

# SINdem4Juniors

## 9<sup>th</sup> Winter Seminar on Dementia and Neurodegenerative Disorders

Recent Advances in Clinical and Experimental Research on Dementia and Neurodegenerative Disorders

Organized by SINdem4Juniors Young Members Executive Committee of The Italian Neurological Dementia Association

# April 27-28-29, 2022

Bressanone, Italy  
Dolomiti – Sud Tirolo

## Save the date!

**April 27, 2022**

Contamination Session

**April 28-29, 2022**

Scientific Session



# SINdem4Juniors

## **Scientific Committee**

Marco Bozzali (*Turin, Italy*)

Federica Agosta (*Milan, Italy*)

Andrea Arighi (*Milan, Italy*)

Alberto Benussi (*Brescia, Italy*)

Chiara Cerami (*Pavia, Italy*)

Matteo De Marco (*Sheffield, United Kingdom*)

Francesco Di Lorenzo (*Brighton, United Kingdom - Rome, Italy*)

Alessandra Dodich (*Trento, Italy*)

Giacomo Koch (*Ferrara, Italy*)

Raffaele Ferrari (*London, United Kingdom*)

Elena Marcello (*Milan, Italy*)

Micaela Mitolo (*Bologna, Italy*)

Arianna Sala (*Stockholm, Sweden - Milan, Italy*)

Luisa Sambati (*Bologna, Italy*)

Laura Serra (*Rome, Italy*)

# Wednesday April 27

15.30 Registration

15.45 Opening

## CONTAMINATION SESSION

Moderators: MARCO BOZZALI (*Turin, Italy*)  
MATTEO DE MARCO (*Sheffield, United Kingdom*)  
GIORGIO FUMAGALLI (*Milan, Italy*)

## SESSION I

16.00 **Paleogenomics: Studying Ancient DNA To Better Understand Species Evolution?**

LOVE DALÉM (*Stockholm, Sweden*)

16.45 **How your brain changes after space travel**

FLORIS WUYTS (*Antwerp, Belgium*)

17.30 Coffee break

## SESSION II

Moderators: ELENA MARCELLO (*Milan, Italy*)  
ALBERTO BENUSSI (*Brescia, Italy*)  
MIRELLA RUSSO (*Chieti, Italy*)

18.00 **From fibroblasts to neurons to study aging and neurodegeneration**

JEROME MERTENS (*Innsbruck, Austria*)

18.45 **Mirror Neurons - Insights from Neurodegeneration**

LUCIANO FADIGA (*Ferrara, Italy*)

19.30 **Memorial Massimo Musicco**

Moderator: MARCO BOZZALI (*Turin, Italy*)  
Speaker: MASSIMO GALLI (*Milan, Italy*)

20.15 Dinner

# Thursday April 28

## EDUCATIONAL WORKSHOP

### **Lost in...social: The impact of social media on scientific accomplishment**

ANDREA ARIGHI (*Milan, Italy*)

CHIARA CERAMI (*Pavia, Italy*)

ALESSANDRA DODICH (*Trento, Italy*)

MICAELA MITOLO (*Bologna, Italy*)

LAURA SERRA (*Rome, Italy*)

GIULIANA CONCA (*Pavia, Italy*)

9.30 **Improving your scientific profile in the era of social network**

VITTORIO IACOVELLA (*Trento, Italy*)

10.10 **Building an open research network in a world-wide perspective**

VALERIO CAPRARO (*London, UK*)

10.50 Coffee break

11.05 **#S4J... are we social?**

LOST IN SOCIAL TEAM (*S4J, Italy*)

13.00 Lunch

## SESSION I

Moderators: FEDERICA AGOSTA (*Milan, Italy*)

ALESSANDRO BOMBACI – JUNIOR (*Turin, Italy*)

15.00 **Common molecular mechanisms in ALS and related disorders: closing the gap with FTD**

PIETRO FRATTA (*London, UK*)

## ORAL COMMUNICATION

15.20 **Apraxia of Speech in Progressive Supranuclear Palsy: the use of video recordings to facilitate diagnosis**

ROMANO LUCIANO, G. CALANDRA BUONAURA, F. BASCHIERI, L. FILIPPI, P. GUARALDI, G. GIANNINI, G. PAGLIARO, P. CORTELLI, L. SAMBATTI (*Geneva, Switzerland*)

# Thursday April 28

- 15.30 **Task-free functional networks related to emotion processing in frontotemporal lobar degeneration**  
CASTELNOVO VERONICA, E. CANU, D. CALDERARO, M. LEOCADI, S. BASAIA, N. RIVA, G. MAGNANI, F. CASO, P. CAROPPO, S. PRIONI, G. ROSSI, L. TREMOLIZZO, I. APPOLLONIO, V. SILANI, M. FILIPPI, F. AGOSTA (*Milan, Monza, Italy*)

## FLASH POSTER

- 15.40 **Amyotrophic lateral sclerosis-frontotemporal dementia: shared and divergent neural correlates across the clinical spectrum**  
CIVIDINI CAMILLA, S. BASAIA, E. SPINELLI, E. CANU, V. CASTELNOVO, N. RIVA, G. CECCHETTI, F. CASO, G. MAGNANI, A. FALINI, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 15.45 **Qualitative characterization of linguistic performance profiles in Primary Progressive Aphasia: An FDG-PET study**  
CONCA FRANCESCA, G. SANTI, C. POLITO, V. ESPOSITO, S. CAMINITI, V. BERTI, V. BESSI, A. MARCONE, S. IANNACCONE, S. SORBI, E. CATRICALÀ, D. PERANI, S. CAPPÀ (*Pavia, Florence, Milan, Italy*)
- 15.50 **Mixed semantic-logopenic variant Primary Progressive Aphasia: a clinico-biomarkers continuum hypothesis**  
MORINELLI CARMEN, C. POLITO, S. MAZZEO, S. PADIGLIONI, V. MOSCHINI, V. BERTI, C. FERRARI, B. NACMIAS, S. SORBI, V. BESSI (*Florence, Italy*)
- 15.55 Opening discussion

