

2018 MEETING

ENCALS

European Network to Cure ALS

20-22 JUNE 2018
OXFORD



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Welcome Address

Dear colleagues,

We are proud to host the 2018 European Network to Cure ALS (ENCALS) meeting and welcome you to Oxford. There has never been a more productive time in neuroscience research, bringing with it the realistic expectation of therapeutic advances for those living with ALS. This ENCALs meeting is by far the largest to date, with more than 400 registered delegates. From the nearly 250 submitted abstracts, we have been able to build an exciting programme of cutting-edge research, interspersed with engaging plenary speakers from around the world.



The Oxford ALS Centre was founded in 2001 through the Motor Neurone Disease Association's pioneering Care Centre programme that now comprises more than 20 UK regional specialist clinics. Our research programme spans the single cell to the complete nervous system. We try to integrate this work into clinical care as much as possible through a close partnership with those living with ALS.

Oxford itself has a long and rich cultural history. Its University is one of oldest in the world, with teaching recorded as far back as the 11th Century. It operates as a federation of more than 40 self-governing Colleges and Halls scattered around the city, responsible for more than 23,000 students among a total city population of 150,000. Among the University's alumni are 29 Nobel laureates and 27 UK Prime Ministers. The very strong academic ties with European and wider international partners continue to be greatly valued.

The growth of the ENCALs meeting ensures it is a large administrative task. We are very grateful to our support team, particularly Akke Albada and Simone Vugts from the ENCALs office, plus Lynn Ossher and Niki Andrew at the Oxford end.

Research conferences are a catalyst for productivity and therapeutic advancement ultimately. Discussing ideas, comparing notes, developing existing and new collaborations are important elements in building a sense of global community and shared purpose. We wish you an enjoyable as well as productive meeting.

Martin Turner & Kevin Talbot

Meeting Guidelines

Due to the large number of attendees we need your full cooperation in making the meeting run effectively.

PLEASE:

1. Arrive on time for each session. Once the lecture theatre is full you will be directed to the overflow room.
2. Avoid creating gaps in the seating so that the maximum number of people can be accommodated. Session Chairs will be instructed not to begin until any gaps are filled.
3. If you have a ticket for the dinner at Keble College on Thursday 21st June, but find you no longer need it, inform the registration desk immediately so that we can allocate it to someone on the waiting list.
4. It is critical that you arrive on time for the Conference Dinner at Keble College on Thursday 21st June. Dinner will be served precisely at 8pm. This allows at least 30 minutes to get from the conference venue (Saïd Business School) to Keble. It is a 15-minute walk.
5. The dress code for the conference as a whole is casual, as is usual for ENCALS. For the dinner, please dress as would normally be appropriate for an evening in a restaurant.

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Committees

Programme Committee

- **Federica Agosta** (Italy)
- **Orla Hardiman**, Chair (Ireland)
- **Janine Kirby** (UK)
- **Kevin Talbot** (UK)
- **Martin Turner** (UK)
- **Jochen Weishaupt** (Germany)

Local Organising Committee

- **Niki Andrew**
- **Lynn Ossher**
- **Kevin Talbot**
- **Martin Turner**

ENCALS Executive Board

- **Chair: Leonard van den Berg** (The Netherlands)
- **Vice Chair: Orla Hardiman** (Ireland)
- **Treasurer: Adriano Chio** (Italy)
- **Ammar Al Chalabi**, Chair Award Committee (England)
- **Sharon Abrahams** (Scotland)
- **Peter Andersen** (Sweden)
- **Julian Grosskreutz** (Germany)
- **Magdalena Kuzma** (Poland)
- **Albert Ludolph** (Germany)
- **Jesus Mora Pardina** (Spain)
- **Philip van Damme** (Belgium)
- **Francois Salachas** (France)
- **Pamela Shaw** (England)
- **Kevin Talbot** (England)
- **Markus Weber** (Switzerland)

Award Committee

- **Ammar Al-Chalabi**, Chair (England)
- **Markus Weber** (Switzerland)
- **Mamede de Carvalho** (Portugal)
- **Sharon Abrahams** (Scotland)
- **Susanne Petri** (Germany)
- **Ludo van den Bosch** (Belgium)
- **Luc Dupuis** (France)
- **Magdalena Kuzma** (Poland)

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Venue

Saïd Business School,
Park End St, Oxford,
OX1 1HP
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Acknowledgements

ENCALS would like to thank the following sponsors for their generous support of this year's meeting.

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Programme: Oxford 20th-22nd June 2018

Each plenary presentation is 25 minutes plus 5 minutes for questions; each platform presentation is 12 minutes plus 3 minutes for questions.

Wednesday 20th June

12.00-13.00	Lunch and Registration
13.00-13.30	Welcome (Leonard van den Berg, Orla Hardiman) Sally Light, Chief Executive MND Association; Evy Reviers, EuPals
Session 1	Chair: Orla Hardiman, Dublin
13.30-14.00	Roadmaps to therapy in ALS Matthew Kiernan, Sydney
14.00-15.30	Biophysical basis of the acute effects of riluzole and retigabine on motor axonal excitability in patients with ALS Boudewijn Sleutjes, Utrecht
	Connectome-based disease progression model for ALS Jil Meier, Utrecht
	CSF chitinase protein performance as ALS biomarkers Alexander Thompson, Oxford
	Imaging of brain metabolism in asymptomatic C9orf72 repeat expansion carriers and non-carriers using 31P-MRSI at 7T Henk-Jan Westeneng, Utrecht
	Non-coding RNA serum biomarkers in ALS Greig Joilin, Sussex
	Electric shock and extremely low-frequency magnetic field exposure and risk of ALS: Euro-MOTOR Susan Peters, Utrecht

15.30-16.00	Break
Session 2	Chair: Ammar Al-Chalabi, London (KCL)
16.00-16.30	How many DNA samples is enough? Michael van Es, Utrecht
16.30-18.00	Oligogenic and discordant inheritance: A population-based genomic study of Irish kindreds carrying the C9orf72 repeat expansion Marie Ryan, Dublin Next generation sequence analysis of telomere length in ALS Ahmad Al Khleifat, London (KCL) Genome-wide analyses identify KIF5A as a novel ALS gene Kevin Kenna, Dublin Modelling FUS-ALS using gene-edited isogenic iPSC reporter lines Lara Marrone, Dresden Exogenous recombinant FUS is able to accumulate in cortical neurons in mouse brain Mattia Perez, Strasbourg Superoxide dismutase prions transmit ALS disease in mice expressing hemizygous D90A hSOD1 Elaheh Ekhtiari Bidhendi, Umea
18.00-19.30	Poster Session 1
19:00-20:00	Project MinE meeting (INVITATION ONLY)

Thursday 21st June

Session 3	Chair: Susanne Petri, Hannover
09.00-09.30	Reversing aberrant phase transitions connected to ALS James Shorter, Philadelphia (U Penn)
09.30-10.30	Studying the interaction between TARDBP and p62/SQSTM1: A look into RNA processing defects in ALS Raphael Munoz-Ruiz, Paris (ICM) Endogenous TDP-43 mutant mice develop ALS characteristics in vivo and show novel gain of splicing function Pietro Fratta, London (UCL) FUS-induced neurotoxicity in <i>Drosophila</i> is prevented by downregulating nucleocytoplasmic transport proteins Jolien Steyaert, Leuven Structural and functional MRI reveals frontal cortical deficits in a TDP-43 knock-in mouse model of ALS-FTD Ziqiang Lin, London (KCL)
10.30-11.00	Break
Session 4	Chair: Albert Ludoph, Ulm
11.00-11.30	Neuropathological heterogeneity across the ALS spectrum Olaf Ansorge, Oxford
11.30-12.30	Synapse loss in the prefrontal cortex is associated with cognitive decline in amyotrophic lateral sclerosis Christopher Henstridge, Edinburgh Using patient-derived astrocytes to unravel the role of misfolded SOD1 in sALS cases Noemi Gatto, Sheffield Selective vulnerability of the primary motor cortex in ALS Matthew Nolan, Oxford

	Investigation of dysfunction in cognitive brain networks in ALS by localisation of the sources of mismatch negativity Roisin McMackin, Dublin
12.30-13.30	Lunch
Session 5	Chair: Karin Danzer, Ulm
13.30-14.00	Axonal mRNA biology: Implications for axonal maintenance Christine Holt, Cambridge
14.00-15.30	HDAC6 inhibition reverses axonal transport defects in iPSC-derived motor neurons from FUS-ALS patients Wenting Guo, Leuven Serum microRNA profiles identify the Fragile-X-protein family as novel neuropathological markers in ALS Axel Freischmidt, Ulm C9ORF72 repeat expansions cause axonal transport defects in iPSC-derived motor neurons Laura Fumagalli, Leuven Axon-seq decodes the motor axon transcriptome and its modulation in response to ALS Jik Nijssen, Stockholm MicroRNAs secreted by C9orf72 patient-derived astrocytes contribute to impairment in axonal growth and cell death in vitro Andrea Varcianna, Sheffield Directly converted astrocytes from ALS patient fibroblasts stratify disease phenotypes and identify miR-146a as a potential therapeutic target Cajtia Gomes, Lisbon
15.30-16.00	Break

Session 6	Chair: Pamela Shaw, Sheffield
16.00-16.30	Transcriptomic analysis of iPSC-derived motor neurons from C9orf72 ALS/FTD patients Ana Candalija, Oxford Synergistic mechanisms of C9orf72 gain and loss of function Hortense de Calbiac, Paris (ICM)
16.30-17.00	Prospects for genetic therapies in neurodegenerative disorders Matthew Wood, Oxford
17.00-17.45	The ENCALs debate: This house believes ALS is a prion-like disease Chair: Martin Turner, Oxford FOR: James Shorter, Philadelphia (U Penn) (15 minutes) AGAINST: Simon Mead, London (UCL) (15 minutes) DISCUSSION (15 minutes)
17.45-19.15	Poster Session 2
20.00	Conference Dinner, Keble College (TICKET REQUIRED)

Friday 22nd June

Session 7	Chair: Leonard van den Berg, Utrecht
09.00-09.30	ENCALS Awards
09.30-10.00	Pur-alpha provides a potential link between RNA toxicity and loss-of-function in C9orf72 ALS Bart Swinnen, Leuven Inosine supplementation bypasses adenosine deaminase deficiency in C9orf72 astrocytes increasing bioenergetic capacity and motor neuron survival Scott Allen, Sheffield
10.00-10.30	Clinical trials in ALS: Stratification and personalised therapeutics Angela Genge, Montréal
10.30-11.00	Break
11.00-12.45	Implementing evidence-based methods in ALS clinical trials Ruben van Eijk, Utrecht Optimization of preclinical nucleic acid-based therapeutic for the most common genetic form of ALS Helene Tran, Massachusetts (U Massachusetts) WVE-3972-01, an investigational stereopure antisense oligonucleotide, preferentially knocks down G4C2 repeat-containing C9ORF72 transcripts Jean-Cosme Dodart, Massachusetts (WAVE Lifesciences) G-quadruplex-binding small molecules ameliorate C9orf72 ALS/FTD pathology in iPSC neurons and in vivo Rubika Balendra, London (UCL) AAV vectors for ALS treatment and modelling Maria Grazia Biferi, Paris (IM) An open-label trial of Triumeq in patients with ALS Julian Gold, Sydney



