND RNA BIOLOGY	SESSION 10B CLINICAL STRATIFICATION AND ENDPOINTS	SESSION 10C SURROGATE MARKERS
10.30 – 11.00 TDP-43 dependent cryptic exons: Functional fluid biomarker and target validation ***P Wong (USA)***	**10.30 – 11.00** Stratification and improving clinical endpoints: Is personalised medicine the answer? ***A Genge (Canada)***	**10.30 – 10.50** Cerebrospinal fluid levels of Chitinase 3-like protein 1 correlate with cerebral glucose metabolism in ALS **J De Vocht (Belgium)**

11.00 – 11.15 Lnc-HIBADH-4 regulates autophagy-lysosome pathway in amyotrophic lateral sclerosis by targeting CTSD ***J Huang (China)***	**11.00 – 11.30** ALS clinical heterogeneity: What we know and what we need to know ***S Vucic (Australia)***	**10.50 – 11.10** Threshold tracking transcranial magnetic stimulation and neurofilament light chain as biomarkers in ALS. ***A Jacobsen (Denmark)***
11.15 – 11.30 Harnessing TDP-43 mediated feedback loops as novel diagnostic tools and for pathomechanistic insights **M Hallegger (UK)**	**11.30 – 11.45** Evaluating the performance of the Bayesian primary efficacy analysis model in the HEALEY ALS Platform Trial ***B Saville (USA)***	**11.10 – 11.30** Cortico-muscular coherence: A promising biomarker of neurodegeneration in ALS ***S Bista (Ireland)***
11.30 – 11.45 FUS is a global regulator of RNA methylation and ALS-FUS mutations disrupt this function at several levels ***T Shelkovnikova (UK)***	**11.45 – 12.00** Head-to-head reliability of different outcome measures in the ALS Methodology Study 999AS003 ***C Neuwirth (Switzerland)***	**11.30 – 11.50** Cortical hyperexcitability in ALS is mediated by distinct neuronal populations. ***N Pavey (Australia)***
11.45 – 12.00 Loss of ALS-linked SFPQ causes aberrant splicing and deregulation of RNA editing in human motor neurons ***G Tyzack (UK)***	**12.00 – 12.15** Enhancing randomized clinical trials for ASLS: harnessing synthetic placebo controls from patient registries ***R Van Eijk (Netherlands)***	**11.50 – 12.10** Dynamic analysis of brain state reveals altered functional networks in ALS: Insights from high density resting state EEG – ***M Metzger (Ireland)***
12.00 – 12.15 C9orf72 gene networks in the human brain correlate with cortical thickness in C9-FTD and implicate vulnerable cell types ***I Broce (USA)***	**12.15 – 12.30** Can we beat the placebo response by patient stratification at the baseline of a clinical trial? ***B Lerner (Israel)***	**12.10 – 12.30** The cortical neurophysiological signature of ALS ***M Trubshaw UK)***
12.15 – 12.30 Trancriptomic signatures of frontal cortex vulnerability in C9orf72 ALS and FTLD-TDP ***B Spencer (USA)***		

12.30 – 14.00 LUNCH

SESSION 11 JOINT CLOSING SESSION	
14.00 – 14.05	Invitation to Montreal 2024
14.05 – 14.10	Poster Prize Awards
14.10 – 14.20	Healey Center Prize
14.20 – 14.30	Lalji Family Award
14.30 – 15.00	Genetic testing in ALS: Opportunities and challenges – M Harms (USA)
15.00 – 15.15	Survival for patients with ALS: How close are we to developing a robust personalised prediction model? – H-J Westeneng (Netherlands)
15.15 – 15.30	Late breaking news