

MESSAGE FROM THE ORGANIZERS

Dear participant of the 10th Meeting of ENCALS,

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Message from Organizers

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PROGRAMME OVERVIEW

Friday, 25/05/2012

- 08.30 - 11.30 Workshop on neurophysiology MUNIX and related measures
- 11.30 - 13.45 Registration and lunch
- 13.45 - 14.45 Opening Session : Latran Guest Speaker
- 14.45 – 16.15 Session 1: Applied Epidemiology & Deep Phenotyping
- 16.15 - 16.30 Coffee
- 16.30 – 18.00 Session 2: Therapeutic Targets in ALS
- 18.00 – 19.30 Guided Poster Tour with Cheese and Wine Reception

Saturday, 26/05/2012

- 08.30 – 09.00 Session 3: Disease Mechanisms in ALS and Related Neurodegenerations
- 10.30 - 11.00 Coffee
- 11.00 – 12.30 Session 4: Cognition and Imaging
- 12.30 - 14.00 Lunch
- 14.00 – 15.30 Session 5: Disease Mechanisms, GLIA
- 15.30 - 15.50 Coffee
- 15.50 – 17.00 Session 6: Debate
- 17.00 - 17.30  business meeting
- 17.30 - 19.00 Guided Tour Posters with wine reception
- 19.00 - 20.00 Optional Tour of Campus
- 20.00 Dinner in the Dining Hall College Square

Sunday, 27/05/2012

08.00 - 08.30 ENCALS C9orf72 Consortium

08.30 – 09.00  Young Investigator Award

09.00 – 11.30 Session 7: Genetics and Genomics

11.30 – 13.00 Session 8: New Developments

13.00 Meeting Conclusion

Friday, 25/05/2012

- 08.30 – 11.30 **Workshop on neurophysiology MUNIX and related measures** B2.72-2.73-2.74
- 11.30 - 13.45 Registration and lunch Hallway, Ground Floor
- 13.45 - 14.45 Opening Session Stanley Quek Theatre B1
Prof. Leonard H. van den Berg
- Invited Speaker: Latran Foundation: *Dr. Teepu Siddique (USA)*
“Cause to mechanism: the molecular funnel of neurodegeneration”
- 14.45 – 15.15 **Oral Session 1: Applied Epidemiology & Deep Phenotyping**
Chair: Adriano Chio, Markus Weber
- Plenary Speaker: Orla Hardiman (Ireland)
- 15.15 - 15.35 **OS1.1:** Motor Unit Number Index (MUNIX): longitudinal measurements in ALS patients in a multicentre trial
C. Neuwirth (Switzerland)
- 15.35 - 16.55 **OS1.2:** Symptom development in patients with motor neuron disease
R. Walhout (Netherlands)
- 16.55 - 16.15 **OS1.3:** An exposome wide association study in ALS
P. van Doormaal (Netherlands)
- 16.15 - 16.30 **Coffee**
- 16.30 – 17.00 **Oral Session 2: Therapeutic Targets in ALS**
Chair: Francois Salachas, Pam Shaw
- 16.30 - 17.00 Plenary Speaker: Jeff Rothstein (USA)
- 17.00 - 17.15 **OS 2.1:** Dexamipexole effects on functional decline in ALS patients in a Phase II study: subgroup analysis of demographic and clinical characteristics
S.A. Rudnicki (Biogen Idec, Cambridge MA)

- 17.15 - 17.30** OS2.2: Prolonged survival and milder impairment of motor function in the SOD1 mouse model devoid of FGF-2

N. Thau (Germany)
- 17.30 - 17.45** OS2.3: EphA4 inhibition rescues the motor axon phenotype in a zebrafish model for ALS and SMA

L. Schoonaert (Belgium)
- 17.45 - 18.00** OS2.4:A Phase 2-3 Trial of Olesoxime in Subjects with Amyotrophic Lateral Sclerosis

Olesoxime for ALS Study Group (France)
- 18.00 - 19.30** **Guided Poster Tour with Cheese and Wine Reception**