Randomized phase 2B trial of NPO01, a novel immune regulator, in ALS

Jonathan Katz, San Francisco

12.45-13.00 Introduction to ENCALS 2019 and Close of Meeting

Satellite Meetings

Wednesday 20th June

19:00-20:00 Project MinE Meeting **(INVITATION ONLY)**

Thursday 21st June

12:30-13:30 ENCALS Executive Meeting **(INVITATION ONLY)**

Poster Sessions

Poster Session 1: Wednesday 20th June, 18:00 – 19:30

Entrance Hall:

A01 Hot-spot KIF5A mutations cause familial ALS

David Brenner*, Rüstem Yilmaz, Kathrin Müller, Torsten Grehl, Susanne Petri, Thomas Meyer, Julian Grosskreutz, Patrick Weydt, Wolfgang Ruf, Christoph Neuwirth, Markus Weber, Susana Pinto, Kristl G. Claeys, Berthold Schrank, Berit Jordan, Antje Knehr, Kornelia Günther, Annemarie Hübers, Daniel Zeller, The German ALS network MND-NET, Christian Kubisch, Sibylle Jablonka, Michael Sendtner, Thomas Klopstock, Mamede de Carvalho, Anne Sperfeld, Guntram Borck, Alexander E. Volk, Johannes Dorst, Joachim Weis, Markus Otto, Joachim Schuster, Kelly del Tredici, Heiko Braak, Karin M. Danzer, Axel Freischmidt, Thomas Meitinger, Tim M. Strom, Albert C. Ludolph, Peter M. Andersen, and Jochen H. Weishaupt

A02 Alterations of C9orf72, SOD1, TARDBP, FUS and UBQLN2 genes with amyotrophic lateral sclerosis

Vildan Çiftçi, Türker Bilgen, Şule Darbaş, Yunus Arıkan, Hilmi Uysal*, Sibel Berker Karaüzüm

A03 Novel ALS-associated mutations in the ARPP21 gene cause abnormal protein aggregation and altered neuronal morphology

Chun Hao Wong*, Simon D Topp, Youn-Bok Lee, Sarah Mueller, Graham Cocks, Bradley N Smith, Nicola Ticozzi, John Landers, Christopher E Shaw

A04 TBK1 variants and sporadic ALS: Looking for accomplices

Giuseppe Marangi*, Serena Lattante, Amelia Conte, Giulia Bisogni, Daniela Bernardo, Paolo Doronzio, Nilo Riva, Christian Lunetta, Marcella Zollino, Mario Sabatelli

A05 Repeat expansion detection from whole-genome sequence data of Project MinE

Joke J.F.A. van Vugt*, Egor Dolzhenko, Richard J. Shaw, Maarten Kooyman, Gijs H.P. Tazelaar, Michael A. van Es, Project MinE ALS Sequencing Consortium, Leonard H. van den Berg, Michael A. Eberle and Jan H. Veldink

A06 Whole-genome variant analysis of Spanish monozygotic twins discordant for ALS disease

Gerardo Alonso-Munguía*, Yolanda Campos, Jesus Mora, Teresa Salas, Victoria López-Alonso

A07 Additional SQSTM1 mutations in ALS patients

Rustem Yilmaz*, Kathrin Müller, David Brenner, Albert Ludolph, Peter Andersen, Jochen Weishaupt

A08 Analysis of ascertainment bias in ALS

Puja R. Mehta*, Ashley Jones, Sarah Martin, Alfredo Iacoangeli, Ammar Al-Chalabi

A09 Whole exome sequencing identifies novel and recurrent variants in Hungarian patients with ALS

Kornélia Tripolszki*, Dóra Nagy, Zsófia F. Nagy, József I. Engelhardt, Péter Klivényi, Márta Széll

A10 Testing for synergy between loss and gain of FUS function in causing motor neuron degeneration

Sanjuan-Ruiz I, Myers B, McAlonis-Downes M, Cleveland DW, Lagier-Tourenne C, Da Cruz S & Dupuis L

A11 Investigating TBK1-dependent signalling pathways in Amyotrophic Lateral Sclerosis

Maria Davies*, Mark O. Collins

- A12 MIF inhibits the formation and toxicity of misfolded SOD1 amyloid aggregates: Implications for familial ALS**
Argueti. S*Shvil N, Banerjee V, Zoltsman G, Shani T, Kahn J, Abu-Hamad S, Papo N, Engel S, Bernhagen J, Israelson A
- A13 Role of the calcium-activated chloride channel TMEM16F in amyotrophic lateral sclerosis.**
Claire Soulard*, Céline Salsac, Kévin Mouzat, Cécile Hilaire, Serge Lumbroso, Cédric Raoul, Frédérique Scamps
- A14 Autophagy interacts with TDP-43 function**
Pascual Torres*, Omar Ramírez-Núñez, Ricardo Romero-Guevara, Gisel Barés, Ana B Granado-Serrano, Victòria Ayala, Jordi Boada, Laia Fontdevila, Monica Povedano, Daniel Sanchís, Reinald Pamplona, Isidro Ferrer, and Manuel Portero-Otín
- A15 TDP-43 protein aggregation in Amyotrophic Lateral Sclerosis: a role for the post-translational modification SUMOylation**
Cindy Maurel*, Anna Chami, Rose-Anne Thépault, Sylviane Marouillat, Céline Brulard, Hélène Blasco, Philippe Corcia, Christian Andres, Patrick Vourc'h
- A16 Mechanisms of paraspeckle hyper-assembly in ALS**
Tatyana A Shelkovernikova*, Haiyan An, Vladimir L Buchman
- A17 Physical interaction and functional interplay of p62 and TDP-43 in ALS**
Daniel Scott*, Alice Montgomery, Mark Searle, Neil Oldham, Rob Layfield
- A18 Investigating a role for C9orf72 at the synapse**
Rebecca N Cohen*, Claudia S Bauer, Andrew J Grierson, Kurt J De Vos

- A19 The C9orf72 protein interacts with mitochondria and regulates mitochondrial quality control**
Emma F Smith*, Andrew J Grierson, Kurt J De Vos
- A20 Study of mitochondrial function and mitochondrial fusion/fission dynamics in the cellular model of amyotrophic lateral sclerosis SOD1G93A NSC-34**
Alonso-Munguía G*, De la Fuente-Muñoz M, Campos Y
- A21 Identification and characterization of RANT modulators in the G4C2 expansion**
Nausicaa Valentina Licata*, VG D'agostino, R Cristofani, C Zucal, R Loffredo, V Adami, M Pancher, A Quattrone, A Poletti, A Provenzano
- A22 Glycosphingolipid dysregulation and lysosomal dysfunction in motor neurone disease**
Carla S. da Silva Santos*, Mylene Huebecker, David A. Priestman, Frances M. Platt
- A23 C9ORF72 mutation impairs vesicular trafficking cell communication in Amyotrophic Lateral Sclerosis and Frontotemporal Dementia**
Raquel Manzano*†, Yoshitsugu Aoki†, Yi Lee, Ruxandra Dafinca, Misako Aoki, Andrew G. L. Douglas, Miguel A. Varela, Chaitra Sathyaprakash, Jakub Scaber, Paola Barbagallo, Pieter Vader, Imre Mäger, Kariem Ezzat, Martin R. Turner, Naoki Ito, Samanta Gasco, Norihiko Ohbayashi, Samir El Andaloussi, Shin'ichi Takeda, Mitsunori Fukuda, Kevin Talbot, Matthew J.A. Wood
- † Authors contributed equally
- A24 microRNAs analysis of patient-derived iPSCs and motor neurons for the development of a molecular therapy for ALS**
Mafalda Rizzuti*, Monica Nizzardo, Valentina Melzi, Giuseppe Filosa, Luca Calandriello, Martina Locatelli, Laura Dioni, Nereo Bresolin, Giacomo P. Comi, Silvia Barabino, Stefania Corti

- | | |
|-----|---|
| A25 | <p>Prognostic value of serum creatinine in ALS patients: A meta-analysis</p> <p>Débora Lanznaster*, Frank Patin, Philippe Corcia, Christian Andres, Patrick Vourc'h, Theodora Angoulvant, Héléne Blasco</p> |
| A26 | <p>Distinctive subcortical grey matter signatures along the ALS-FTD spectrum: a multimodal neuroimaging study</p> <p>Rangariroyashe H. Chipika*, Eoin Finegan, Parameswaran M. Iyer, Taha Omer, Mark A. Doherty, Alice Vajda, Niall Pender, Russell L. McLaughlin, Siobhan Hutchinson, Orla Hardiman, Peter Bede</p> |
| A27 | <p>The width of the third ventricle in ALS patients reflects subcortical gray matter atrophy and associates to cognitive impair</p> <p>Juan F Vázquez-Costa*, Sara Carratalà-Boscà, José I Tembl, Victoria Fornés-Ferrer, Jordi Pérez-Tur, Luis Martí-Bonmatí, Teresa Sevilla</p> |
| A28 | <p>Motor unit number index (MUNIX) in proximal muscles of the arm in amyotrophic lateral sclerosis</p> <p>Sarah Demortiere, Aude-Marie Grapperon*, Annie Verschueren, Emilien Delmont, Shahram Attarian</p> |
| A29 | <p>The clinical and radiological landscape of PLS: A multimodal neuroimaging study</p> <p>Eoin Finegan*, Rangariroyashe H. Chipika, Orla Hardiman, Peter Bede</p> |
| A30 | <p>CSF and serum pNfH assay performance study in the ALS clinic</p> <p>Elizabeth Gray*, Alexander Thompson, Emily Feneberg, Kevin Talbot, Andreas Jeromin, Martin Turner</p> |
| A31 | <p>Circulating exosomes as a promising source of biomarkers for ALS</p> <p>Laura Pasetto, Vito D'agostino, Laura Brunelli, Roberta Pastorelli, Alessandro Corbelli, Fabio Fiordaliso, Andrea Calvo, Adriano Chiò, Massimo Corbo, Christian Lunetta, Gabriele Mora, Manuela Basso and Valentina Bonetto*</p> |