- 16.30 Coffee break

## SESSION II

Moderators: ANDREA ARIGHI (*Milan, Italy*)  
EDOARDO GIOELE SPINELLI (*Milan, Italy*)

## OPENING LECTURE

- 17.00 **Diagnosing Alzheimer's with a blood sample: are we there yet?**  
HENRIK ZETTERBERG (*Mölnådal, Sweden*)

## ORAL COMMUNICATION

- 17.20 **Plasma neurofilament light chain as a biomarker of Alzheimer's disease in subjective cognitive decline and mild cognitive impairment**  
LECCESE DEBORAH, G. GIACOMUCCI, S. BAGNOLI, S. MAZZEO, A. INGANNATO, S. PADIGLIONI, S. SORBI, V. BESSI, B. NACMIAS (*Florence, Italy*)
- 17.30 **Cortical microstructural measures correlate with neuroinflammatory measures, predict longitudinal atrophy, and evolve over the AD continuum**  
MARIO TORSO, G. RIDGWAY, I. HARDINGHAM, S. CHANCE (*Oxford, United Kingdom*)

# Thursday April 28

## FLASH POSTER

- 17.40 **Interplay between noradrenergic/dopaminergic enzymatic axis and neuroinflammation in Alzheimers disease**  
CATERINA MOTTA, M. ASSOIGNA, C. BONOMI, F. DI LORENZO, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 17.45 **Pathological Abeta42/40 predicts brain damage load in Alzheimers disease**  
MARTINA DI DONNA, C. BONOMI, F. BERNOCCHI, V. DE LUCIA, M. ASSOIGNA, C. MOTTA, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 17.50 **Atrophy in dopaminergic pathways is associated with emergence of delusions in patients with Alzheimers disease**  
MANCA RICCARDO, J. VALERA-BERMEJO, A. VENNERI (*London, Sheffield, England*)

- 18.30 **POSTER SESSION**

- 19.30 Dinner

## SESSION III

Moderators: FRANCESCO DI LORENZO (*Brighton, United Kingdom*)  
MAZZEO SALVATORE (*Florence, Italy*)

- 20.30 **Alzheimer's disease: where are we going and are we ready?**  
BRUNO DUBOIS (*Paris, France*)

## FLASH POSTER

- 21.10 **A machine learning-based holistic approach to predict the clinical course of patients within the Alzheimer's disease spectrum**  
RUSSO MIRELLA, N. MASSETTI, R. FRANCIOTTI, D. NARDINI, G. MANDOLINI, A. GRANZOTTO, M. BOMBA, S. DELLI PIZZI, A. MOSCA, M. DE ROSA, D. CALISI, M. SANTILLI, R. SCHERER, M. ONOFRJ, S. SENSI (*Chieti, Rome, Italy*)
- 21.15 **Amyloid PET to assess white matter pathology in Alzheimers disease: still amyloid fault?**  
LUCA SACCHI, A. PIETROBONI, T. CARANDINI, A. ARIGHI, G. FUMAGALLI, S. SIGGILINO, V. CONTARINO, M. ARCARO, C. FENOGLIO, F. ZITO, M. CASTELLANI, E. SCARPINI, D. GALIMBERTI (*Milan, Italy*)

# Friday April 29

## LUNCH SYMPOSIUM

### **New Strategies for Cognitive Decline in Neurodegenerative Disorders**

Moderators: ARIANNA SALA (*Stockholm, Sweden - Milan, Italy*)

MICOL AVENALI (*Milan, Italy*)

- 10.00 **Managing Cognitive Dysfunction in Multiple Sclerosis**  
MARCO BOZZALI (*Turin, Italy*)
- 10.40 **Cognitive Impact of Deep Brain Stimulation on Parkinson's disease**  
CARLO ALBERTO ARTUSI (*Turin, Italy*)
- 12.00 Lunch
- Moderators: CHIARA CERAMI (*Pavia, Italy*)  
TIZIANA CARANDINI (*Milan, Italy*)
- 13.00 **Treating Alzheimer's disease with Ultrasound**  
ROLAND BEISTEINER (*Vienna, Austria*)
- 13.40 **Epilepsy and cognition - A bidirectional relationship?**  
ARJUNE SEN (*Oxford, United Kingdom*)
- 14.30 Coffee break

## SESSION IV

Moderators: ALESSANDRA DODICH (*Trento, Italy*)

FEDERICO EMANUELE POZZI (*Monza, Italy*)

- 15.00 **Designing better tests for better trials in Alzheimer's disease**  
JOHN HARRISON (*London, United Kingdom*)

## ORAL COMMUNICATION

- 15.20 **CAG repeats within the non-pathological range in the HTT gene influence personality traits in patients with Subjective Cognitive Decline: a 13-year follow-up study**  
MOSCHINI VALENTINA, S. MAZZEO, S. BAGNOLI, S. PADIGLIONI, F. EMILIANI, G. GIACOMUCCI, C. MORINELLI, A. INGANNATO, T. FRENI, L. BELLONI, C. FERRARI, S. SORBI, B. NACMIAS, V. BESSI (*Florence, Italy*)



# Friday April 29

- 15.30 **Self-assessment of Empathy uncovers defective self-awareness in Mild Cognitive Impairment**  
QUARANTA DAVIDE, C. CERAMI, N. CARAGLIA, A. CAPRARA, E. COSTANTINI, M. SILVERI, S. CAPPA, C. MARRA, A. DODICH (*Rome, Milan, Pavia, Rovereto, Italy*)

