



# 7<sup>th</sup> Neuroimaging Society in ALS

Trinity Biomedical Sciences Institute, Dublin

## SATURDAY 10<sup>TH</sup> DECEMBER

1100-1115

Welcome and brief review of the year in ALS imaging  
Martin Turner (UK)

1115-1200

### KEYNOTE

35 + 10 minutes

The selective anatomical vulnerability of ALS: 'disease-defining' and 'disease-defying' brain regions  
Peter Bede (Ireland)

1200-1300

### RESEARCH PRESENTATIONS 1

10 + 5 minutes each

Increased *in vivo* glial activation in patients with PLS assessed with [<sup>11</sup>C]-PBR28 PET

Sabrina Paganoni (USA)

Structural organization of the brain connectome in patients with PLS

Silvia Basaia (Italy)

Relationship between brain metabolism on FDG-PET and cognitive/behavioural functioning in ALS

Joke De Vocht (Belgium)

Gray matter correlates of cognitive decline in ALS: a multi-atlas based MRI study

Marcondes França Jr (Brazil)

1300-1400

### LUNCH

1400-1530

### EMERGING APPLICATIONS

25 + 5 minutes each

fMRI in the spinal cord

Falk Eippert (UK)

Longitudinal MRI-based ALS staging: concepts and applications

Jan Kassubek (Germany)

7T DTI of *ex vivo* ALS brains and pathological correlates

Mary-Kay Floeter (USA)

1530-1600

### COFFEE

1600-1800

### RESEARCH PRESENTATIONS 2

10 + 5 minutes each

The neuroanatomical substrate of pseudobulbar affect in ALS: a multimodal neuroimaging study

Foteini Christidi (Greece)

The metabolic signature of spreading TDP 43 pathology in ALS patients

Donatienne Van Weehaeghe (Belgium)

Volumetric analysis of the hypothalamus in ALS

Martin Gorges (Germany)

Effects of motor neuron disease progression on cortical beta and gamma rhythms: Longitudinal case studies of ALS using MEG

Michael Lee (Australia)

Data-driven modelling of diffusion MRI changes in ALS indicates evolution of distal prior to proximal corticospinal tract pathology

Matt Gabel (UK)

The association of motor symptom development and thickness of functional regions within the motor cortex in ALS

Bram Nitert (Netherlands)

Tracking longitudinal evolution of ALS using diffusion tensor MRI

Pilar M. Ferraro (Italy)

The progression of cerebral pathology in ALS: A six-monthly multi-modal MRI study over two years

Ricarda Menke (UK)

1830-

### DINNER

Bang Restaurant, 11 Merrion Row

# SUNDAY 11<sup>th</sup> DECEMBER

**0900-0930**

## **ELECTIONS**

Steering Committee

**0930-1100**

## **RESEARCH PRESENTATIONS 3**

10 + 5 minutes each

**Glial activation measured by [11C]-PBR28 PET correlates with 1H-MRS brain metabolites in ALS**

Eva-Maria Ratai (USA)

**Survival and neuroimaging in ALS**

Henk-Jan Westeneng (Netherlands)

**Combined NODDI and quantitative magnetization transfer (qMT) imaging provides new insights into ALS**

Rebecca Broad (UK)

**Brain Sodium MRI depicts upper motor neuron involvement in ALS**

Aude-Marie Crapperon (France)

**Resting state functional connectivity in C9orf72 mutation carriers: genotype and phenotypes**

Rachel Smallwood (USA)

**Association of cognitive impairment and intrinsic functional connectivity of the fronto-temporal network**

Dorothee Lulé (Germany)

**1100-1130**

## **COFFEE**

**1130-1300**

## **RESEARCH PRESENTATIONS 4**

10 + 5 minutes each

**MEG cortico-muscular coherence to assess corticospinal tract integrity in ALS**

Malcolm Proudfoot (UK)

**A connectivity-based analysis of frontostriatal and cortico-basal networks in ALS**

Peter Bede (Ireland)

**Sequential PET and MRI in a patient with ALS-FTD reveals worsening brain metabolism and cortical thinning with disease progression**

Erik Pioro (USA)

**MRI-based staging in the ALS-FTD spectrum: application to bvFTD**

Hans-Peter Müller (Germany)

**Imaging muscle denervation in MND using whole-body MRI**

Tom Jenkins (UK)

***In vivo* correlates of pathological diagnosis in clinical variants of primary progressive aphasia**

Edoardo G Spinelli (Italy)

**1300-1400**

## **LUNCH**

**1400-1500**

## **IMAGING CONSORTIA UPDATES**

## **DISCUSSION AND CLOSE**