Saturday, 26/05/2012

08.30 – 09.00

Oral Session 3: Disease Mechanisms in ALS and Related Neurodegenerations

Chairs: Jochen Prehn, Caterina Bendotti

Plenary Speaker: Prof. Kevin Talbot (UK)

09.00 - 09.15

OS3.1: Elevated mitochondrial calcium extrusion disturbs ERMCC dynamics in G93A hSOD1 motor neurons

J. Lautenschlaeger (Germany)

09.15 - 09.30

OS3.2: PLCdelta1 knockout prolongs survival of ALS mice

K.A. Staats (Belgium)

09.30 - 09.45

OS3.3: Molecular mechanisms of Golgi pathology in progressive motor neuronopathy

S. Bellouze (France)

09.45 - 10.00

OS3.4: Elevated PGC-1a activity sustains muscle function throughout disease in a model of familial ALS

P. Parone (USA)

10.00 - 10.15

OS3.5: Utilizing a SOD1 zebrafish model of ALS to dissect neuronal circuits involved in ALS and in drug screening

T. Ramesh (UK)

10.15 - 10.30

OS3.6: Altered expression and activity of stearyl-CoA desaturase 1 in amyotrophic lateral sclerosis

F. Schmitt

10.30 - 11.00

Coffee

11.00 – 11.30

Oral Session 4: Cognition and Imaging

Chair: Julian Grosskreutz, Martin Turner

Plenary Speaker: Sharon Abrahams (SCOTLAND)

11.30 - 11.45

OS4.1: Evidence for Subtypes within the Cognitive Continuum: A Population-Based Longitudinal Study

M.Elamin (Ireland)

11.45 - 12.00 OS4.2: Quantitative analysis of corticospinal tract hyperintensity in ALS

J Fabes (UK)

12.00 - 12.15 OS4.3: Amyotrophic lateral sclerosis spreads along structural brain connections

E Verstraete (Netherlands)

12.15 - 12.30 OS4.4: Grey matter correlates of clinical variables in Amyotrophic Lateral Sclerosis– a neuroimaging study

P. Bede (Ireland)

12.30 - 14.00

Lunch

Davenport Hotel

14.00 – 14.30

Session 5: Disease Mechanisms, Glia

Chair: Vincenzo Silani, Ludo van den Bosch

Plenary Speaker: Severine Boillee (FRANCE)

14.30 - 14.50

OS 5.1: Expression and function of system Xc- and microglial glutamate in ALS Models

L. Mesci Pinar (France)

14.50 - 15.10

OS 5.2: Altered intracellular calcium signaling correlates with Astrocyte degeneration in ALS

D. Rossi (Italy)

15.10 - 15.30

OS 5.3: Neuro-muscular junctions in Co-cultures of hiPSCs-derived Motoneurons and Myotubes

M. Stockman (Germany)

15.30 - 15.50

Coffee

15.50 – 17.00

Oral Session 6: Debate

“Has the SOD1 animal model passed its sell-by date?”

(Audience Participation Strongly Encouraged)

Moderator: Leonard van den Berg

Speaker: Prof. Pamela J. Shaw (University of Sheffield)

Speaker: Prof. Wim Robberecht (Catholic University Leuven)

17.00 - 17.30

 business meeting

17.30 - 19.00

Guided Tour Posters with wine reception

19.00 - 20.00

Optional Tour of Campus

20.00

Dinner in the Dining Hall College Square

Sunday, 27/05/2012

08.00 - 08.30 **ENCALS C9orf72 Consortium Meeting**
(all welcome)

Moderator: Ammar Al Chalabi

08.30 - 09.00  **YOUNG INVESTIGATOR AWARD**

09.00 – 09.45 **Oral Session 7: Genetics and Genomics**
Chair: Dan Bradley, Jan Veldink

Plenary Speaker: Bob Brown (USA)

09.30 - 09.45 **OS 7.1:** FUSopathy in cells and transgenic mice expressing an
Aggregation prone form of human protein