- A32 The TDP-43 pathological interactome**
- Emily Feneberg*, Elizabeth Gray, Roman Fischer, David Gordon, Olaf Ansorge, Benedikt Kessler, Kevin Talbot, Martin R. Turner
- A33 Connectivity-based thalamic segmentation as a cortical pathological window in ALS**
- Ricarda A. L. Menke*, Benjamin C. Tendler, Sean Foxley, Menuka Pallegage-Gamarallage, Olaf Ansorge, Karla L. Miller, Martin R. Turner
- A34 Oxidation-reduction potential of cerebrospinal fluid as progression biomarker in ALS patients with spinal onset**
- Miloš Opačić*, Zorica Stević, Vladimir Baščarević, Miroslav Živić, Mihajlo Spasić, Dragosav Mutavdžić, Ivan Spasojević
- A35 Implementing Motor Unit Number Index (MUNIX) in a large clinical trial: Real world experience from 27 centres**
- Christoph Neuwirth, MD*, Nathalie Braun, MD, PhD, Kristl G. Claeys, MD, PhD, Robert Bucelli, MD, PhD, Christina Fournier, MD, Mark Bromberg, MD, Susanne Petri, MD, Stephan Goedee, MD, Timothée Lenglet, MD, Ron Leppanen, MD, Antonio Canosa, MD, Ira Goodman, MD, Muhammad Al-Lozi, MD, Takuya Ohkubo MD, PhD, Annemarie Hübers, MD, Nazem Atassi, MD, Agessandro Abrahao, MD, MSc, Andreas Funke, MD, Martin Appelfeller, Tech, Anke Tümmmler, Tech, Eoin Finegan, MD, Jonathan D. Glass, MD, Suma Babu, MD, Shafeeq S. Ladha, MD, Olga Kwast-Rabben, MD, PhD, Raul Juntas-Morales, MD, Amina Coffey, MD, Vinay Chaudhry, MD, Tuan Vu, MD, Chow Saephanh, Tech, Colleen Newhard, Tech, Marion Zakrzewski, Tech, Esther Rosier, Tech, Nancy Hamel, Tech, Divisha Raheja, MD, Jesper Raaijman, MD, Toby Ferguson, MD, and Markus Weber, MD
- A36 Discovery and development of diagnostics and therapeutics for TDP-43 proteinopathies**
- Tariq Afroz*, Tamara Seredenina, Vincent Darmency, Cedric Boudou, Jacqueline Kocher, Mayank Chauhan, Anthony Marchand, Heiko Kroth, Ajay Purohit, David Paterson, Laurent Martarello, Manuela Neumann, Jan Stoehr, Andrea Pfeifer, Andreas Muhs

- A37** Cervical spinal cord comparisons based on T1-weighted MRI in ALS
Hannelore K. van der Burgh*, Jil M. Meier, Henk-Jan Westenberg, Martijn P. van den Heuvel, Leonard H. van den Berg
- A38** Analysis of GAP-43 expression in differentially vulnerable muscles in two mouse models of motor neuron disease
Laura H. Comley*, Jik Nijssen and Eva Hedlund
- A39** Mutations in FUS lead to axonal and synaptic changes in a zebrafish model and primary cortical neurons
Shaakir Salam, Prof. C. Houart, Dr. C. A. Vance
- A40** Deciphering the dual neuroprotective/neurotoxic role of FGF-2 in SOD1G93A ALS mice in vitro and in vivo
Ekaterini Kefalakes*, Sebastian Boeselt, Anastasia Sarikidi, Miren Ettcheto, Franziska Bursch, Maximilian Naujock, Nancy Stanslowsky, Martin Schmuck, Marta Barenys, Florian Wegner, Claudia Grothe, Susanne Petri
- A41** Blocking Carnitine palmitoyl-transferase 1 (CPT1) potentially delays disease progression in the SOD1 G93A mouse model
Michael Sloth Trabjerg*, Dennis Christian Andersen, John Dirk Nieland
- A42** Inhibition of B-Glucocerebrosidase activity preserves motor unit integrity in a mouse model of amyotrophic lateral sclerosis
Bouscary A*, Mosbach A, Spedding M, Loeffler JP, Henriques A
- A43** Study of the mechanisms leading to immune disorder in C9orf72 deficient mice
Camille Corbier*, Angéline Gaucherot, Peggy Kirstetter, Nicolas Charlet-Berguerand
- A44** The oculomotor-restricted protein Synaptotagmin 13 protects motor neurons from degeneration in ALS
Monica Nizzardo*, Federica Rizzo, Michela Taiana, Julio Aguila Benitez, Jik Nijssen, Ilary Allodi, Valentina Melzi, Roberto Del Bo, Nereo Bresolin, Giacomo Pietro Comi, Eva Hedlund, Stefania Corti

- A45** Newly established ALS model of long-living double mutant hSOD1/RAG2/-/- mice could be attractive for testing therapeutic utility of human stem cells
Malgorzata Majchrzak*, Luiza Stanaszek, Piotr Walczak, Miroslaw Janowski, Barbara Lukomska
- A46** MIF inhibits the formation and toxicity of misfolded SOD1 amyloid aggregates: Implications for familial ALS
Argueti. S*Shvil N, Banerjee V, Zoltsman G, Shani T, Kahn J, Abu-Hamad S, Papo N, Engel S,4, Bernhagen J, Israelson A
- A47** Determination of the role of CorticoSpinal Motor Neurons in ALS onset and progression
Thibaut Burg*, Mathieu Fischer, Caroline Rouaux
- A48** UBA1/GARS-dependent pathways drive sensory-motor connectivity defects in spinal muscular atrophy
Hannah K Shorrock, Dinja van der Hoorn, Penelope J Boyd, Maica Llaveró Hurtado, Douglas J Lamont, Brunhilde Wirth, James N Sleight, Giampietro Schiavo, Thomas M Wishart, Ewout JN Groen*, Thomas H Gillingwater
- A49** Mitochondrial abnormalities & disruption of the neuromuscular junction precede the clinical phenotype & motor neuron loss in hFUSWT transgenic mice
Eva So*, Jacqueline C Mitchell, Caroline Memmi, George Chennell, Gema Vizcay-Barrena, Leanne Allison, Christopher E Shaw, Caroline Vance
- A50** The Crym-CreERT2 mouse line to study the role of corticospinal motor neurons in ALS
Jelena Scekcic-Zahirovic*, Mathieu Fischer, Caroline Rouaux
- A51** Oxidation resistance 1 (OXR1) is neuroprotective in cellular and animal models of amyotrophic lateral sclerosis
Matthew Williamson, Mattéa Finelli*, David Gordon, Kevin Talbot, Kay Davies, Peter Oliver

- A52 Genetic and pharmacological effects of mGlu5 receptor blockade in the SOD1G93A mouse model of amyotrophic lateral sclerosis**
Marco Milanese, Tizana Bonifacino, Francesca Provenzano, Claudia Rebosio, Carola Torazza, Francesca Ferrari, Aldamaria Puliti, Marcello Melone, Giambattista Bonanno
- A53 Characterization of a novel FUS zebrafish model to study the ALS-FTD spectrum**
Annis-Rayan Bourefis*, Maria-Letizia Campanari, Doris-Lou Demy, Edor Kabashi
- A54 Translating ribosome affinity purification from C9orf72- ALS/FTD patient-derived iPSC motor neurons**
Chaitra Sathyaprakash, Jakub Scaber, Nidaa Ababneh, Ana Candalija Ruxandra Dafinca, Kevin Talbot
- A55 Glutamate receptor properties and intracellular calcium dynamics of ALS iPSC derived motor neurons**
Franziska Bursch*, Maximilian Naujock, Norman Kalmbach, Selma Staeger, Andreas Hermann, Susanne Petri, Florian Wegner
- A56 Modulation of the adult SOD1G93A astrocyte phenotype by treatment with exosome-shuttled miRNAs derived from mesenchymal stem cells**
Francesca Provenzano*, Marco Milanese, Debora Giunti, Carola Torazza, Chiara Marini, Cesare Usai, Nicole Kerlero de Rosbo, Antonio Uccelli, Giambattista Bonanno
- A57 Human induced pluripotent stem cells-derived motor neurons for modelling age-related pathophysiological mechanisms of ALS**
Ricardo Romero-Guevara*, Victoria Ayala, Pascual Torres, Ana B Granado-Serrano, Chiara Rossi, Bahira Zammou, Jordi Boada, Rebeca Berdún, Mariona Jové, Monica Povedano, Reinald Pamplona, Manel Portero-Otin

- A58 Cellular pathways dysregulated by mutant FUS in CRISPR/Cas9 cell models**
Haiyan An*, Tatyana Shelkovernikova, and Vladimir Buchman
- A59 Impaired DNA damage response signaling by FUS- NLS mutations leads to neurodegeneration and FUS aggregate formation**
Marcel Naumann*, Arun Pal, Anand Goswami, Xenia Lojewski, Julia Japtok, Anne Vehlow, Maximilian Naujock, René Günther, Mengmeng Jin, Nancy Stanslowsky, Peter Reinhardt, Jared Sternecker, Marie Frickenhaus, Francisco Pan-Montojo, Erik Storkebaum, Ina Poser, Axel Freischmidt, Jochen H. Weishaupt, Karlheinz Holzmann, Dirk Troost, Albert C. Ludolph, Tobias M. Boeckers, Stefan Liebau, Susanne Petri, Nils Cordes, Anthony A. Hyman, Florian Wegner, Stephan W. Grill, Joachim Weis, Alexander Storch, Andreas Hermann
- A60 The anterior cingulate cortex in the ALS-FTD spectrum: post mortem MRI-histology correlation**
Anna Leone (1)*, Ricarda A. L. Menke (1,2), Benjamin C. Tendler (1,2), Istvan N. Huszar (1,2), Mark Jenkinson (1,2), Sean Foxley (1,2,3), Martin R. Turner (1,2), Karla L. Miller (1,2), Olaf Ansorge (1), Menuka Pallegage-Gamarallage (1)
- A61 Safety and efficacy of human embryonic stem cells derived astrocytes following intrathecal transplantation in SOD1G93A and NSG animal models**
Izrael Michal, Slutsky Shalom Guy, Tamar Admoni, Granit Avital, Hasson Arik, Joseph Itskovitz-Eldor, Krush Paker Lena, Kuperstein Graciela, Lavon Neta, Shiran Yehezkel Ionescu, Solmesky Javier Leonardo, Zaguri Rachel, Zhuravlev Alina, Ella Volman, Chebath Judith and Revel Michel

Seminar Room A:

- C01 Cognitive impairment in facial onset sensory and motor neuronopathy (FOSMN)**
Andrew W Barritt*, Marwa Elamin, Stuart J Anderson, Rebecca Broad, Angus Nisbet and P Nigel Leigh
- C02 Amyotrophic lateral sclerosis related cognitive deficits are a marker of localized TDP-43 cerebral pathology**
Jenna M. Gregory*, Karina McDade, Thomas Bak, Suvankar Pal, Siddharthan Chandran, Colin Smith and Sharon Abrahams
- C03 Neuropsychiatric symptoms in MND patients and their family members**
Caroline McHutchison*, Andrew McIntosh, Marie Ryan, Emmet Costello, Mark Heverin, Shuna Coville, Suvankar Pal, Siddharthan Chandran, Orla Hardiman, Sharon Abrahams
- C04 Emotional apathy and awareness in frontotemporal dementia**
Ratko Radakovic*, Shuna Colville, Denise Cranley, John Starr, Suvankar Pal, Sharon Abrahams
- C05 The profile of language changes in Amyotrophic Lateral Sclerosis: results from a population-based study of incident cases**
Marta Pinto-Grau*^{M.Psych(ClinNeuroPsych)}, Sarah O'Connor MSc, Lisa Murphy MSc, Emmet Costello BSc, Mark Heverin MSc, Alice Vajda PhD, Niall Pender PhD, Orla Hardiman MD FRCPI FTCD MRIA
- C06 The relationship between apathy subtypes, quality of life and caregiver burden in amyotrophic lateral sclerosis – work in progress**
Debbie Gray*, Kaitlin Dudley, Eneida Mioshi, David Dick Giulia Melchiorre, Harry Gordon, Judith Newton, Shuna Colville, Suvankar Pal, Siddharthan Chandran, Zachary Simmons, Ratko Radakovic, Sharon Abrahams

- C07 Stage of prolonged survival with riluzole treatment in patients with amyotrophic lateral sclerosis: A retrospective analysis**
Ton Fang BSc, Ahmad Al Khleifat MB BCh, Jacques-Henri Meurgey BSc, Ashley Jones PhD, Professor P Nigel Leigh PhD, Professor Gilbert Bensimon PhD, Professor Ammar Al-Chalabi PhD*
- C08 What do people living with ALS in Ireland think about dysphagia and what do they want from dysphagia-related health services? A qualitative study**
Dr. Dominika Lisiecka*, Dr. Helen Kelly, Prof. Jeanne Jackson
- C09 Causes of death in amyotrophic lateral sclerosis. Results from the Rhineland-Palatinate ALS registry**
Joachim Wolf*, Anton Safer, Johannes Wöhrle, Frederick Palm, Wilfred Nix, Matthias Maschke, Armin Grau
- C10 Flail arm syndrome – diagnostic challenge: A case report**
Zoran Vukojevic*, Aleksandra Dominovic Kovacevic, Sanja Grgic, Dusko Racic, Srdjan Mavija
- C11 A first year in life of Zagreb – ENCALs centre**
Ervin Bilić*, Mirela Hančević, Hrvoje Bilić, Branimir Ivan Šepec, Barbara Sitaš, Rujana Šprljan Alfirev, Marina Petrović, Gordana Pavliša, Nadežda Rustemović, Andreja Klokočki, Davorka Vranješ
- C12 Enhancing the efficacy of non-invasive ventilation for patients with amyotrophic lateral sclerosis**
David O'Brien*, Esther Hobson, Theodoros Stavroulakis, Susan Baxter, Stephen Bianchi, Paul Norman, Mark Elliott, Christopher McDermott
- C13 The radiological spectrum of motor-neuron diseases: A multimodal spinal cord study**
Giorgia Querin, Mohamed Mounir El Mendili, Peter Bede, Véronique Marchand-Pauvert, Pierre-François Pradat

- C14** Computational speech analysis as a tool for early detection of bulbar dysfunction in ALS patients
 *Cascales Lahoz D; Guillén-Solà A; Serra Martínez M; Bertran Recasens, B; Alemán Cabrera F; Martínez-Llorens J; Balañá Corberó A; Villatoro Moreno M; Rubio Pérez MA
- C15** Prize4life ALS mobile analyzer: Measuring ALS progression
 Noa Davis*, Yehuda Snir, Idit Ron, Iris Perl, Shay Rishoni
- C16** Clinical characteristics of amyotrophic lateral sclerosis patients from ALS center of the Republic of Srpska: case series and a review of literature
 Srdjan Mavija*, Aleksandra Dominovic- Kovacevic, Zoran Vukojevic, Dusko Racic, Sanja Grgic
- C17** Smoking and ALS: Investigation of association followed by Mendelian randomisation analysis to assess causality
 Sarah Opie-Martin*, Pamela J Shaw, Christopher E Shaw, Neil Pearce, Karen E Morrison, George Davey-Smith, Gibran Hemani, Ashley Jones, Ammar Al-Chalabi
- C18** Genotypes and phenotypes of Amyotrophic Lateral Sclerosis in Mongolia
 Tselmen Daria*, Kathrin Müller, Zolzaya Doljoo, Suvd Oidovdorj, Sarantsetseg Turbat, Erdenechimeg Yadamsuren, BolormaaD, OyungerelB, Chimeglkham Banzrai, Baasanjav Damchaa, Patrick Weydt, Elmar Pinkhardt, Angela Rosenbohm, Munkhtuvshin Namid, Josef Högel, Guntram Borck, Munkhbat Batmunkh, Albert Ludolph, Jochen H.Weishaupt
- C19** Euro-MOTOR: A multicentre population-based case-control study of dusts, gases and fumes as risk factors for ALS
 Visser AE, Rooney JPK, D'Ovidio F, Peters S*, Vermeulen R, Beghi E, Chiò A, Veldink J, Logroscino G, Hardiman O, van den Berg L, for the Euro-MOTOR consortium

- C20** Estimating future MND prevalence in the context of population change and putative new treatments, using a south London urban population
 Alison Gowland*, Sarah Opie-Martin, Ashley Jones, Ammar Al-Chalabi
- C21** New insights into the pathophysiology of fasciculations in amyotrophic lateral sclerosis: An ultrasound study
 J.F. Vázquez-Costa*, M. Campins-Romeu, J. J. Martínez-Payá, J.I. Tembl, M.E. del Baño-Aledo, J. Ríos-Díaz, V. Fornés-Ferrer, M.J. Chumillas, T Sevilla
- C22** Stability and change: Needs of informal ALS caregivers across the caregiving course
 M Galvin, S Carney, B Corr, N Pender, O Hardiman
- C23** Possible environmental factors associated with spatial clustering of ALS patients with C9orf72 mutations
 Abdelilah Assialioui*, María A Barceló, Ana Núñez, Raúl Domínguez, Sara Bernal, Marc Saez, Mónica Povedano
- C24** Pathogenic biological routes common between sporadic amyotrophic lateral sclerosis (ALS) and ubiquitin frontotemporal lobar degeneration (FTLD-U)
 Marina Iridoy, Leyre Martinez, Ivonne Jericó, Irene Zubiri, María Victoria Zelaya, Mercedes Lachén-Montes, Karina Ausín, Andrea González-Morales, Enrique Santamaría, Joaquín Fernández Irigoyen
- C25** Gene expression profile in frontal cortex in sporadic frontotemporal lobar degeneration-TDP
 Pol Andrés-Benito, Ellen Gelpi, Mónica Povedano*, Raúl Domínguez, Gabriel Santpere, Isidre Ferrer
- C26** Capturing ALS: LCM-Seq for single-cell spatial transcriptomic profiling of human spinal motor neurons in ALS
 Christoph Schweingruber*, Julio Aguila Benitez, Gill Pollmeier, Nigel Kee, Eva Hedlund

C27 An ALS case with 38 (G4C2)-repeats in C9orf72 and sparse DPR and TDP-43 pathology

Lieselot Dedeene*, Evelien Van Schoor, Koen Poesen#, Dietmar Rudolf Thal#, Philip Van Damme#

Authors contributed equally

C28 Inhibition of Rho Kinase (ROCK) with Fasudil as disease-modifying treatment for ALS – a phase IIa clinical trial (ROCK-ALS)

Paul Lingor*, Markus Weber, William Camu, Magdalena Kuzma-Kozakiewicz, Tim Friede, Jan C. Koch

C29 Leveraging crowdsourcing to advance novel therapeutic targets for ALS: The Teva CNS Target Identification Crowdsourcing Initiative

Sara Shnider, Lucie Bruijn, George Yohrling, Ian Reynolds, Susan Browne, David Wilson, Jennifer Stratton, Neta Zach*

C30 The GPR17 receptor as a new potential pharmacological target to restore oligodendroglial dysfunction in amyotrophic lateral sclerosis

Elisabetta Bonfanti*, Marco Milanese, Erica Morgante, Stefano Raffaele, Tiziana Bonifacino, Giambattista Bonanno, Maria Pia Abbracchio, Marta Fumagalli

C31 Targeting TGF- β RII to treat Amyotrophic Lateral Sclerosis by a 3rd generation antisense oligonucleotide – in vivo safety and efficacy

Sebastian Peters, Eva Zitzelsperger, Sabrina Kuespert, Rosmarie Heydn, Sven Korte, Siw Johannesen, Ohnmar Hsam, Tim-Henrik Bruun, Ulrich Bogdahn

C32 A placebo-controlled study to evaluate efficacy and safety of Clenbuterol in patients with Spinal and Bulbar Muscular Atrophy (SBMA)

Giorgia Querin, Elisabetta Pupillo, Ilaria Martinelli, Matteo Gizzi, Cinzia Bertolin, Elena Pegoraro, Maria Pennuto (3,4), Ettore Beghi, Gianni Sorarù

C33 Masitinib therapeutically targets sciatic nerve pathology associated with paralysis progression in an inherited ALS model

Emiliano Trias, Valentina Varela, Romina Barreto-Núñez, Sofía Ibarburu, Mariángeles Kovacs, Ivan C. Moura, Olivier Hermine, Joseph S. Beckman, Luis Barbeito*

C34 Masitinib in the treatment of amyotrophic lateral sclerosis (ALS): Update on confirmatory phase 3 trial (AB14008)

Angela Genge*, Jesus S. Mora, Vincent Arnold, Colin D. Mansfield, Olivier Hermine

C35 Initiation of masitinib at a less severe stage of disease produces greater treatment-effect: Subgroup analyses from masitinib study AB10015

Jesus S. Mora*, Angela Genge, (On behalf of the AB10015 Study Group), Colin D. Mansfield, Olivier Hermine

C36 Sensitivity analyses from the first phase 3 clinical study of masitinib (AB10015) in ALS demonstrate robustness of the positive primary analysis

Olivier Hermine*, Vincent Arnold, Colin D. Mansfield, Jesus S. Mora, Angela Genge Genge (On behalf of the AB10015 Study Group)