## FLASH POSTER

- 15.40 **Unravelling neural correlates of empathy deficits along Alzheimers disease continuum**  
GIACOMUCCI GIULIA, G. GALDO, C. POLITO, V. BERTI, S. PADIGLIONI, S. MAZZEO, E. CHIARO, M. DE CRISTOFARO, S. BAGNOLI, B. NACMIAS, S. SORBI, V. BESSI (*Florence, Italy*)
- 15.45 **Brain networks in Alzheimer's disease: a study of EEG resting-state functional connectivity**  
GRAZIANO FABIOLA, V. BLANDINO, F. GUAJANA, E. MUSCOSO, T. PICCOLI, G. CARAVAGLIOS (*Palermo, Catania, Italy*)
- 15.50 **A data-driven classification and cognitive and metabolic imaging characterization of Posterior Cortical Atrophy**  
DANIELE LICCIARDO V. ISELLA, F. FERRI, V. IMPAGNATIELLO, C. MAPELLI, C. CRIVELLARO, C. FERRARESE, G. VALLAR (*Milan, Monza, Italy*)

- 16.30 Coffee break

## SESSION V

Moderators: LUISA SAMBATTI (*Bologna, Italy*)  
LIDIA SARRO (*Turin, Italy*)

- 17.00 **Orthostatic Hypotension and Cognitive Decline**  
IVA STANKOVIC (*Belgrade, Serbia*)

## ORAL COMMUNICATION

- 17.20 **EEG abnormalities in patients with delirium as a predictive biomarker of Dementia with Lewy Bodies**  
DE ROSA MATTEO ALESSANDRO, S. CONSOLI, D. CALISI, G. EVANGELISTA, A. DIGIOVANNI, R. SPERANZA, F. DONO, M. RUSSO, C. CARRARINI, M. ONOFRJ, L. BONNANNI (*Chieti, Italy*)
- 17.30 **Intrinsic brain functional connectivity predicts treatment-related motor complications in drug-naïve Parkinsons disease patients**  
SATOLLI SARA, R. DE MICCO, F. DI NARDO, M. SICILIANO, G. CAIAZZO, F. ESPOSITO, G. TEDESCHI, A. TESSITORE (*Naples, Caserta, Italy*)

# Friday April 29

## FLASH POSTER

- 17.40 **Altered functional connectivity of the subthalamic nucleus in Parkinsons disease: focus on candidates for deep brain stimulation**  
LUIGI ALBANO, F. AGOSTA, S. BASAIA, C. CIVIDINI, T. STOJKOVIC, I. STANKOVIC, A. TOMIC, E. STEFNOVA, V. MARKOVIC, P. MORTINI, V. KOSTIC, M. FILIPPI (*Milan, Italy*)
- 17.45 **Discriminating the cognitive profile of subcortical dementias: neurodegenerative vs. cerebrovascular**  
GENDARINI CLAUDIA, E. AIELLO, T. DIFONZO, S. ZAGO, N. BRESOLIN, M. SAETTI (*Milan, Italy*)
- 17.50 **Self-administered at-home proprioceptive exercise improves Orthostatic Hypotension in Dementia with Lewy Body**  
SERAFINI CHIARA, C. BONOMI, C. ROCCHI, C. NOCENZI, M. DI DONNA, M. BRUNO, G. KOCH, A. MARTORANA (*Rome, Italy*)

## 18.30 POSTER SESSION

19.30 Dinner

## SESSION VI

Moderators: GIACOMO KOCH (*Ferrara, Italy*)  
SILVIA BASAIA - JUNIOR (*Milan, Italy*)

- 20.30 **Treating dementia with Non-invasive Brain Stimulation**  
ALVARO PASCUAL-LEONE (*Boston, USA – Barcelona, Spain*)

## FLASH POSTER

- 21.10 **Gamma transcranial alternating stimulation in Alzheimers disease: a randomized, double-blind, sham-controlled, crossover study**  
VALENTINA CANTONI, A. BENUSSI, M. GRASSI, L. BRECHET, C. MICHEL, A. DATTA, C. THOMAS, S. GAZZINA, M. COTELLI, M. BIANCHI, E. PREMI, Y. GADOLA, M. COTELLI, M. PENGO, F. PERRONE, M. SCOLARO, S. ARCHETTI, E. SOLJE, A. PADOVANI, A. PASCUAL-LEONE, B. BORRONI (*Brescia, Pavia, Italy - Geneva, Switzerland - Kuopio, Finland, Boston*)
- 21.15 **Structural and functional connectivity changes in ad patients after 6 months of precuneus rtms: preliminary results**  
LUCIA MENCARELLI, S. BONNÌ, I. BORGHI, M. ASSOGNA, M. MINEI, V. PEZZOPANE, A. D'ACUNTO, F. PORRAZZINI, A. MARTORANA, G. KOCH (*Rome, Ferrara, Italy*)

# Poster Session

April 28<sup>rd</sup> - Thursday

## POSTER SESSION

Moderators: FRANCESCO DI LORENZO (*Brighton, United Kingdom*)  
ANDREA PLUTINO (*Ancona, Italy*)  
RICCARDO MANCA (*Sheffield, United Kingdom*)  
DARIO CALISI (*Chieti, Italy*)  
BEATRICE CONDRÒ (*Rome, Italy*)  
ARISTOTELIS KARATZOULIS (*Monza, Italy*)