B. Buchman (UK)

09.45 - 10.00 **OS 7.2:** ALS-associated mutant VAPBP56S perturbs Ca²⁺ homeostasis
to disrupt axonal transport of mitochondria

G. Mórotz (UK)

10.00 - 10.15 **OS 7.3:** Gene expression profiling of lymphoblastoid cells from
C9ORF72 related amyotrophic lateral sclerosis

J. Cooper-Knock (UK)

10.15 - 10.30 **OS7.4:** C9ORF72 hexanucleotide repeat expansion in Italian ALS patients

N. Ticozzi (Italy)

11.00 - 11.15 **OS7.5:** UNC13A influences survival in an Italian population-based series

A. Calvo (Italy)

11.15 - 11.30 **OS7.6:** PGC-1 alpha as a genetic modifier in experimental ALS

B. Schwalenstöcker (Germany)

12.00 – 13.00 Oral Session 8: New Developments

Chair: Orla Hardiman, Leonard van den Berg

12.0-12.15 Executive Dysfunction in ALS relates to changes in white matter integrity in the frontal lobes

Pettit, Bastin and Abrahams (Scotland)

12.15-12.30 Comparison of an amyotrophic lateral sclerosis staging system with the revised amyotrophic lateral sclerosis functional rating scale

R Balendra (United Kingdom)

12.00-12.45 Systemic delivery of angiogenin protein for the treatment of ALS

A T Behan (Ireland)

12.45-1.00 **Identification of neurotrophic factors for ALS-relevant motor neuron subsets by a novel FACS-based approach**

D. Buttigieg (France)

1.00 Meeting Conclusion

POSTER SESSIONS

Posters will be displayed throughout the meeting .

Poster Session 1

Friday, 25/05, 18.00 – 19.30 (Chair: Jesus Mora; TBA)

CLINICAL

P.01: SPINAL MRI ATROPHY STUDY IN AMYOTROPHIC LATERAL SCLEROSIS AND SPINAL MUSCULAR ATROPHY

EL MENDILI, M-M; Cohen-Adad, J; Morizot-Koutlidis, R; Lenglet, T; Serge, R; Benali, H; Pradat, P-F (Laboratoire d'Imagerie fonctionnelle (LIF) U.678 INSERM / UMR-S UPMC)

P.02: REPORTING BIOMAKER – DEVELOPMENT IN ALS PATIENTS TREATED WITH G-CSF MOBILIZED STEM CELLS

Prof. Ulrich Bogdahn (University of Regensburg - Department of Neurology) Jennifer Rösl, Andrei Khomenko, Dobri Baldaranov, Jochen Grassinger, Verena C. Haringer¹, Katja Kollwe **, Renata Schreck, Susanne Petri **, Reinhard Dengler **, Albert Ludolph , Bernhard Kaiser, Michael Deppe***, Gerhard Schuierer#, Wilhelm Schulte-Mattler, Ulrich Bogdahn - Regensburg, San Diego, Ulm, Münster, Hannover*

P.03: SUSCEPTIBILITY MRI REVEALS ALTERED MAGNETIC BEHAVIOUR IN ALS-RELATED WHITE MATTER DAMAGE

Hartung, V; Prell, T; Tietz, F; Ilse, B; Reichenbach, J; Schweser, F; Witte, OW; Grosskreutz, J (Hans Berger Department of Neurology, University Hospital Jena, Germany)

P.04: DISTRIBUTION OF ADIPOSE TISSUE IN PATIENTS WITH ALS ASSESSED BY AUTOMATIC WHOLE BODY MRI ANALYSIS

H.-P. Müller¹, E. Lindauer¹, L. Dupuis¹, H. Neumann², J. Kassubek¹, A.C. Ludolph¹ (1Dept of Neurology, Univ. Ulm, Germany, 2Inst of Neural Information Processing, Univ. Ulm, Germany)

