Thursday, 21st May

12.00–13.30 Registration and Lunch
Hallway, Ground Floor

13.30–14.35 Opening Session
Prof. Van den Berg & Prof. Orla Hardiman
Stanley Quek Theatre B1

13.35-14.15 Invited Speaker: Latran Foundation: Prof. Seward Rutkove (USA)
“EIM as a biomarker in ALS”

14.15 – 15.00 Oral Session 1: Genes and Genomics
Chairs: Dr. Russell McLaughlin, Prof. Jan Veldink

14.15-15.00 State of the Art Speaker: Prof. John E. Landers (USA)
“Using Next-Generation Sequencing to Dissect ALS Pathogenesis”

15.00 - 15.15 OS1.1: Genetic Overlap between Amyotrophic Lateral Sclerosis and Schizophrenia
R. McLaughlin (Project MinE)

15.15 – 15.30 OS1.2: The Serotonin 2b Receptor prevents Microglia Degeneration and Disease Progression in ALS
H. el Oussini

15.30 – 15.45 OS1.3: TBK1 Haploinsufficiency causes ALS and FTD
J. Weishaupt

15.45-16.00 OS1.4: Intermediate ATXN2 CAG Expansions predict risk in ALS
W. Sproviero

16.00 - 16.30 Coffee

16.30 – 17.30 Oral Session 2: Cognition
Chairs: Prof. Sharon Abrahams, Dr. Marwa Elamin

16.30 – 16.45 OS 2.1: The Predictors of Behavioural Change in ALS Patients without Dementia
M. Elamin

16.45 - 17.00 OS2.2: Apathy Profiles in Amyotrophic Lateral Sclerosis, Parkinson’s disease and Alzheimer’s disease
R. Radakovic

17.00 - 17.15  OS2.3: Cognitive Impairment in ALS assessed with 18F-FDG-PET

U. Manera

17.15 – 17.30  OS2.4: Cognitive Deficits in Pure ALS: A Data Driven Approach

T. Burke

17.30 - 19.00  Guided Poster Tour with Cheese and Wine Reception

B2.72-2.73-2.74 & B2.36-2.37-2.38

18.00 - 19.30  Project MinE Meeting (closed meeting)

Stanley Quek Theatre B1

19.15  Cytokinetics Investigator Reception (closed meeting)

Alexander Hotel
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
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<tr>
<td>09.15-10.00</td>
<td>Oral Session 3: C9orf72 and Novel Therapeutics</td>
<td>Chairs: Prof. Albert Ludolph, Prof. Pamela Shaw</td>
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<tr>
<td>09.15-10.00</td>
<td>State of the Art Speaker: Prof. Leonard Petruccelli (USA)</td>
<td>“Mechanisms of Toxicity and Therapeutic approaches for C9FTD/ALS”</td>
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<td>10.00-10.15</td>
<td>OS3.1:</td>
<td>Genetic Correction of C9orf72 Repeat Expansion Mutation in ALS/FTD Patient iPSCs</td>
<td>N. Ababneh</td>
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<td>10.15-10.30</td>
<td>OS3.2:</td>
<td>C9orf72 Repeat Expansions produce Distinctive Metabolic Profiles in Human CNS Tissue</td>
<td>G. Valbuena</td>
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<tr>
<td>10.30-10.45</td>
<td>OS3.3:</td>
<td>C9orf72 Epigenetic Modifications in Italian Amyotrophic Lateral Sclerosis Patients</td>
<td>D. Calini</td>
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<td>10.45-11.00</td>
<td>OS3.4:</td>
<td>Diaphragmatic Pacing in Motor Neurone Disease: A randomized Controlled Trial (DiPALS)</td>
<td>C. McDermott</td>
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<tr>
<td>11.00-11.30</td>
<td></td>
<td>Coffee</td>
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<td>11.30-12.30</td>
<td>Oral Session 4: Imaging</td>
<td>Chairs: Dr. Esther Verstraete, Dr. Peter Bede</td>
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<td>11.30-11.45</td>
<td>OS4.1:</td>
<td>Simulating Disease spread in Amyotrophic Lateral Sclerosis using a Connectome-Based Model</td>
<td>R. Schmidt</td>
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<td>11.45-12.00</td>
<td>OS4.2:</td>
<td>Physical Disability in ALS is Associated with Functional Connectivity Changes.</td>
<td>J. Machts</td>
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<tr>
<td>12.00-12.15</td>
<td>OS4.3:</td>
<td>Pathology spreading in ALS: A Single-Center in Vivo DTI-Based Staging Analysis in 289 Patients.</td>
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J. Kassubek