- 1 Cortical remodeling across the lifespan in healthy brain reveals structural network vulnerability to neurodegeneration**  
CAMILLA CIVIDINI, S. BASAIA, E. SPINELLI, V. CASTELNOVO, M. LEOCADI, D. CALDERARO, M. MAGNO, E. CANU, M. FILIPPI, F. AGOSTA (*Uxbridge, Newcastle, UK*)
- 2 Cerebrospinal fluid neurofilament light chain (NfL) as a biomarker of neurodegeneration in Alzheimer's disease and frontotemporal lobar degeneration spectrum**  
GUIDO MARIA GIUFFRÈ, E. COSTANTINI, S. CITRO, N. MARTELLACCI, V. GUGLIELMI, D. QUARANTA, P. CALABRESI, C. MARRA (*Rome, Italy*)
- 3 The involvement of social cognition in primary progressive aphasia**  
MARIA ANTONIETTA MAGNO, E. CANU, V. CASTELNOVO, S. BASAIA, A. LAMANUZZI, G. MAGNANI, F. CASO, P. CAROPPO, S. PRIONI, G. ROSSI, L. TREMOLIZZO, I. APPOLONIO, V. SILANI, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 4 Burden and dimensioning of the risk of dementia in late-onset epilepsy: a systematic review and meta-analysis**  
MICHELE ROMOLI, C. COSTA, A. SEN (*Perugia, Italy - Oxford, UK*)
- 5 Control of core temperature in major orthopedic surgery and neurotraumatology using levobupivacaine for spinal anesthesia in old patients with delirium and stroke**  
BARBARA AMARISSE, C. RENZINI, A. ZURLO, G. GIULIANI, V. PEDUTO (*Perugia, Ferrara, San Marino, Italy*)
- 6 Familial and non-familial frontotemporal dementia: an Italian single-centre cohort**  
ILENIA LIBRI, A. BENUSSI, A. ALBERICI, E. PREMI, V. CANTONI, Y. GADOLA, J. RIVOLTA, M. GIUNTA, H. ZETTERBERG, K. BLENNOW, A. PADOVANI, B. BORRONI (*Brescia, Italy - Göteborg - Svezia*)

# Poster Session

- 7 Amyotrophic lateral sclerosis-frontotemporal dementia: shared and divergent neural correlates across the clinical spectrum**  
CAMILLA CIVIDINI, S. BASAIA, E. SPINELLI, E. CANU, V. CASTELNOVO, N. RIVA, G. CECCHETTI, F. CASO, G. MAGNANI, A. FALINI, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 8 Stepwise connectivity paves the way to reveal functional network vulnerability in age-related neurodegenerative disorders**  
CAMILLA CIVIDINI, F. AGOSTA, S. BASAIA, E. SPINELLI, V. CASTELNOVO, M. LEOCADI, D. CALDERARO, E. CANU, M. FILIPPI (*Milan, Italy*)
- 9 Physiotherapy with dual-tasks improves cognition and resting-state functional connectivity in Parkinson's disease with postural instability and gait disorders**  
MICHELA LEOCADI, E. CANU, E. SARASSO, A. GARDONI, S. BASAIA, V. CASTELNOVO, N. PIRAMIDE, M. VOLONTÈ, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 10 Profile of  $\alpha$ -Klotho in serum and CSF of Parkinson's disease**  
PIERGIORGIO GRILLO, G. SANCESARIO, G. DI LAZZARO, N. MERCURI, A. PISANI, T. SCHIRINZI (*Rome, Italy*)
- 11 Cortical footprint of depressive symptoms in Frontotemporal Lobar Degeneration: a surface-based analysis**  
ALMA GHIRELLI, S. NIGRO, B. TAFURI, D. URSO, G. MILELLA, R. DE BLASI, G. LOGROSCINO (*Bari, Tricase, Italy*)
- 12 Cortical remodeling across the lifespan in healthy brain reveals structural network vulnerability to neurodegeneration**  
CAMILLA CIVIDINI, S. BASAIA, E. SPINELLI, V. CASTELNOVO, M. LEOCADI, D. CALDERARO, M. MAGNO, E. CANU, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 13 Functional brain connectome in ventral and dorsal variants of posterior cortical atrophy**  
MARIA ANTONIETTA MAGNO, F. AGOSTA, E. CANU, S. BASAIA, C. CIVIDINI, F. CASO, G. MAGNANI, M. MONTEMBEAULT, R. LEVY, R. MIGLIACCIO, M. FILIPPI (*Milan, Italy - San Francisco, USA - Paris, France*)
- 14 MRI biomarkers of freezing of gait development in Parkinson's disease: a longitudinal study**  
ELISABETTA SARASSO, F. AGOSTA, S. BASAIA, C. CIVIDINI, T. STOJKOVIC, I. STANKOVIC, N. PIRAMIDE, A. TOMIC, V. MARKOVIC, E. STEFANOVA, V. KOSTIC, M. FILIPPI (*Milan, Italy - Belgrade, Serbia*)
- 15 Anticholinergic burden, cognitive impairment and deprescribing in a cohort of outpatients from a geriatric clinic in the province of Modena**  
EMANUELE ROCCO VILLANI, F. BENVENUTO, G. VACCARI, B. MANNI, A. CARFÌ, A. FABBO (*Rome, Modena, Italy*)