P.05: MONOCLONAL GAMMOPATHY IN THE FULL SPECTRUM OF MOTOR NEURON DISORDERS AND MULTIFOCAL MOTOR NEURON DISORDERS AND MULTIFOCAL MOTOR NEUROPATHY

L. Vlam, MD,¹ S. Piepers, MD, PhD,¹ N.A. Sutedja, MD, PhD,¹ B.C. Jacobs MD, PhD,² A.P. Thio-Gillen,² J. H. Veldink, MD, PhD,¹ E.A. Cats, MD, PhD,¹ F. Brugman, MD, PhD,¹ N.C. Notermans MD, PhD,¹ R.I. Wadman MD,¹ W.-L. van der Pol MD, PhD,¹ L.H. van den Berg MD, PhD.¹

P.06: IMMUNOLOGICAL STATUS OF PATIENTS WITH ALS

Zorica Stevic, Clinic of Neurology, School of Medicine, Belgrade, Serbia

P.07: ELECTRONIC PATIENT- REPORTED OUTCOME TO EVALUATE PHYSIOTHERAPY TREATMENT IN ALS

Robert Meyer; Christoph Münch; Andre Maier; Theresa Holm; Laura Steinfurth; Thomas Meyer (Department of Neurology, Charité-University Hospital, Campus Virchow-Klinikum, Augustenburger Platz)

P.08: ILLNESS BURDEN IN PATIENTS WITH ALS AND THEIR CAREGIVERS: A WEB-BASED SURVEY

Paul Wicks¹, Massagli MP¹, Leigh Ann White^{2 1} PatientsLikeMe Inc., 155 Second Street, Cambridge MA 02141

² Biogen Idec, 133 Boston Post Road, Weston MA 02493

P.09: SELF-ASSESSMENT OF THE DAILY FOOD INTAKE IN ALS VIA AN APPLICATION

T. Holm, A. Maier, L. Steinfurth, J. Leimeister, A. Prinz, P. Linke, R. Meyer, C. Münch, T. Meyer (Charité University Hospital)

P.10: WEB-BASED SELF-ASSESSMENT OF DYSPNOEA IN ALS

André Maier (Charité - Universitätsmedizin Berlin)

P.11: TIME TO GENERALIZATION AS A PREDICATOR OF PROGNOSIS IN ALS Tortelli R, Zoccolella S, Cortese R, D'Errico E, Capozzo R, Leo A, Simone IL, Logroscino G. (Department of Neurosciences and Sense Organs, University of Bari, Italy)

P.12: WEIGHT LOSS IN ALS: REASONS, IMPACT ON QUALITY OF LIFE AND BENEFIT OF HIGH CALORIE SUPPLEMENTS

Körner S, Hendricks M, Kollwe K, Dengler R, Petri S

P.13: PHRENIC NERVE STUDIES PREDICT SURVIVAL IN AMYOTROPHIC LATERAL SCLEROSIS

Susana Pinto, Anabela Pinto, Mamede de Carvalho Translational and Clinical Physiology Unit, Institute of Molecular Medicine-Faculty of Medicine, University of Lisbon, Portugal

P.14: GAMMA-SYNUCLEIN PATHOLOGY IN ALS

Dr Owen Peters (Cardiff University)

P.15: IS THE FRONTAL ASSESSMENT BATTERY RELIABLE IN ALS PATIENTS?

Joost Raaphorst (Academic Medical Centre, Amsterdam, The Netherlands)

P.16: LANGUAGE AND COGNITIVE IMPAIRMENTS IN BULBAR-ONSET AMYOTROPHIC LATERAL SCLEROSIS

*Sarafov S, Raycheva M, Mehrabian S, Tournev I, Traykov L (University Hospital
"Alexandrovska, Sofia, Department of Neurology)*

EPIDEMIOLOGY

P.17: WHY DOES THE AGE AT ONSET OF AMYOTROPHIC LATERAL SCLEROSIS DIFFER BETWEEN COUNTRIES?