C37 People living with ALS and their caregivers' input into drug development

*Amy Laverdiere, Bonnie Charpentier, Jennifer Petrillo, Kristina Bowyer, Calaneet Balas, Allison D. Martin, David Zook, James Valentine, Lucie Bruijn

C38 Long-term Outcome of Filgrastim (G-CSF) in ALS Patients

S. Johannesen*, B. Budeus, T-H. Bruun, S. Peters, Sabrina Küspert, A-L. Meier, I. Kobor, O. Hsam, AM. Wirth, W. Schulte-Mattler, S. Iberl, A. Schneider, W. Koch, U. Bogdahn

Poster Session 2: Thursday 21st June, 17:45 – 19:15

Entrance Hall:

- B01** Discovery and characterisation of a novel genetic variant of amyotrophic lateral sclerosis
Tobias Moll*, Dr Johnathan Cooper-Knock, Dr Alexander Beer, Dr Henry Robbins, Dr Adrian Higginbottom, Dr Guillaume Hautbergue, Dr Lydia Castelli, Dr Tennore Ramesh, Dr Janine Kirby, Prof Dame Pamela Shaw
- B02** Characterisation of a cohort of adult onset Middle Eastern ALS cases for mutations in known ALS genes
Nada Al-Ahmady*, Martina de Majo, Simon Topp, Chun-Hao Wong, Christopher Shaw, Marc Gotkine, Bradley Smith
- B03** Genetic analysis of a French cohort of patients with sporadic amyotrophic lateral sclerosis (SALS)
Patrick Vourc'h*, Sylviane Marouillat, Céline Brulard, Cindy Maurel, Catherine Antar, Rose-Anne Thépault, Hélène Blasco, Stéphane Beltran, Philippe Couratier, Christian Andres, Philippe Corcia
- B04** Next Generation Sequencing in familial ALS and/or FTD Spanish patients
Daniel Borrego-Hernández*, María del Carmen Herrero-Manso, Pilar Cordero-Vázquez, Alberto Villarejo-Galende, Sara Llamas-Velasco, Marta González-Sánchez, Alexandra Juárez-Rufián, Gabriel García-Salamero, Miguel Ángel Martín-Casanueva, Jesús Esteban-Pérez, Alberto García-Redondo
- B05** Another pleiotropic gene, KIF5A, implicated in Turkish families with ALS and HSP
Ceren Tunca*, Fulya Akçimen, Cemile Koçoğlu, Cemre Coşkun, Aslı Gündoğdu-Eken, Ersin Tan, Azize Esra Gürsoy, Sevda Erer, Mehmet Zarifoğlu, A. Nazlı Başak

- B06** Dissecting the role of two novel ALS risk genes NEK1 and C21orf2
Pavol Zelina*, Christy Kolsteeg, Bram Schipper, Anna de Ruiter, Leonard H. Van den Berg, Jan H. Veldink, R. Jeroen Pasterkamp
- B07** CAG Intermediate-repeats expansion in ATXN2 associated with increase of risk in ALS
Jennifer Christine Hengeveld*, Leonie Dupuis, Alice Vajda, Mark Heverin, Dan Bradley, Orla Hardiman, Russell Lewis McLaughlin
- B08** ALSScan: A framework for the analysis and visualisation of DNA NGS data of ALS patients
A Iacoangeli*, A Al Khleifat, W Sproviero, A Shatunov, AR Jones, SL Morgan, A Pittman, RJ Dobson, SJ Newhouse and A Al-Chalabi
- B09** Estimating copy number of SMN1 and SMN2 gene using whole genome sequencing ALS survival
Matthieu Moisse*, on behalf of Project Mine Sequencing Consortium
- B10** Determining the risk of ALS in relatives of patients with ALS: A study of re-categorisation rates from "sporadic ALS" to "familial ALS"
Marie Ryan*, Mark Heverin, Mark Doherty, Niall Pender, Russell McLaughlin, Orla Hardiman
- B11** Deciphering the respective contribution of macrophages and microglia to human motor neuron degeneration in ALS
*Elise Liu, Cynthia Lefebvre, François Salachas, Lucette Lacomblez, Christian Lobsiger, Stéphanie Millecamps, Séverine Boillée, Delphine Bohl
- B12** Nuclear mRNA export factor GANP in lower motor neuron degeneration
Rosa Woldegebriel*, Emil Ylikallio, Markus Sainio, Laura Mäenpää, Carsten Bonnemann, Sandra Donkervoort, Diana Bharucha-Goebel, Maie Walsh, Zornitza Stark, Marie-José van den Boogaard, Pirjo Isohanni, Tuula Lönnqvist, Henna Tynismäa

- B13 Bioenergetic profiling of SOD1 patient models of ALS**
Scott P. Allen, Ryan Woof*
- B14 Chaperone mediated autophagy respond to dynein mediated transport inhibition in motor neuron diseases**
Riccardo Cristofani*, Valeria Crippa, Maria Elena Cicardi, Paola Rusmini, Marco Meroni, Veronica Ferrari, Barbara Tedesco, Mariarita Galbiati, Gessica Sala, Carlo Ferrarese, Angelo Poletti
- B15 Neuron-specific non-canonical IFN-gamma pathway in ALS**
Saikata Sengupta*, Thanh Tu Le, Vedrana Tadic, Silke Keiner, Beatrice Stubendorff, Tino Prell, Otto W Witte, Julian Grosskreutz
- B16 TDP-43 protein and SUMOylation**
Anna Maria Maraschi, Valentina Gumina, Claudia Colombrita, Clara Volpe, Marco Feligioni, Vincenzo Silani, Antonia Ratti A*
- B17 Regulation of exosome secretion to diminish toxicity of the muscle secretome in ALS myotubes**
Owen Connolly*, Virginie Mariot, Laura Le Gall, Geetha Vijayakumar, Pierre Francois Pradat, Julie Dumonceaux, William J Duddy, Stephanie Duguez
- B18 Perinuclear accumulation of SOD1 in sporadic ALS myotubes, and its impact on cell-cell communication**
Vanessa Milla*, Laura Le Gall, Virginie Mariot, Geetha Vijayakumar, Pierre Francois Pradat, Julie Dumonceaux, William J Duddy, Stephanie Duguez
- B19 Paraspeckle-like properties of G4C2 RNA foci**
Ana Bajc Česnik, Simona Darovic, Sonja Prpar Mihevc, Maja Štalekar, Mirjana Malnar, Helena Motaln, Youn-Bok Lee, Julija Mazej, Jure Pohleven, Markus Grosch, Miha Modic, Marko Fonovič, Boris Turk, Micha Drukker, Christopher E. Shaw, Boris Rogelj*

- B20 ALS associated mutations impair AchR clustering in skeletal muscle**
Maria Demestre, Julia Higelin, Frank Fillies, Erik Storkebaum, Luc Dupuis, Tobias Boeckers
- B21 Mitochondrial location of nuclear proteins: A common mechanism for ALS-related cellular stress?**
Chiara Rossi*, Pascual Torres, Victoria Ayala, Jordi Boada, Reinald Pamplona, and Manuel Portero-Otín
- B22 Modeling and mechanistic insights in C9orf72-mediated neurodegeneration**
Saul Herranz-Martin, Callum Walker, Evangelia Karyka, Pamela J Shaw, Sherif El-Khamisy, Mimoun Azzouz
- B23 Neuregulin 1 reduces motoneuron cell death and promotes neurite growth in an in vitro model of motoneuron degeneration**
*Guillem Mòdol-Caballero, Daniel Santos, Xavier Navarro, Mireia Herrando-Grabulosa
- B24 Neuroimaging needs time to shine: Structural brain involvement in a multimodal longitudinal study in ALS**
Hannelore van der Burgh*†, Renée Walhout †, Henk-Jan Westeneng, Ruben Schmidt, Jeroen Hendrikse, Jan H. Veldink, Martijn P. van den Heuvel, Leonard H. van den Berg
- B25 Utilizing network medicine approaches to explore the role of muscle in ALS**
Stephen Morgan*, Stephanie Duguez, William J Duddy
- B26 Dying-forward or dying-back – tract-type specific fractional anisotropy as a potential biomarker for ALS**
Anna M. Wirth*, Siw Johannesen, Ines Kobor, Ohnmar Hsam, Andrei Khomenko, Dobri Baldaranov, Mark W. Greenlee, Tim-H. Bruun, Ulrich Bogdahn

B27 Secretion of toxic exosomes by muscle cells of ALS patients: Interaction with FUS

Stephanie Duguez*, Laura Le Gall, William J Duddy, Sylvain Roquevière, Virginie Mariot, Olivier Lucas Blandine Madji Hounoum, Jeanne Lainé, Julie Dumonceaux, Pascal Leblanc, Gisele Ouandaogo, Laura Robelin, Francesca Ratti, Alexandre Mejat, Francois Salachas, Gillian Butler Browne, Jean Philippe Loeffler, Jose-Luis Gonzales De Aguilar, Helene Blasco, Cedric Raoul, Cecile Martinat, Pierre Francois Pradat

B28 Peak cough flow is a good biomarker that correlates with disease progression and survival in ALS

Elisa De Mattia*, Andrea Lizio, Giulia Sannicolò, Francesca Gerardi, Marino Iatomasi, Caterina Conti, Fabrizio Rao, Valeria Sansone, Christian Lunetta

B29 Brain morphology is associated with C9orf72 mutation and regional gene expression

Hannelore K van der Burgh†, Kevin van Veenhuijzen†*, Henk-Jan Westeneng, Jan H Veldink, Leonard H van den Berg

† Authors contributed equally

B30 Prediagnostic elevated levels of phosphorylated neurofilament heavy chain in blood of patients with amyotrophic lateral sclerosis

Maxim De Schaepdryver*, Janne Goossens, Andreas Jeromin, Britta Brix, Rik Vandenberghe, Philip Van Damme, Koen Poesen

B31 Reading the patient's palm – The contrary pattern of hand muscle denervation in ALS and SMA

René Günther, Christoph Neuwirth, Jan Koch, Paul Lingor, Nathalie Braun, Robert Untucht, Markus Weber and Andreas Hermann

B32 Chromosome conformation signatures as a clinical tool for diagnosis, prognosis and disease understanding in ALS

M Salter, W Westra, W Elvidge, R Powell, J Back, D Mahecha, B Foulkes, Y Ruchiy, A Ramadass, F Grand, CR Lim, J Green, L Ossher, A Thompson, J Scaber, E Feneberg, M Cudkowicz, M Turner, K Talbot, E Hunter, A Akoulitchev*

B33 Could biochemical parameters and/or comorbidities support the prognosis of ALS?