# Poster Session

- 16 **Thalamic artero-venous fistula as the cause of acute and rapidly progression cognitive decline: a case report**  
MARIA ROSARIA BAGNATO, M. DI DONNA, M. PIERANTOZZI, F. PITOCCHI, V. FERRAZZOLI, A. MARTORANA (*Rome, Italy*)
- 17 **Atypical dural enhancement in atypical Alzheimer's Disease: a case report**  
MATILDE BRUNO, M. DI DONNA, C. BONOMI, C. SERAFINI, F. BERNOCCHI, S. FALLETTI, F. PLACIDI, A. MARTORANA (*Rome, Italy*)
- 18 **The usefulness of visual rating scales of atrophy in Primary Progressive Aphasia**  
GIORGIO GIULIO FUMAGALLI, N. FALGAS, M. MERCURIO, A. ARIGHI, A. TORT-MERINO, L. SACCHI, S. BORREGO-ÉCIJA, T. CARANDINI, G. CONTE, A. PIETROBONI, E. SCARPINI, R. SANCHEZ-VALLE, D. GALIMBERTI (*Milan, Italy - Barcelona, Spain*)
- 19 **Blood-Brain Barrier integrity and its influence in AD Continuum**  
FRANCESCO RICCI, C. BONOMI, S. FALLETTI, A. MARTORANA (*Rome, Italy*)
- 20 **Olfactory cortex functional connectivity may predict the conversion from MCI to AD**  
DANIELA BALLOTTA, C. CASADIO, M. CORNI, E. BARDI, M. TONDELLI, M. MOLINARI, F. BENUZZI (*Modena, Italy*)
- 21 **Patients and clinical experience of tele-neuropsychology during the covid-19 pandemic**  
ANTEA CACCIA, A. DODICH, I. CHIZZONI, C. PAPAGNO (*Trento, Bolzano, Italy*)
- 22 **Late onset frontal syndrome: differentiation between Frontotemporal dementia and Primary psychiatric disorder using visual rating scales of atrophy**  
GIORGIO GIULIO FUMAGALLI, E. MINACAPILLI, L. SACCHI, T. CARANDINI, M. MERCURIO, E. ROTONDO, V. BORRACCI, G. GIARDINIERI, A. PIETROBONI, P. BRAMBILLA, G. CONTE, F. TRIULZI, D. GALIMBERTI, E. SCARPINI, A. ARIGHI (*Milan, Italy*)
- 23 **Parkinson disease and embodied language: the effects of demonstratives on patients' reachability judgement task**  
CHIARA GIACOBBE, Y. COELLO, G. SANTANGELO (*Caserta, Italy - Lille, France*)
- 24 **Long-term relapse of anti-LGI1 encephalitis: a case report**  
NICOLA DAVIDE LOIZZO, T. GUERRA, A. INTRONA, B. TARTAGLIONE, M. TROJANO (*Bari, Italy*)
- 25 **Deep Brain Stimulation for Multiple System Atrophy, Progressive Supranuclear Palsy, and Dementia with Lewy Body: A Systematic Review**  
DOMIZIANA RINALDI (*Rome, Italy*)
- 26 **Serum biomarkers in Parkinson's disease: correlations with respective CSF content and clinical features**  
HENRI ZENUNI, P. GRILLO, L. BATTISTINI, N. MERCURI, G. SANCESARIO, T. SCHIRINZI (*Rome, Italy*)

# Poster Session

- 27 **Correlation between dopamine transporter binding and laterality of auditory dysfunction in Parkinson's disease**  
ELENA GARASTO, M. CONTI, A. VIZIANO, R. SISTO, N. MERCURI, A. MOLETI, M. PIERANTOZZI, A. STEFANI, R. CERRONI (*Rome, Italy*)
- 28 **Repetitive Transcranial Magnetic Stimulation (rTMS) on two different brain areas for the treatment of cognitive impairment in Alzheimer's Disease: a Neurophysiological study**  
FRANCESCO MOTOLESE, A. MAGLIOZZI, E. FALATO, B. SANCETTA, A. CRUCIANI, V. DI LAZZARO (*Rome, Italy*)
- 29 **Non-invasive associative plasticity induction between left PMv and M1: a TMS-EEG study**  
VALENTINA PEZZOPANE, D. SPAMPINATO, M. ASSOGNA, E. CASULA, G. KOCH (*Rome, Ferrara, Italy*)
- 30 **Cultural influence on Clock Drawing Test: a narrative review**  
GIORGIA MAESTRI, A. NICOTRA, M. CANEVELLI, S. POMATI, L. PANTONI, I. COVA (*Milan, Rome, Italy*)
- 31 **Cognitive impairment in previously independent COVID-19 patients: the tip of the iceberg?**  
GIULIA GAMBERINI, F. MASUCCIO, C. SOLARO
- 32 **Strengths and pitfalls of neuropsychological assessment with a cultural mediator: a case report**  
ALESSIA NICOTRA, G. MAESTRI, V. CUCUMO, M. CANEVELLI, S. POMATI, L. PANTONI, I. COVA (*Milan, Rome, Italy*)
- 33 **Study of the neural substrate of conceptual representations and clinical implication in semantic dementia**  
ILARIA BORGHI, S. BONNÌ, M. MICHELE, E. CASULA, G. KOCH, C. CALTAGIRONE, G. GAINOTTI (*Rome, Italy*)
- 34 **Control of course of temperature in major orthopedic surgery and neurotraumatology using levobupivacaine for spinal anesthesia in old patients with hyperkinetic delirium**  
BARBARA AMARISSE, B. CIAMMITTI (*Perugia, Terni, Italy*)
- 35 **Control of core temperature in major orthopedic surgery and neurotraumatology using levobupivacaine for spinal anesthesia in old patients with delirium and dementia**  
BARBARA AMARISSE, C. RENZINI (*Perugia, Ferrara, San Marino, Italy*)