Susan Byrne, Iain Jordan, Marwa Elamin, Orla Hardiman (Trinity College Dublin, Ireland)

P.18: THE ALS REGISTER SWABIA: EPIDEMIOLOGY AND RISK FACTORS IN SOUTHERN GERMANY

A. Rosenbohm, D. Rothenbacher, G. Nagel, Albert C. Ludolph (Departments of Neurology and Medical Biometry and Epidemiology, Ulm University, Germany)

P.19: MEDICATION USE, PAST MEDICAL HISTORY AND THE RISK OF ALS: A POPULATION-BASED CASE-CONTROL STUDY

Meinie Seelen, MD¹; Perry TC van Doormaal, MD¹; Margot HJ Roozkrans, MD¹; Mark HB Huisman, MD¹; Sonja W de Jong, MD¹; H Jurgen Schelhaas, MD, PhD²; Anneke J van der Kooij, MD, PhD³; Marianne de Visser, MD, PhD³; Jan H Veldink, MD, PhD¹; Leonard H van den Berg, MD, PhD¹. (Utrecht, Holland)

P.20: MAY HYPERTENSION HAVE PROTECTIVE EFFECTS IN ALS? RESULTS OF A POPULATION-BASED STUDY

Ilardi, Calvo, Moglia, Canosa, Cammarosano, PARALS, Mazzini, Mora, Chiò (CRESLA, Department of Neuroscience, University of Turin)

P.21: PREVALENCE OF IMMUNE-RELATED COMORBIDITY AMONG ALS PATIENTS IN A U.S. HEALTH INSURANCE CLAIMS DATABASE

JR Williams¹, DA Kerr¹, and W Farwell¹ ¹Biogen Idec, Cambridge, MA, USA

P.22: PREVALENCE OF CARDIOVASCULAR AND CEREBROVASCULAR RISK FACTORS AND COMORBIDITY AMONG ALS PATIENTS IN A U.S. HEALTH INSURANCE CLAIMS DATABASE

JR Williams¹, DA Kerr¹, and W Farwell¹ (1Biogen Idec, Cambridge, MA, USA)

P.23. EUROMOTOR

P.Berk Utrecht, Holland

POSTER SESSION 2

Saturday, 26/05, Time, (Chair: Albert Ludolph and Karen Morrison)

GENETICS

P.24: SCREENING FOR RARE VARIANTS IN THE CODING REGION OF ALS ASSOCIATED GENES AT 9p21.2 AND 19p13.3

Max Koppers (University Medical Center Utrecht)

P.25: ANALYSIS OF THE H63D POLYMORPHISM IN HFE AS SUSCEPTIBILITY FACTOR FOR AMYOTROPHIC LATERAL SCLEROSIS

Mr. Wouter van Rheenen (University Medical Center Utrecht)

P.26: IDENTIFYING NOVEL RISK AND PROTECTIVE ALS VARIANTS THROUGH TARGETED RESEQUENCING

Kevin Kenna, Russell McLaughlin, Orla Hardiman, Dan Bradley (Trinity College Dublin)

P.27: IDENTIFY-BY-DESCENT MAPPING REVEALS GENOMIC LOCI THAT MAY HARBOUR MULTIPLE RARE ALS-CAUSING VARIANTS

Russell L McLaughlin, Kevin P Kenna, Dan G Bradley, Orla Hardiman (Trinity College Dublin)

P.28: HAS THE TIME NOW COME FOR A REVISION OF THE ALS GENE CLASSIFICATION SYSTEM?