Nora Molina*, Laura Moreno-Martínez, Leticia Moreno-García, Miriam de la Torre, Raquel Manzano, Pilar Zaragoza, Rosario Osta, Pilar Larrodé, Ana Cristina Calvo

B34 Functional interhemispheric connectivity of motor cortices in ALS using EEG source analysis

Stefan Dukic*, Roisin McMackin, Teresa Buxo, Christina Schuster, Mark Heverin, Peter Bede, Muthuraman Muthuraman, Bahman Nasserolelami, Edmund Lalor, Orla Hardiman

B35 Optometric analysis in amyotrophic lateral sclerosis patients

Federica Cozza*, Stefania Bona, Giordana Donvito, Andrea Lizio, Valeria Ada Sansone, Christian Lunetta

B36 Assessing cortico-muscular communication in motor neuron disease

Amina Coffey, Teresa Buxo*, Stefan Dukic, Roisin McMackin, Mark Heverin, Madeleine Lowery, Richard G. Carson, Edmund Lalor, Bahman Nasserolelami, Orla Hardiman

B37 Combined metabolomics and lipidomics analyzes of fibroblasts from ALS patients

Blasco H*, Veyrat-Durebex C*, Caudron P, Bris C, Bocca C, Chupin S, Corcia P, Vourc'h P, Funalot B, Andres CR, Lenaers G, Couratier P, Reynier P

B38 Upregulation of miR-146a in ALS mouse cortical astrocytes decrease their reactivity and prevents miR-155 transfer into exosomes

Marta Barbosa*, Cátia Gomes, Ana Rita Vaz, Dora Brites

B39 Characterization of aged TBK1 deficient mice

Clara Bruno*, Kirsten Sieverding, Albert C. Ludolph, David Brenner and Jochen H. Weishaupt

- B40** A zebrafish model implicates hnRNPK and hnRNPA3 in C9orf72 RNA toxicity
Elke Braems*, Bart Swinnen, Wim Robberecht, Ludo Van Den Bosch
- B41** Features of frontotemporal lobar degeneration in the cyclophilin A knock-out mice
Laura Pasetto*, Silvia Pozzi, Edoardo Micotti, Mirjana Carli, Gianluigi Forloni and Valentina Bonetto
- B42** Developing vertebrate models to highlight the functional relevance of NEFL in ALS pathogenesis
Doris Lou Demy*, Maria-Letizia Campanari, Raphaël Munoz-Ruiz, Edor Kabashi
- B43** Inhibition of histone deacetylases improves motor performances and extends survival in a FUS ALS mouse model
Elisabeth Rossaert*, Eveliina Pollari#, Matthieu Moisse, Tom Jaspers, Lawrence Van Helleputte, Katrien De Bock, Tijs Vandoorne, Ludo Van Den Bosch
- # Authors contributed equally
- B44** Targeted Drosophila screen reinforces nucleocytoplasmic transport to DPR pathology in C9orf72-associated ALS/FTLD
Mathias De Decker*, Joni Vanneste*, Steven Boeynaems, Elke Bogaert, Thomas Vercruysse, Jolien Steyaert, Wendy Scheveneels, Dirk Daelemans, Wim Robberecht, Philip Van Damme, Ludo Van Den Bosch
- B45** Acetylation state of RelA modulated by epigenetic drugs prolongs survival and induces a neuroprotective effect on ALS murine model
Lorenzo Schiaffino*, Roberta Bonafede, Ilaria Scambi, Edoardo Parrella, Marina Pizzi, Raffaella Mariotti
- B46** Impaired stress granule dynamics in motor neurons from a novel mouse model of TDP-43-associated ALS
D. Gordon*, R. Dafinca, L. Farrimond, J. Alegre-Abarrategui, B. Davies, O. Ansorge, R. Wade-Martins and K. Talbot

- B47** Identification and validation of nuclear and cytoplasmic TDP-43 protein binding partners in a mouse model of ALS
Dr Alinda R Fernandes, Jacqueline CMitchell, Chun Hao Wong, Dr Micheal J O'Neill, Prof Chris E Shaw
- B48** Chemotherapeutic agent 5-Fluorouracil improves performance of mutant SOD1 mouse model of ALS
Amaya Rando, Miriam de la Torre, Pilar Zaragoza, Antonio Musaro, Sara Hernández, Josep E. Esquerda, Ana Martinez, Xavier Navarro, Ana Cristina Calvo*, Janne M. Toivonen, Rosario Osta
- B49** Effects of gamma-carbolines on pathology caused by expression of C-terminally truncated human FUS in the nervous system of transgenic mice
Aleksey A. Ustyugov, Galina Limorenko, Valeria Goloborsheva, Tamara A. Ivanova, Kirill Chaprov, Ekaterina Vikhareva, Maria Chicheva, Pavel Mazin, Sergey O. Bachurin, Vladimir L. Buchman*
- B50** The effect of intermediate polyQ expansions in Ataxin-2 on TDP-43 pathology in vivo
Emma Sudria-Lopez*, Dianne M. van den Heuvel, Teresa Calafat Pla, Giel Korsten, Christiaan van der Meer, Mark H. Broekhoven, David Gordon, Kevin Talbot, Leonard H. van den Berg and R. Jeroen Pasterkamp
- B51** Conditional deletion of Id2 in oligodendrocyte progenitor cells does not ameliorate disease outcome in SOD1G93A mice
Caroline Eykens*, Cathy Jensen, Antonio Iavarone, Philip Van Damme (1,2,4), Ludo Van Den Bosch, Wim Robberecht
- B52** Bespoke mouse models of ALS
Remya R. Nair*, Asif Nakhuda, Charlotte Tibbit, Samanta Gasco, Carmelo Milioto, Anny Devoy, Pietro Fratta, Adrian M. Isaacs, Thomas J. Cunningham #, and Elizabeth M. C. Fisher #

Authors contributed equally

- B53 A feedback loop between dipeptide repeat protein, TDP-43 and karyopherin- α mediates C9ORF72-related neurodegeneration**
D. A. Solomon, A. Stepto, W. H. Au, Y. Adachi, D. C. Diaper, R. Hall, A. Rekhi, A. Boudi, Y. -B. Lee, B. Smith, J. Bridi, G. Spinelli, J. Dearlove, D. M. Humphrey, J.-M. Gallo, C. Troakes, M. Fanto, M. Soller, B. Rogelj, R. B. Parsons, C. E. Shaw, T. Hortobagyi, & F. Hirth*
- B54 Mutations in TARDBP show axonal transport defects in induced pluripotent stem cell-derived motor neurons**
Raheem Fazal, Laura Fumagalli, Ann Swijsen, Mathias De Decker, Bart Swinnen, Matthieu Moisse, Elisabeth Rossaert, Robert Ciaran Prior, Wenting Guo, Ruben Boon, Pieter Vanden Berghe, Wim Robberecht, Catherine Verfaillie, Ludo Van Den Bosch, and Philip Van Damme
- B55 Design of an inducible system to test the toxicity of dipeptide repeats in C9orf72 iPSC-derived motor neurons from ALS patients**
Paola Barbagallo*, Sally Cowley, Ruxandra Dafinca, Kevin Talbot
- B56 C9orf72 iPS-derived motor neurons have altered cytosolic and mitochondrial calcium buffering**
Ruxandra Dafinca*, Nidaa Ababneh, Paola Barbagallo, Ana Candalija, Kevin Talbot
- B57 Using iPSC-derived motor neurons to explore protein misaccumulation and cellular dysfunction in motor neuron disease**
Jenny Greig*, Naomi Hartopp, Sebastien Paillusson, Graham Cocks, Chris Shaw
- B58 Development of a human stem cell-derived neuromuscular in vitro system**
Jik Nijssen, Gill Pollmeier*, Rein Hoogstraaten, Julio Cesar Aguila, Eva Hedlund

- B59 Motor neuron differentiation of iPSCs from peripheral blood of a TARDBP mutated ALS patient**
Patrizia Bossolasco*, Francesca Sassone, Valentina Gumina, Vincenzo Silani
- B60 Neuronal excitability of ALS patient-derived motor neurons**
Ann Swijsen*, Raheem Fazal, Laura Fumagalli, Tijs Vandoorne, Catherine Verfaillie, Ludo Van Den Bosch and Philip Van Damme
- B61 Ryanodine receptor and IP3 receptor role in the ER-mitochondria-calcium-cycle of IPSC derived ALS motor neurons**
Benjamin Vlad*, Vedrana Tadic, Saikata Sengupta, Beatrice Stubendorff, Otto W. Witte, Andreas Hermann, Julian Grosskreutz

Seminar Room A:

- D01** The effect of a healthcare training programme on clinical usage of the Edinburgh Cognitive and Behavioural ALS Screen (ECAS)
Faith Hodgins*, Steve Bell, Sharon Abrahams
- D02** Usability of eyetracking computer systems and impact on psychological wellbeing in patients with advanced amyotrophic lateral sclerosis
Katharina Linse, Elisa Aust, Wolfgang Rüger, Markus Joos, Henning Schmitz-Peiffer, Alexander Storch, Andreas Hermann
- D03** The Edinburgh Cognitive and Behavioural ALS Screen: Relationship to age, education, IQ and the Addenbrooke's Cognitive Examination-III
*Mónica M. De Icaza Valenzuela, Dr. Thomas H. Bak, Dr. Suvankar Pal, Professor Sharon Abrahams
- D04** Characterising psychological trauma resulting from being given a diagnosis of Motor Neuron Disease (MND)
Eleonora Volpato*, Deepti Marchment, Francesco Pagnini, Paolo Banfi, Laura H. Goldstein, Ammar Al-Chalabi
- D05** The Edinburgh Cognitive and Behavioural ALS Screen (ECAS) in Alzheimer's Disease and behavioural variant Frontotemporal Dementia
Mónica M. De Icaza Valenzuela*, Dr. Thomas H. Bak, Shuna Colville, Dr. Suvankar Pal, Professor Sharon Abrahams
- D06** The relationship between cognitive impairment and motor phenotypes in ALS: A population-based study
Cristina Moglia*, Andrea Calvo, Barbara Iazzolino, Antonio Canosa, Umberto Manera, Maria Francesca Sarnelli, Valentina Solara, Fabiola De Marchi, Letizia Mazzini, Fabrizio D'Ovidio, Adriano Chiò
- D07** Behavioural correlates of attentional function in ALS patients
Maher Zoubi, Marcel Daamen, Patrick Weydt, Xenia Kobeleva