# Poster Session

- 36 **Muscarinic Receptors Expression in the Peripheral Blood Cells Differentiate Dementia with Lewy Bodies from Alzheimer's Disease**  
DARIO CALISI, M. REALE, C. CLAUDIA, M. RUSSO, F. DONO, L. FERRI, M. DI PIETRO, A. PORRECA, E. COSTANTINI, M. DI NICOLA, M. ONOFRJ, L. BONANNI (*Chieti, Italy*)
- 37 **Temporo-mesial volume and olfactory capacity to predict Alzheimer's Disease: a longitudinal study**  
CLAUDIA CASADIO, D. BALLOTTA, M. CORNI, E. BARDI, M. TONDELLI, M. MOLINARI, F. BENUZZI (*Modena, Italy*)
- 38 **Qualitative characterization of linguistic performance profiles in Primary Progressive Aphasia: An FDG-PET study**  
CONCA FRANCESCA, G. SANTI, C. POLITO, V. ESPOSITO, S. CAMINITI, V. BERTI, V. BESSI, A. MARCONE, S. IANNACCONE, S. SORBI, E. CATRICALÀ, D. PERANI, S. CAPPA (*Pavia, Florence, Milan, Italy*)
- 39 **Mixed semantic-logopenic variant Primary Progressive Aphasia: a clinico-biomarkers continuum hypothesis**  
MORINELLI CARMEN, C. POLITO, S. MAZZEO, S. PADIGLIONI, V. MOSCHINI, V. BERTI, C. FERRARI, B. NACMIAS, S. SORBI, V. BESSI (*Florence, Italy*)
- 40 **Interplay between noradrenergic/dopaminergic enzymatic axis and neuroinflammation in Alzheimers disease**  
CATERINA MOTTA, M. ASSOONA, C. BONOMI, F. DI LORENZO, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 41 **Pathological Abeta42/40 predicts brain damage load in Alzheimers Disease**  
MARTINA DI DONNA, C. BONOMI, F. BERNOCCHI, V. DE LUCIA, M. ASSOONA, C. MOTTA, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 42 **Atrophy in dopaminergic pathways is associated with emergence of delusions in patients with Alzheimers disease**  
MANCA RICCARDO, J. VALERA-BERMEJO, A. VENNERI (*London, Sheffield, England*)
- 43 **A machine learning-based holistic approach to predict the clinical course of patients within the Alzheimer's disease spectrum**  
RUSSO MIRELLA, N. MASSETTI, R. FRANCIOTTI, D. NARDINI, G. MANDOLINI, A. GRANZOTTO, M. BOMBA, S. DELLI PIZZI, A. MOSCA, M. DE ROSA, D. CALISI, M. SANTILLI, R. SCHERER, M. ONOFRJ, S. SENSI (*Chieti, Rome, Italy*)
- 44 **Amyloid PET to assess white matter pathology in Alzheimers disease: still amyloid fault?**  
LUCA SACCHI, A. PIETROBONI, T. CARANDINI, A. ARIGHI, G. FUMAGALLI, S. SIGGILINO, V. CONTARINO, M. ARCARO, C. FENOGLIO, F. ZITO, M. CASTELLANI, E. SCARPINI, D. GALIMBERTI (*Milan, Italy*)

# Poster Session

April 29<sup>th</sup> - Friday

## POSTER SESSION

Moderators: ANDREA ARIGHI (*Milan, Italy*)  
MARCELLO MOCCIA (*Naples, Italy*)  
CARLO ALBERTO ARTUSI (*Turin, Italy*)  
ANNIBALE ANTONIONI (*Ferrara, Italy*)  
MATTEO ALESSANDRO DE ROSA (*Chieti, Italy*)

- 45 **The role of cerebro-spinal fluid (csf) proteins as prognostic biomarkers in alzheimer's disease**  
VALERIA BLANDINO, T. COLLETTI, F. GRAZIANO, F. GUAJANA, D. TARANTINO, T. PICCOLI (*Palermo, Italy*)
- 46 **Neurofilament Light Chain and Intermediate HTT Alleles as combined biomarkers in Italian ALS patients**  
ASSUNTA INGANNATO, S. BAGNOLI, S. MAZZEO, V. BESSI, S. MATÀ, M. DEL MASTIO, G. LOMBARDI, C. FERRARI, S. SORBI, B. NACMIAS (*Florence, Italy*)
- 47 **Simultaneous transcranial electrical and magnetic stimulation boost gamma oscillations in the dorsolateral prefrontal cortex**  
MICHELE MAIELLA, E. CASULA, I. BORGHI, M. ASSOGNA, A. D'ACUNTO, V. PEZZOPANE, L. MENCARELLI, M. PELLICCIARI, G. KOCH (*Rome, Ferrara, Italy*)
- 48 **Functional connectivity rearrangements propagating from disease epicenters in frontotemporal lobar degeneration variants**  
EDOARDO GIOELE SPINELLI, F. FALBO, S. BASAIA, C. CIVIDINI, N. RIVA, E. CANU, V. CASTELNOVO, G. MAGNANI, F. CASO, P. CAROPPO, S. PRIONI, G. ROSSI, L. TREMOZZO, I. APPOLLONIO, V. SILANI, M. FILIPPI, F. AGOSTA (*Milan, Monza, Italy*)
- 49 **White matter microstructural changes in healthy aging: a DTI and NODDI study**  
SILVIA BASAIA, F. AGOSTA, C. CIVIDINI, F. GUARNACCIA, E. SPINELLI, M. FILIPPI (*Milan, Italy*)
- 50 **Motor cerebro-cerebellar networks breakdown among different subtypes of Parkinson's disease**  
SILVIA BASAIA, F. AGOSTA, A. FRANCA, C. CIVIDINI, R. BALESTRINO, T. STOJKOVIC, I. STANKOVIC, R. DE MICCO, L. ALBANO, E. SARASSO, A. GARDONI, N. PIRAMIDE, V. MARKOVIC, E. STEFANOVA, V. KOSTIC, M. FILIPPI (*Milan, Italy - Belgrade, Serbia*)
- 51 **Anatomical correlates of strategic memory: a neuropsychological study**  
COCUZZA ALESSANDRO, L. SBRISSA, T. DIFONZO, M. SIRTORI, A. DI FONZO, G. FRANCO, G. BERTANI, B. ZARINO, N. BRESOLIN, M. SAETTI (*Milan, Italy*)