Rubika Balendra, Ammar Al-Chalabi (Department of Clinical Neuroscience, King's College London)

P.29: ALS-CAUSING MUTANT TDP-43 VARIANTS AND THEIR EFFECT ON PROTEIN DEGRADATION PATHWAYS

H.Wolf(1), A.Besemer(1), M.Stark(1), I.Drechsler(1), H.Witan(1), JP.Julien(2), C.Behl(1), A.Clement(1) (1)Institute for Pathobiochemistry, University Medical Center, Johannes Gutenberg University Mainz, Ger)

P.30: P2RX7 POLYMORPHISMS AND SUSCEPTIBILITY TO ALS IN AN ITALIAN POPULATION: PRELIMINARY RESULTS

Michele Benigni¹, Claudia Ricci¹, Stefania Casali¹, Giannini Fabio¹, Cinzia Volonté², Stefania Battistini¹

¹Department of Neurological, Neurosurgical, and Behavioral Sciences, University of Siena, Siena, Italy

²Cellular Biology and Neurobiology Institute, CNR Fondazione Santa Lucia, Rome, Italy

P.31: SYSTEMIC DEPLETION OF SCD1 PROMOTES ACCELERATED MOTOR FUNCTION RECOVERY FOLLOWING NERVE INJURY

G Hussain, F Schmitt, F Rene, A Henriques, J-L Gonzalez De Aguilar, J-P Loeffler (Inserm, Umrs692, Université de Strasbourg, Strasbourg, France)

P.32: GENETICS OF ALS IN ITALY: RESULTS OF A POPULATION-BASED STUDY

¹Calvo A, ⁵Restagno G, ⁵Brunetti M, ⁵Ossola I, ¹Moglia C, PARALS, ³Corrado L, ³D'Alfonso S, ⁴Mazzini L, ²Mora G, ¹Chiò A, ¹Als Center, Department of Neuroscience, University of Troino, Italy

P.33: CGG-repeat expansion in FMR1 is not associated with amyotrophic lateral sclerosis

Ewout J N Groen^{a,b}, Wouter van Rheenen^a, Max Koppers^{a,b}, Perry T C van Doormaal^a, Lotte Vlam^a, Frank P Diekstra^a, Dennis Dooijes^c, R Jeroen Pasterkamp^b, Leonard H van den Berg^a, Jan H Veldink^a

P.34: ASSOCIATION OF FUS WITH THE CYTOSKELETAL PROTEINS TBCB AND DCTN1

Stefan Putz (University Hospital Ulm)

P.35: AMYOTROPHIC LATERAL SCLEROSIS CARRYING EXPANSION OF C9ORF72 WITH OBSESSIVE-COMPULSIVE DISORDER AT ONSET

Moglia C, Calvo A, Canosa A, Ilardi A, Bersano E, Manera U, Restagno G, Chio' A ALS center, Department of Neuroscience, University of Torino, Italy

P.36: FASTER DISEASE PROGRESSION IN fALS LINKED TO C9ORF72 HEXANUCLEOTIDE REPEAT EXPANSIONS

A. Hübers (1), A. Volk (2), C. Kubisch (2), N. Marroquin (2), A.C. Ludolph, J.H. Weishaupt (1) ((1) Department of Neurology, (2) Department of Human Genetics, University of Ulm, Germany)

P. 37: THE MOLECULAR BASIS OF ALS IN TURKEY

Ozoguz A1, Bilguvar K2, ParmanY3, Deymeer F3, Oflazer P3, Koc F4, Gunel M2 and Basak A N1 1Bogazici University, Molecular Biology and Genetics Department, Neurodegeneration Research Laboratory (NDAL), Istanbul, Turkey 2Yale University Medical School, Department of Neurosurgery, Gunel Laboratory, New Haven, USA 3Istanbul University, Istanbul Medical School, Neurology Department, Istanbul, Turkey 4Cukurova University, Medical School, Neurology Department, Adana, Turkey

P.38: ATXN2 AND ITS NEIGHBOURING GENE SH2B3 BOTH MODULATE THE ALS RISK IN THE TURKISH POPULATION

Lahut S1, Ömür Ö1, Uyan Ö1, Ağım Z S1, Özoğuz A1, ParmanY2, Deymeer F2, Oflazer P2, Koç F3, Özçelik H4, Auburger G5 and Başak A N11Boğaziçi University, Molecular Biology and Genetics Department, Neurodegeneration Research Laboratory (NDAL), Istanbul, Turkey 2Istanbul University, Istanbul Medical School, Neurology Department, Istanbul, Turkey 3Çukurova University, Medical School, Neurology Department, Adana, Turkey 4University of Toronto, Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Department of Laboratory Medicine and Pathobiology, Toronto, ON, Canada 5Goethe University, Experimental Neurology, Frankfurt am Main, Germany