- D08** The rate of weight loss at diagnosis in ALS is more important than BMI in predicting outcome
Maurizio Grassano*, Andrea Calvo, Antonio Canosa, Fabrizio D'Ovidio, Umberto Manera, Cristina Moglia, Adriano Chiò
- D09** Percutaneous endoscopic gastrostomy with noninvasive mechanical ventilation in patients with amyotrophic lateral sclerosis
Annete Zevallos, Ana Hernandez, Javier Sayas, Pilar Cordero, Jesús Esteban*
- D10** Organ donation after cardiac death in ALS patients: Protocol and experience in a tertiary center in Spain
A Martínez*, J.F. Vázquez Costa, J Galán, R Domenech Clar, M León Fabregas, T Sevilla
- D11** Estimating the overall prevalence of ALS and of different stages of cognitive impairment in Catalonia. A retrospective population cohort design
Maria A Barceló, Janina Turón-Sans, Marc Saez*, Jordi Gascón-Bayarri, Raúl Domínguez, Andrés Paipa, Mònica Povedano
- D12** The MotOrtose project – Development of a motorized upper extremity orthosis for ALS
Tore W Meisingset*, Geir Bråthen, Terje K Lien
- D13** The development of a Norwegian ALS registry
Tore W. Meisingset*, Geir Bråthen
- D14** Do ALS motor phenotypes develop stochastically?
Calvo Andrea*, D'Ovidio Fabrizio, Grassano Maurizio, Manera Umberto, Vasta Rosario, Canosa Antonio, Moglia Cristina, Chiò Adriano

- D15 A pilot study of voice banking in amyotrophic lateral sclerosis patients**
Giordana Donvito*, Lucia Catherine Greco, Andrea Lizio, Stefania Bona, Valeria Ada Sansone, Elena Carraro, Christian Lunetta
- D16 Design and implementation of an augmented reality device for environment control in amyotrophic lateral sclerosis patients**
Stefania Bona*, Giordana Donvito, Paolo Vaccari, Federica Cozza, Marco Ciboldi, Valeria Ada Sansone, Christian Lunetta
- D17 The effects of intensity, duration and time-since-quitting on the association between total cigarette smoking and ALS risk: Euro-MOTOR**
Susan Peters*, Anne E Visser, Jelle Vlaanderen, James PK Rooney, Fabrizio D'Ovidio, Lützen Portengen, Ettore Beghi, Adriano Chiò, Giancarlo Logroscino, Orla Hardiman, Jan Veldink, Leonard van den Berg, Roel Vermeulen
- D18 Factors influencing diagnosis delay in ALS patients referred to a secondary center for neuromuscular diseases in Poland.**
K.Szacka*, M.Kuzma-Kozakiewicz
- D19 Care Audit Research and Evaluation for MND (CARE-MND): An electronic platform for motor neurone disease in Scotland**
Danielle Leighton*, Judith Newton, Harry Gordon, Giulia Melchiorre, Shuna Colville, Laura Stephenson, Richard Davenport, Ian Morrison, George Gorrie, Robert Swingle, Siddharthan Chandran, Suvankar Pal
- D20 Religiosity in Polish and German patients with amyotrophic lateral sclerosis**
Katarzyna Ciećwierska, Krzysztof Nieporęcki, Anna Maksymowicz-Śliwińska, Maksymilian Bielecki, Peter M. Andersen, Albert C. Ludolph, Dorothee Lule, Magdalena Kuźma-Kozakiewicz
- D21 Modelling individual amyotrophic lateral sclerosis disease courses in different centers using the D50 progression model**
Nayana Gaur, Beatrice Stubendorff, Torsten Grehl, Matthieu Moisse, Philip van Damme, Christoph Neuwirth, Markus Weber, Umberto Manera, Adriano Chio, Jan Veldink, Leonard van den Berg, Thomas Meyer, Julian Grosskreutz*

- D22 Patterns of spreading of weakness in amyotrophic lateral sclerosis based on patients' reports**
Verde Federico, Ticozzi Nicola, Morelli Claudia, Messina Stefano, Doretti Alberto, Poletti Barbara, Ratti Antonia, Maderna Luca, Silani Vincenzo
- D23 Characterising the metabolic profile of ALS: Results from the EuroMotor study cohort**
Alexandros P Siskos, James Rooney, Federico Casale, Fabrizio D'Ovidio, Orla Hardiman, Adriano Chio, Ettore Beghi, Giancarlo Logroscino, Jan Veldink, Leonard van den Berg (on behalf of the EuroMotor consortium), Hector Keun
- D24 NeuroGUIDization of PALS population for patient-centric research and care**
Alexander Sherman*, Igor Katsovskiy, Olga Kharakozova, Alexander Korin, Amanda Podesta, Ervin Sinani, George Tarasenko, Prasha Vigneswaran, Yusra Wahab, Jason Walker, Merit Cudkowicz
- D25 Exosomes as novel therapeutic approach for ALS**
Roberta Bonafede*, Ilaria Scambi, Lorenzo Schiaffino, Alice Busato, Pietro Bontempi, Pasquina Marzola, Raffaella Mariotti
- D26 A new view of retinoic acid's function in the neuromuscular system and its potential as a therapeutic for amyotrophic lateral sclerosis**
Azita Kouchmeshky*, Shakil Khan, Guy S. Bewick, Peter J. McCaffery
- D27 Machine learning tools for improving the efficiency of drug development clinical trials in ALS**
Danielle Beaulieu, Samad Jahandideh, Albert A. Taylor, David L. Ennist
- D28 People living with ALS and their caregivers' input into drug development in Europe**
M Galvin, O Hardiman, A Laverdiere, B Charpentier, J Petrillio, K Bowyer, Lucie Bruijn

- D29 **Edaravone in amyotrophic lateral sclerosis: The experience of the former 6 months therapy in the neurological clinic of Pisa**
Elena Caldarazzo Ienco, Costanza Bisordi, Giuseppe Muratore, Monica Fabbrini, Daniele Pala, Domenico Giannese, Maria Francesca Egidi, Annalisa Lo Gerfo, Lucia Chico, Gabriele Siciliano
- D30 **A post-hoc analysis of the edaravone phase III study 19: Regression analyses to examine long-term efficacy**
Wendy Agnese, Steve Apple, Shawn Liu, Jeff Zhang, Jean Hubble
- D31 **A post-hoc analysis of edaravone study 19: Forced vital capacity (FVC) subgroup analysis**
Wendy Agnese, Steve Apple, Shawn Liu, Jeff Zhang, Jean Hubble
- D32 **Towards more efficient clinical trial designs in ALS: Lessons from the edaravone development program**
Joseph Palumbo, Kikumi Tsuda, Koji Takei, Steve Apple, Wendy Agnese, Shawn Liu, Jeff Zhang, JeanHubble
- D33 **A phase 2, double-blind, randomized, placebo-controlled, multiple-dose study of reldesemtiv in patients with ALS (FORTITUDE-ALS)**
Angela Genge*, Stacy A Rudnicki, Jinsy A Andrews, Carlayne Jackson, Noah Lechtzin, Fady I Malik, Tim Miller, Andrew A Wolff, Jeremy M Shefner
- D34 **A single-blind, randomized controlled clinical trial to evaluate the effects of intensive motor rehabilitation in ALS patients (ERMOSla)**
Jessica Mandrioli, Antonio Fasano*, Nicola Fini, Elisabetta Zucchi, Annalisa Gessani, Marco Vinceti, Stefano Cavazza, ERRALS group
- D35 **Neuregulin 1 Type III gene therapy improves SOD1-linked amyotrophic lateral sclerosis**
*Mireia Herrando-Grabulosa, Guillem Modol-Caballero, Belén García-Lareu, Assumpció Bosch, Xavier Navarro

- D36 **Exploring the proteome of ALS laser microdissected Purkinje cells: Method development**
Connor Scott*, Simon Davis, Benedikt Kessler, Roman Fischer, Olaf Ansorge
- D37 **Tract pathology in amyotrophic lateral sclerosis correlates with aggressiveness of disease as defined by the D50 progression model**
Robert Steinbach*, Meerim Batrybekova, Annekathrin Rödiger, Benjamin Ilse, Anne Gunkel, Annika Voss, Beatrice Stubendorff, Thomas Mayer, Otto W. Witte, Julian Grosskreutz
- D38 **ALS Cell Atlas: An online resource to infer gene activity in nine major CNS cell types in ALS patients and mouse models**
Nathan Skene, Marta Alabrudzinska, Peter Lönnerberg, Sebastian A. Lewandowski*

Information for Presenters

Presenters will have access to a built-in laptop PC in the Nelson Mandela Lecture Theatre for their talks. Please bring your talk on a USB drive as a .ptx file formatted for a Windows machine, or as a .pdf file. Presenters should arrive early on the day of their presentation at the following times in order to transfer their talks to the computer in the lecture theatre:

Wednesday 20th June	12:00-13:00
Thursday 21st June	08:00-09:00
Friday 22nd June	08:00-09:00

Each plenary presentation is 25 minutes with five minutes for questions.

Each platform presentation is 12 minutes with three minutes for questions.

ENCALS Banquet Dinner

Thursday, June 21st, 2018

Keble College, Oxford, OX1 3PG

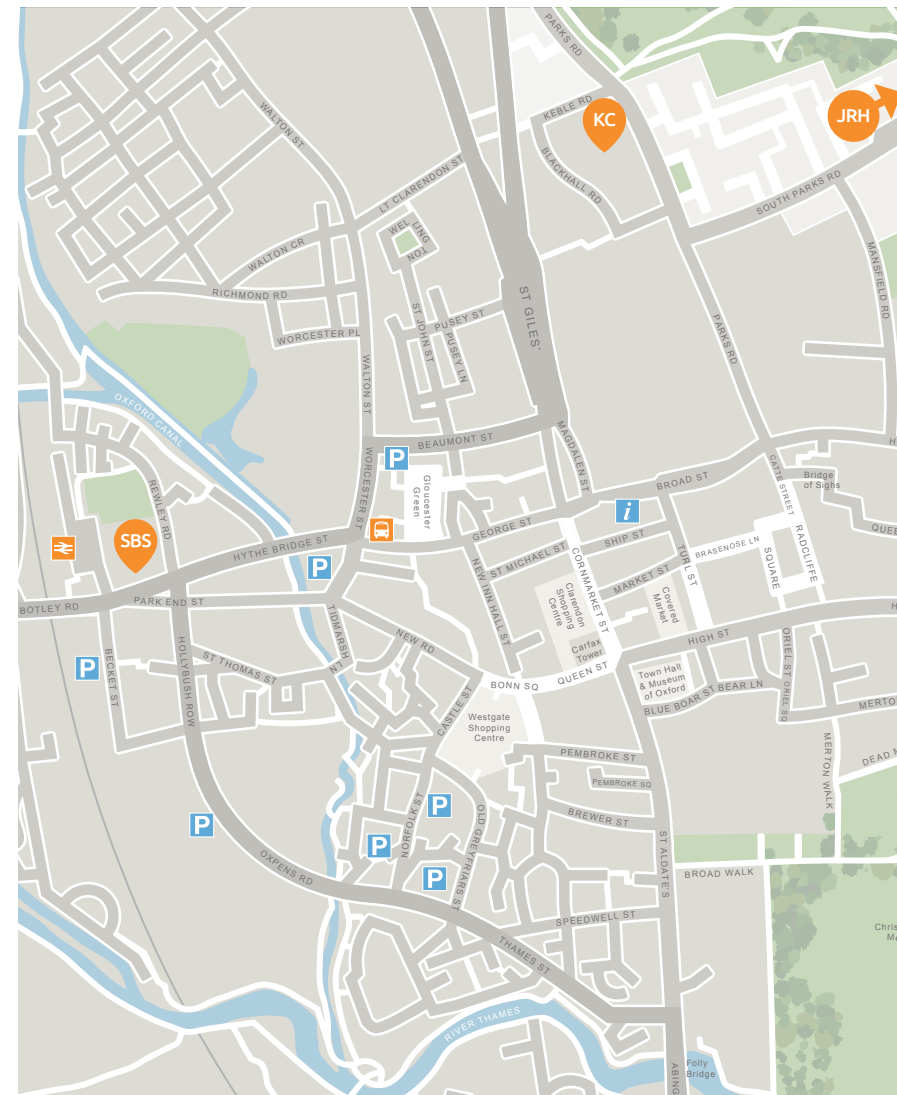
Doors open from 19:30

Dinner served at 20:00 precisely

Featuring a performance by The Men of Magdalen

Pre-registration and ticket required for admission

Map of Oxford



SBS Saïd Business School

KC Keble College

JRH John Radcliffe Hospital
(off map)

Oxford Railway Station

Oxford Bus Station

Guides to Oxford

Some of Oxford's ALS researchers give you their personal guide to the best of Oxford.