# Poster Session

- 52 **Accelerated epigenetic ageing in isolated REM Sleep Behavior Disorder**  
LUCA BALDELLI, L. SAMBATI, M. BACALINI, C. PIRAZZINI, F. MIGNANI, P. GUARALDI, G. CALANDRA BUONAURA, P. GARAGNANI, P. CORTELLI, F. PROVINI (*Bologna, Italy*)
- 53 **GBA mutations and parkinson's disease. Biological biomarkers and device-aided therapies**  
PAOLO DE MARCO, F. SPAGNOLO, A. QUARTA, D. PASTORE, M. SCOTTO DI CARLO, A. MARIA RINI (*Chieti, Brindisi, Italy*)
- 54 **Stepwise connectivity paves the way to reveal functional network vulnerability in age-related neurodegenerative disorders**  
CAMILLA CIVIDINI, F. AGOSTA, S. BASAIA, E. SPINELLI, V. CASTELNOVO, M. LEOCADI, D. CALDERARO, E. CANU, M. FILIPPI (*Milan, Italy*)
- 55 **Constitutive NOS production in Alzheimer's disease according to  $\epsilon$  genotype: a human CSF-based in vivo analysis**  
CHIARA GIUSEPPINA BONOMI, M. DI DONNA, M. ASSOIGNA, D. FIORELLI, F. BERNOCCHI, M. NUCCETELLI, C. MOTTA, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 56 **A psychological intervention during the Sars-Cov-2 pandemic for caregivers of early-onset Alzheimer's disease patients**  
GIULIA D'ALVANO, M. DE STEFANO, S. ESPOSITO, A. IAVARONE, M. SICILIANO, D. BUONANNO, F. TROJSI, G. TEDESCHI (*Naples, Italy*)
- 57 **A case of adult-onset leukoencephalopathy with axonal spheroids and pigmented glia due to a novel mutation in *csf1r* gene with clinical features resembling fronto-temporal dementia**  
FRANCESCO MISIROCCHI, A. ZILIOLI, A. BENUSSI, M. SPALLAZZI (*Parma, Brescia, Italy*)
- 58 **Frequency-dependent modulation of cerebellar excitability during the application of non-invasive alternating current stimulation**  
DANNY SPAMPINATO (*Rome, Italy*)
- 59 **The association of mental, social, and physical leisure activities with age-related cognitive decline in community-dwelling older adults: results from the cross-sectional NutBrain study**  
ELENA PERDIXI, S. BERNINI, S. CONTI, N. JESUTHASAN, A. COSTA, M. COTTA RAMUSINO, F. ADORNI, F. PRINELLI (*Milan, Pavia, Segrate, Italy*)
- 60 **CSF levels of Endothelin-1, VEGF, MMP2 and MMP9 within Alzheimer's disease continuum**  
FRANCESCA BERNOCCHI, M. ASSOIGNA, C. BONOMI, V. DE LUCIA, M. DI DONNA, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 61 **The role of CSF biomarkers in idiopathic normal pressure hydrocephalus**  
FILIPPO EMILIANI, S. MAZZEO, L. DEL RE, S. BAGNOLI, S. PADIGLIONI, G. GIACOMUCCI, J. BALESTRINI, B. NACMIAS, S. SORBI, V. BESSI (*Florence, Italy*)

# Poster Session

- 62 Cognitive impairment following Covid-19 infection. Clinical characteristics and biomarkers longitudinal profiling**  
GAIA PELLITTERI, F. JANES, M. FABRIS, R. MILANIC, G. GIGLI, F. CURCIO, M. VALENTE (*Udine, Italy*)
- 63 Functional connectivity in Parkinson's Disease candidates for deep brain stimulation**  
LUIGI ALBANO, F. AGOSTA, S. BASAIA, C. CIVIDINI, T. STOJKOVIC, E. SARASSO, I. STANKOVIC, A. TOMIC, V. MARKOVIC, E. STEFANOVA, P. MORTINI, V. KOSTIC, M. FILIPPI (*Milan, Italy - Belgrade Serbia*)
- 64 MRI investigation of caudate networks in the normal aging**  
SILVIA BASAIA, F. AGOSTA, G. SFERRUZZA, M. ZAVARELLA, C. CIVIDINI, M. MAGNO, L. CACCIAGUERRA, M. BACIGALUPPI, G. MARTINO, M. FILIPPI (*Milan, Italy*)
- 65 Pallidal functional connectivity changes are associated with disgust recognition in pure motor amyotrophic lateral sclerosis**  
VERONICA CASTELNOVO, E. CANU, M. MAGNO, E. GATTI, N. RIVA, B. POLETTI, V. SILANI, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 66 Structural and functional cerebellar alterations in Parkinson's disease with postural instability and gait disorders**  
ANDREA GARDONI, E. SARASSO, S. BASAIA, M. VOLONTÉ, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 67 Awareness in neurodegenerative disorders: a systematic MRI review**  
MICHELA LEOCADI, E. CANU, A. PALDINO, M. FILIPPI, F. AGOSTA (*Milan, Italy*)
- 68 Atypical presentation of a single case of Cortico-Basal Degeneration**  
GIULIO PALMAS, S. BASILICO, G. SALVATO, G. GIANNINI, G. GELOSA, G. BOTTINI (*Pavia, Milan, Italy*)
- 69 Non-ceruloplasmin copper in MCI-AD: preliminary results of the screening phase of the ZINCAID study**  
MATTEO SANTILLI, M. SANTILLI, M. RUSSO, M. BOMBA, D. CALISI, M. DE ROSA, A. GRANZOTTO, R. SQUITTI, S. SENSI (*Chieti, Rome, Italy*)
- 70 Cognitive and affective disorders in critical SARS-CoV-2 patients and caregivers**  
SUSY FERRARI, L. SAMBATI, K. MATTAROZZI, L. MASCIA, T. TONETTI, R. SANTORO, L. CRETTELLA, M. DELLA GIOVAMPAOLA, P. BOTTAUSCI, L. ROMANO, P. CORTELLI, M. GUARINO (*Bologna, Italy*)
- 71 CBS-like phenotype in carriers of beta-glucocerebrosidase gene (GBA) L444P mutation**  
GIULIA LAZZERI, F. DI BIASIO, E. MONFRINI, S. MORBELLI, R. MARCHESI, L. AVANZINO, A. DI FONZO (*Milan, Genova, Italy*)