P.39: IN-SILICO AGGREGATION PROFILE ANALYSIS OF UBQLN2 MUTATIONS IN TURKISH

fALS PATIENTS *Uyan O1, Agim ZS1, Ozoguz A1, Keskin O2, Basak AN1 1Bogazici University, Molecular Biology and Genetics Department, Neurodegeneration Research Laboratory (NDAL), Istanbul, Turkey 2 Koc University, College of Engineering, Chemical and Biological Engineering, Istanbul, Turkey*

MODELS

P.40: EFFECT OF FUMARIC ACID ESTERS ON THE HIF-1alpha MEDIATED RESPONSE

Diana Wiesner, Judith Eschbach, A.C. Ludolph, Anke Witting, Luc Dupuis (University of Ulm, Germany)

P.41: UPREGULATION OF PDI IN ALS MICROGLIA AND ER STRESS DEPENDENT ACTIVATION OF NADPH OXIDASE

Ms. Merja Jaronen (Dept. of Neurobiol., A. I. Virtanen Institute for Molecular Sciences, University of Eastern Finland)

P.42: EFFECT OF PPARs AND THEIR CO-ACTIVATORS ON THE ALTERNATIVE ACTIVATION OF MICROGLIA

Hanna Bayer, Anne Buttgereit, Diana Wiesner, Patrick Weydt und Anke Witting (Department of Neurology, Ulm University, Germany)

P.43: KINESINS EXPRESSION IN THE CENTRAL NERVOUS SYSTEM OF HUMANS AND TRANSGENIC MICE WITH hSOD1G93A

Magdalena Kuzma-Kozakiewicz, Agnieszka Chudy, Ewa Usarek, Beata Gajewska, Anna Baranczyk-Kuzma (Department of Neurology, Department of Biochemistry, Medical University of Warsaw, Poland)

P.44: HDAC6 INHIBITION RESTORES THE PHENOTYPE OF NEW MOUSE MODELS OF CHARCOT-MARIE-TOOTH DISEASE

Constantin D'Ydewalle (Vesalius Research Center, Laboratory of Neurobiology, VIB, KU Leuven, Leuven, Belgium)

P.45: GENDER-SPECIFIC MECHANISM OF SYNAPTIC IMPAIRMENT AND ITS PREVENTION BY G-CSF IN A MOUSE MODEL OF ALS

Eveliina Pollari (Dept. of Neurobiol., A. I. Virtanen Institute for Molecular Sciences, University of Eastern Finland)

P.46: TDP-43 DYSFUNCTION CAUSE SYNAPTIC DEFICITS AND SUBSEQUENT AGE-RELATED NEURODEGENERATION IN DROSOPHILA

Danielle C. Diaper^{1,7}, Yoshitsugu Adachi^{1,7}, Ben Sutcliffe², Dickon M. Humphrey¹, Chris Elliott³, Triona Fielding¹, Mubarik Burki¹, Zoe N. Ludlow¹, Lies Vanden Broeck⁴, Bart Dermaut^{4,5}, Patrick Callaerts⁴, Ammar Al-Chalabi⁶, Christopher E. Shaw⁶, Iain Robinson² & Frank Hirth¹

P.47: POTENTIAL EFFECTS OF LOW-FREQUENCY MAGNETIC FIELDS (LF-MFs) ON AMYOTROPHIC LATERAL SCLEROSIS

Martina Liebl (1), Andreas Horn (1), Blanka Pophof (2), Christian Behl (1), Albrecht M. Clement (1) (Institute for Pathobiochemistry, University Medical Center, Johannes Gutenberg University Mainz)1. Institute for Pathobiochemistry, University Medical Center, Johannes Gutenberg University Mainz, Germany 2. Federal Office for Radiation Protection, Salzgitter, Germany