Chaitra's guide to Central Oxford

A small city, but highly diverse, Oxford has something for everyone, catering to different moods, occasions and temperaments. For your morning coffee, I recommend heading over to the **Handlebar** (St Michael Street), cleverly named for its bicycle decoration, both for all caffeine-related interests, and it turns into a bar in the evenings, often featuring live music from local bands. They also host themed cuisine nights! Check online to see if anything is going on while you're here. Oxford is excellent for breakfasts whether you want a quick pastry, or relax all morning in an outdoor garden with toast, butter, jam, full English, tea and coffee. My personal recommendations include **Browns** on St Giles and the **Old Parsonage** (Banbury Rd) for a hot breakfast.



You can stay in the centre and make your way from one historical location to the next: from the **Eagle and Child** pub on St. Giles, a known former hangout of JRR Tolkien and CS Lewis, or hop across the road to the **Lamb and Flag**, owned by Oxford's most affluent college, St John's. If the weather is nice and you would prefer to sit outside, the **Royal Oak** pub, named for the tree where the future Charles II hid to escape capture from the boisterous Roundheads, has a charming garden where you can enjoy a pub meal with a glass of Pimm's or a G&T. **The Varsity Club** (above the unmissable **Covered Market** on the High Street), is a rooftop bar with surround views of the nearby colleges and cathedral.

Finished with your drink and are looking for some entertainment? Head over to Gloucester Green, home to the famous **Thirsty Meeples** board game café, which houses hundreds of classic, novel and somewhat unusual games. The staff can make recommendations, set it up for you, get you started, and bring you nibbles. You'll have 3 hours of gaming fun but be sure to book in advance! Oxford also has two excellent theatres, the **New Theatre** (George St) and the **Oxford Playhouse** (Beaumont St), which often show plays and musicals straight off the London West End – keep a look out – tickets are much easier to come by here, and cheaper too!

You're hungry now? Well, at this point you could still stick around the centre. On George St we have all the usual chain restaurants if you're looking for something familiar. Excellent pizza can be found at the pub **The White Rabbit**. **Edamame**,

a family restaurant offers the best Japanese food in Oxford – don't be put off by the queue outside – that's just a testament to its greatness. If you're brave enough to venture out a little further, head to Cowley Road, just over the Magdalen Bridge. There are bars and restaurants all the way down the street. A few of my own recommendations are **Kazbar** for cocktails, **Mario's** for Pizza and **Red Star Noodlebar** for fusion Asian cuisine. There are also several burger joints, Mediterranean food, sushi and several bars.

If you just want a quick bite, a sandwich or a snack, I urge you to go into **Taylor's**, Oxford's own chain café (either on the High Street or St Giles) or **Green's café** (St Giles). Both have very good coffees and a great selection of freshly made sandwiches and sweet and savoury bites. Green's is particularly friendly to the gluten intolerant.

Barlas's suggestions for food and coffee

Pierre Victoire is a French restaurant on Little Clarendon where you can taste genuinely French meals accompanied by a delightful wine selection. The staff are very welcoming and polite. Enjoy a dinner or a special pre-theatre menu. Don't forget to book in advance even on weekdays.



Coco Noir offers café at a place abounding with different flavors of Belgian chocolate. Coffee is very nice and if you are a cocoa fan you can try the molten coca which is an intense hot chocolate.

Emily's guide to North Oxford and Summertown

North Parade Avenue is located south of St. Hugh's College in between Banbury and Woodstock Road. Here you have several choices from coffee, lunch or going out in the evening. **Brew** is a small coffee bar and a few tables, students go there to enjoy a break over books and the coffee is one of the best in town. If you prefer to take your coffee away and have a stroll in the fresh air, then just cross the Road towards the south and you can enter the University Park on South Parks Road (don't forget to take a slice of chocolate brownie from the **organic produce store** next to Brew).



The **Rose and Crown** pub is just opposite Brew and ideal to catch the last sunny spells and relax with a pint of beer just after the conference. It has a backyard and is popular with philosophers (I was told). The pub food is traditional and homemade, it is worth to try one of the meat pies on the bar. Just a little bit down North Parade Avenue a place called **Koto** allows to escape traditional English food and dive into a fantastic experience of Japanese food. It is very small and larger groups should book a table in advance, but single persons are able to grab a seat at the bar just before 8pm and the service is very welcoming. Popular are the Lunch Sets between from 12-2:30pm, if you like fish the seafood kagiage Don Set is a must and the miso cod.

Further north Banbury Road, the Summertown area convinces with a vivid centre on its own, a farmer market on Sundays and **Marks & Spencer** to enjoy a special shopping on all other week days. **Laura Ashley** is further up on the left side of the street. Once you made your way all way up to the North there are two things better not to miss out: **Gatineau** a French patisserie (the window view is a temptation) and **Gail's** an artisan bakery, always crowded, great coffee, traditional cream tea (scones, clotted cream and jam), bread, brioche. In the mornings the sun is on this side of the street and there are tables outside to enjoy your breakfast. After work, the sun is on the other side of the road and people gather for drinks on the large round tables of the **Drew Drop Inn**.

Matthew's guide to Cowley Road and East Oxford

East Oxford (centred around Cowley Road and St. Clements) has a variety of shops, bars and restaurants away from the busy tourist areas of central Oxford. My picks are:

Café Coco on Cowley Road is good for brunch/all day breakfast. On St. Clements, **Cuttlefish** does great seafood and **The Coconut Tree** does excellent Sri-Lankan food. **Atomic Pizza** with it's interesting décor) on Cowley Road does good burgers and pizza

The City Arms and **Cape of Good Hope** on Cowley Road are good for a cheap pint, the recently opened **Brewdog** (also on Cowley Road) has a big selection of craft beers/ales, **Café Tarifa** and **Kazbar** have a more relaxed vibe and do a good selection of cocktails

South Parks is one of the biggest public parks in Oxford, and you get great views of the city at the top of the hill.



Alex's pub guide

The Eagle and Child: Also known as the Bird and Baby, The Eagle and Child is located on St Giles, opposite St John's College. The Eagle and Child is famous for being the meeting place of "the Inklings", a literary group that included CS Lewis and JRR Tolkien. They serve a reasonable selection of ale and lager as well as classic pub foods.



The Lamb and Flag: Located on St Giles, opposite The Eagle and Child, The Lamb and Flag is the only remaining college-owned pub in Oxford. They serve a good selection of ale (including Lamb and Flag Gold, brewed specifically for the pub) and lager along with a limited selection of reasonably-priced pub food.

The White Rabbit: Tucked away in a corner of Gloucester Green, the White Rabbit is a cosy pub as much known for its excellent selection of craft beers as for its home-made organic gluten-free pizzas.

The White Horse: A narrow pub set in a 16th century building opposite the Sheldonian theatre on Broad Street, The White Horse is known as a hang-out of the British fictional detective Inspector Morse.

The Kings Arms: Found on the corner of Parks Road and Holywell Street, The Kings Arms has a lively atmosphere and serves a good selection of real ales and food and is very popular with students. The Kings Arms also has limited outside seating available.

The Turf Tavern: Steeped in history and somewhat difficult to find, the atmospheric (and supposedly haunted) Turf Tavern is well worth a visit. Travel down the narrow alley St Helen's Passage, off New College Lane to a low-ceilinged pub with real ales, ciders and plenty of outside seating.

The Bear Inn: A tiny, cosy pub, The Bear Inn is worthy of a visit if only to see the enormous collection of ties that adorn the walls and ceilings of its two small rooms.

The Royal Oak: An atmospheric old pub with a good selection of beers, wine and food, The Royal Oak is situated on Woodstock Road opposite Green Templeton College.

Further afield, **The Trout Inn** occupies a beautiful spot overlooking the river Thames in Lower Wolvercote. It features in various books including Philip Pullman's *La Belle Sauvage* and Evelyn Waugh's *Brideshead Revisited*. It's a one hour walk from the conference venue across Port Meadow and worth booking in advance to for eating. **The Perch** in Binsey is around 30 minutes' walk - an old pub with plenty of character and a large garden.



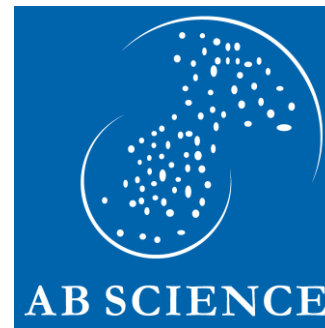
"Science can be complex, but we manage the complexity by approaching problems as a team. On a team, you depend on people, and they depend on you. My son is learning the same lesson through sports."

Tony Romero, Ph.D., Associate Director, Medicinal Chemistry


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- **Sensitivity analyses from the first phase 3 clinical study of masitinib (AB10015) in ALS demonstrate robustness of the positive primary analysis.**
- **Masitinib therapeutically targets sciatic nerve pathology associated with paralysis progression in an inherited ALS model.**
- **Masitinib in the treatment of amyotrophic lateral sclerosis (ALS): Update on confirmatory phase 3 trial (AB14008).**

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of bringing new therapies
for neurodegenerative
diseases to the market

since Orion Pharma was founded

Date of preparation: May 2018/ORI5270a

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