# Poster Session

- 72 **Mental health disorders and fear of COVID-19: a phone survey in older adults recruited in the NutBrain population-based study**  
ELENA PERDIXI, E. PERDIXI, S. BERNINI, S. CONTI, N. JESUTHASAN, A. COSTA, M. COTTA RAMUSINO, F. ADORNI, F. PRINELLI (*Milan, Pavia, Segrate, Italy*)
- 73 **Sundowning in patients with dementia: prevalence, clinical and neuropsychological features**  
MARCO TOCCACELI BLASI, M. VALLETTA, M. CANEVELLI, G. BRUNO (*Rome, Italy*)
- 74 **Confabulation: it rains but pours**  
ELISABETTA GROPPA, C. ROSCI, G. DALLA BARBA, S. SBARAINI, M. SCARABELLO, C. MANFREDI, A. PRIORI (*Milan, Italy*)
- 75 **Cognitive disorders in patient with hematological malignancies treated with CAR-T cell therapy**  
SUSY FERRARI, L. SAMBATI, R. SANTORO, L. CRETTELLA, U. PENSATO, L. MUCCIOLI, G. AMORE, S. SAMMALI, R. RINALDI, S. MONDINI, F. RONDELLI, R. D'ANGELO, M. NICODEMO, B. CASADEI, F. DE FELICE, I. DEFRANCESCO, C. PELLEGRINI, P. ZINZANI, P. TACCHETTI, E. ZAMAGNI, F. BONIFAZI, E. PIERUCCI, M. CAVO, P. CORTELLI, M. GUARINO (*Bologna, Italy*)
- 76 **Cognitive impairment in young COVID-19 patients**  
GIULIA GAMBERINI, F. MSUCCIO, C. SOLARO
- 77 **Neurophysiological investigation of prefrontal activity and oscillatory dynamics in frontotemporal dementia: a TMS-EEG study**  
MARTINA ASSOIGNA, E. CASULA, I. BORGHI, L. MENCARELLI, C. MOTTA, F. DI LORENZO, S. BONNÌ, M. MINEI, V. PEZZOPANE, A. MARTORANA, G. KOCH (*Rome, Italy*)
- 78 **Control of core temperature in major orthopedic surgery and neurotraumatology using levobupivacaine for spinal anesthesia in old patients with delirium using donezepil**  
BARBARA AMARISSE, V. PEDUTO (*Perugia, Terni, Italy*)
- 79 **Amyloid-related imaging abnormalities and beta-amyloid targeting antibodies: a systematic review**  
GIORDANO CECCHETTI, F. AGOSTA, E. SPINELLI, P. VEZZULLI, A. FALINI, M. FILIPPI (*Milan, Italy*)
- 80 **Modulation of verbal fluency tasks using a device combining prismatic adaptation and serious games**  
AGNESE DI GARBO, G. CHIARAMONTE (*Palermo, Italy*)
- 81 **Unravelling neural correlates of empathy deficits along Alzheimers Disease continuum**  
GIACOMUCCI GIULIA, G. GALDO, C. POLITO, V. BERTI, S. PADIGLIONI, S. MAZZEO, E. CHIARO, M. DE CRISTOFARO, S. BAGNOLI, B. NACMIAS, S. SORBI, V. BESSI (*Florence, Italy*)

# Poster Session

- 82 Brain networks in Alzheimer's Disease: a study of EEG resting-state functional connectivity**  
GRAZIANO FABIOLA, V. BLANDINO, F. GUAJANA, E. MUSCOSO, T. PICCOLI, G. CARAVAGLIOS (*Palermo, Catania, Italy*)
- 83 A data-driven classification and cognitive and metabolic imaging characterization of Posterior Cortical Atrophy**  
DANIELE LICCIARDO V. ISELLA, F. FERRI, V. IMPAGNATIELLO, C. MAPELLI, C. CRIVELLARO, C. FERRARESE, G. VALLAR (*Milan, Monza, Italy*)
- 84 Altered functional connectivity of the subthalamic nucleus in parkinsons disease: focus on candidates for deep brain stimulation**  
LUIGI ALBANO, F. AGOSTA, S. BASAIA, C. CIVIDINI, T. STOJKOVIC, I. STANKOVIC, A. TOMIC, E. STEFNOVA, V. MARKOVIC, P. MORTINI, V. KOSTIC, M. FILIPPI (*Milan, Italy*)
- 85 Discriminating the cognitive profile of subcortical dementias: neurodegenerative vs. cerebrovascular**  
GENDARINI CLAUDIA, E. AIELLO, T. DIFONZO, S. ZAGO, N. BRESOLIN, M. SAETTI (*Milan, Italy*)
- 86 Self-administered at-home proprioceptive exercise improves Orthostatic Hypotension in Dementia with Lewy Body**  
SERAFINI CHIARA, C. BONOMI, C. ROCCHI, C. NOCENZI, M. DI DONNA, M. BRUNO, G. KOCH, A. MARTORANA (*Rome, Italy*)
- 87 Gamma transcranial alternating stimulation in Alzheimers disease: a randomized, double-blind, sham-controlled, crossover study**  
VALENTINA CANTONI, A. BENUSSI, M. GRASSI, L. BRECHET, C. MICHEL, A. DATTA, C. THOMAS, S. GAZZINA, M. COTELLI, M. BIANCHI, E. PREMI, Y. GADOLA, M. COTELLI, M. PENGO, F. PERRONE, M. SCOLARO, S. ARCHETTI, E. SOLJE, A. PADOVANI, A. PASCUAL-LEONE, B. BORRONI (*Brescia, Pavia, Italy - Geneva, Switzerland - Kuopion, Finland, Boston*)
- 88 Structural and functional connectivity changes in ad patients after 6 months of precuneus rtms: preliminary results**  
LUCIA MENCARELLI, S. BONNÌ, I. BORGHI, M. ASSOGNA, M. MINEI, V. PEZZOPANE, A. D'ACUNTO, F. PORRAZZINI, A. MARTORANA, G. KOCH (*Rome, Ferrara, Italy*)

# General informations

## **Congress Venue**

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## **Organizing Secretariat**

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