P.48: COMMON EARLY ALTERATIONS IN LUMBAR MOTONEURONS OF SOD1G93A AND SOD1G85R JUVENILE MICE

Jacques Durand, Anton Filipchuk, Arnaud Pambo Pambo, Sylvie Liabeuf, Cecile Brocard, J.P. Gueritaud (CNRS, UMR 7289, Aix Marseille Université, Institut de Neurosciences de la Timone, Marseille, France)

P.49: NEGATIVE RESULTS: CITICOLINE IS NOT PROTECTIVE IN THE SOD1 (G93A) MOUSE MODEL OF ALS

Dr. Sarah Knippenberg (Hannover Medical School - Neurology)

P.50: USE OF MAGNETIC RESONANCE IMAGING TO MONITOR DISEASE PROGRESSION IN ANIMAL MODELS OF FAMILIAL ALS

Ilaria Caron (Mario Negri Institute for Pharmacological Research), Micotti E., Plebani, L., Merlino G. and Bendotti C

P.51: PRE-SYMPTOMATIC NEUROINFLAMMATORY INSIGHTS FROM MULTIMODAL MRI IN THE SOD1 MURINE MODEL OF ALS

Evans MC, Stolp HB, Anthony D, Talbot K, Sibson N, Turner MR (University of Oxford)

P.52: MOBILIZATION OF HEMATOPOIETIC BONE MARROW STEM CELLS BY G-CSF IS NOT PROTECTIVE WHEN INDUCED IN SYMPTOMATIC SOD1G93A MOUSE MODELS

Bendotti C., Caron I., Ferrara G., Merlino G., Plebani L. Dept. Neuroscience, Mario Negri Institute for Pharmacological Research, Milano, Italy

P.53: IS DEFECTIVE MITOCHONDRIAL Ca²⁺ STORAGE IS A PRIMARY CONTRIBUTOR TO NEURONAL DEGENERATION?

P. Parone Department of Cell Biology, University of Geneva, Geneva, Switzerland.

P.54: SOD1 mRNA ARE SEQUENCES AS NOVEL TARGETS FOR ELAV-MEDIATED POST-TRANSCRIPTIONAL MODULATION: A NEW CLUE FOR ALS PATHOGENESIS?

Pamela Milani (1, 2), Marialaura Amadio (3), Stella Gagliardi (1), Alessia Pascale (3), Cristina Cereda (1)

(1) Lab of Experimental Neurobiology, IRCCS National Neurological Institute "C. Mondino", Via Mondino, 2, 27100 Pavia, Italy. (2) Department of Neurological Sciences, University of Pavia, Pavia, Italy. (3) Department of Experimental and Applied Pharmacology, Centre of Excellence in Applied Biology, University of Pavia, Pavia, Italy

P.55: SENSING ION CHANNELS (ASICS) CONTRIBUTE TO MOTONEURON DEGENERATION IN AN ANIMAL MODEL OF ALS

by Aine T Behan#, Bridget Breen#, Ina Woods, Karen Coughlan, Mollie Mitchem, Jochen H.M. Prehn (Department of Physiology and Medical Physics, Centre for the Study of Neurological Disorders, RCSI) Dublin Ireland

P.56: ANDROGENIC/ ANABOLIC STEROID DYSREGULATION AS RISK FACTOR FOR AMYOTROPHIC LATERAL SCLEROSIS

T. Aggarwal(1), M. Galbiati(2), A. Poletti(3), M. Pennuto(1) ((1) Department of Neuroscience, Istituto Italiano di Tecnologia, Genoa, Italy;) (1) Department of Neuroscience, Istituto Italiano di Tecnologia, Genoa, Italy (2) Dipartimento di Endocrinologia, Fisiopatologia e Biologia Applicata, and Centre of Excellence on Neurodegenerative Diseases, Università degli Studi di Milano, Milan, Italy (3) DEFIB/CEND- Università degli Studi di Milano, Italy