12.15 - 12.30  
**OS4.4:** Serum microRNAs in sporadic amyotrophic lateral sclerosis  
*A. Freischmidt*

12.30-14.00  
**Lunch and Poster Session**  
Knowledge Exchange Level 2

13.00 –14.15  
**ENCALS**  
Board Meeting (closed meeting)

14.15 – 16.00  
**Oral Session 5: TDP: RNA Metabolism and Disease**  
*Chairs: Dr. Severine Boillee, Prof. Vincenzo Silani*

14.15-15.00  
**State of the Art Speaker:** Dr. Francisco Baralle (Italy)  
“Functional Interactions of TDP 43 and their Role in ALS Pathogenesis”

15.00 – 15.15  
**OS 5.1:** pTDP43 is a Better Correlate of Clinical Phenotype than RNA Foci or GA Dipeptide in C9ORF72 ALS/FTD  
*J. Scaber*

15.15 – 15.30  
**OS 5.2:** Primary Fibroblasts Cultures Reveal TDP-43 Abnormalities in Amyotrophic Lateral Sclerosis Patients.  
*M. Sabatelli*

15.30 – 15.45  
**OS 5.3:** Deciphering the Pathogenic Mechanisms of TCP-43 and FUS Proteinopathies in Novel Ex Vivo Models  
*E. Hock*

15.45 -16.00  
Cell-to-Cell Transmission of TDP-43 across Axon Terminals  
*M. Feiler*

16.00 – 16.30  
**Coffee**

16.30-17.30  
**Oral Session 6: Models of Disease Pathogenesis (1)**  
*Chairs: Prof. Caterina Bendotti, Dr. Niamh O’Sullivan*

16.30 -16.45  
Different Requirements for the VCP Co-Factors Npl4 and Ufd1 in Neuronal Function
N. O’Sullivan

16.45 - 17.00 Expression of the ALS-causing Variant hSOD1G93A leads to an Impaired Integrity and Altered Regulation

A. Clement

17.00 – 17.15 Characterisation and Motoneuronal Differentiation of Human FUS-ALS Induced Pluripotent Stem Cells

J. Higelin

17.15 - 17.30 Macrophage Migration Inhibitory Factor as a Chaperone Inhibiting Accumulation of Misfolded SOD1

A. Israelson

17.30 - 19.00 Guided Tour Posters with Wine Reception

B2.72-2.73-2.74 & B2.36-2.37-2.38

20.00 Dinner in the Dining Hall Parliament Square Trinity College
Saturday, May 23rd

08.30 - 09.00  
**ENCALS YOUNG INVESTIGATION AWARD**

09.00 – 10.45  
**Oral Session 7: Disease Models and Pathogenesis (2)**  
*Chairs: Dr. Susanne Petri, Prof. Ludo van den Bosch*

09.00 – 09.45  
**State of the Art Speaker:** Dr. Laura Ferraiuolo (UK)  
“Using *in vitro* Models to Reconstruct Pathogenic Mechanisms in ALS”

09.45-10.00  
**OS 7.1:** Pharmacological Correction of Dysfunctional MNs Differentiated from ALS patient-derived iPSC  
*M. Naujock*

10.00-10.15  
**OS 7.2:** Neuromuscular Junction Formation using hiPSC co-culture system  
*M. Demestre*

10.15-10.30  
**OS 7.3:** Presymptomatic Activation of the PDGF-CC Pathway Accelerates Onset of ALS Neurodegeneration  
*S. Lewandowski*

10.30-10.45  
**OS7.4:** Role of Dynein in the Clearance of Misfolded Proteins Responsible for ALS  
*R. Cristofani*

10.45-11.15  
**Coffee**

11.15-12.45  
**Oral Session 8: Novel Biomarkers**  
*Chairs: Prof. Adriano Chio, Dr. Martin Turner*

11.15-11.45  
**State of the Art Speaker:** Dr. Pat Andres, MS, DPT (USA)  
“Use of Quantitative Strength Testing to Measure Disease Progression in ALS”

11.45-12.00  
**OS8.1:** Characterising the Metabolic Profile of ALS: Results from the EuroMotor Study Cohort
A. Siskos

12.00-12.15

OS8.2: Imaging Signatures of ALS

C. Schuster

12.15-12.30

OS8.3: Brain Morphological Changes in Asymptomatic C9orf72 Repeat Expansion Carriers

R. Walhout

12.30-12.45

OS8.4: Abnormal Beta-Band Desynchronisation as a Pre-Symptomatic Biomarker of Motor Network Dysfunction

M. Proudfoot

12.45-13.00

Meeting Conclusion