

SCIENTIFIC PROGRAM



10.30-12.00

RED HALL 2

PRE-CONGRESS SYMPOSIUM**RECOGNITION OF LIFE-LONG CURIOSITY IN PARKINSON'S DISEASE ETIOPATHOGENESIS**

Chairmen: **T. Brücke** (Austria), **P. Riederer** (Germany),
E.Ch. Wolters (The Netherlands)

Committee: **T. Brücke** (Austria), **R. Horowski** (Germany),
P. Riederer (Germany), **M.B.H. Youdim** (Israel),
E.Ch. Wolters (The Netherlands)

- 10.30 Japanese pioneers in Parkinson's disease (introduction by P. Riederer)
N. Hattori (Japan)
- 11.00 Senator-Doktor-Franz-Burda Award: 20 years of gene-hunting in Parkinson's disease (introduction by T. Brücke)
A. Zimprich (Austria)
- 11.30 The impact of genetic research in movement disorders (introduction by E.Ch. Wolters)
Z.K. Wszolek (USA)
- 12.00 Break

12.30-14.00

SILVER HALL

CLINICAL PARALLEL SESSION**1.10 GENETICS**

Chairmen: **S. Goldwurm** (Italy), **E.K. Tan** (Singapore)

- 12.30 Autosomal dominant Parkinsonism
Z.K. Wszolek (USA)
- 13.00 Autosomal recessive Parkinsonism
V. Bonifati (The Netherlands)
- 13.30 Common and rare risk variants for Parkinsonism
O. Ross (USA)

12.30-14.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**1.20 WHAT IS NEW IN SYNUCLEINOPATHIES**Chairmen: **P. Riederer** (Germany), **G.K. Wenning** (Austria)

- 12.30 Alpha-synuclein propagation
N.L. Rey (USA)
- 13.00 Phenotypic spectrum of alpha-synuclein mutations
E.M. Valente (Italy)
- 13.30 Multiple system atrophy-mimics and boundary issues in multiple system atrophy
H.-J. Kim (South Korea)

12.30-14.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**1.40 DIAGNOSIS OF PARKINSON'S DISEASE**Chairmen: **E. Melamed** (Israel) †, **E.Ch. Wolters** (The Netherlands)

- 12.30 Clinical definition
E.Ch. Wolters (The Netherlands)
- 13.00 Pre-motor manifestations
A. Iranzo (Spain)
- 13.30 Non motor manifestations
K. Ray Chaudhuri (United Kingdom)

12.30-14.00

YELLOW HALL 3

ORAL POSTER SESSION (1.30.01-1.30.12)Chairmen: **A. Elia** (Italy), **E. Fiorenzato** (Italy)

- OP 1.30.01** An unexpected higher prevalence of Parkinson's disease in females than males in the province of Trento (Italy): a clues for the etiopathogenesis?
M.C. Malaguti, N. Vanacore, S. Ferrari, S. Piffer, R. Pertile, R. Roni, A. Polverino, M. Gentilini, F. Cembrani, V. Bertozzi, M. Pellegrini, D. Orrico (Italy)
- OP 1.30.02** Parkinson's disease in Senegal: epidemiologic, clinical and therapeutic aspects
N.M. Gaye, L.B. Seck, N.S. Diagne, A.D. Sow, A.M. Diop, O. Cisse, A.B. Faye, M.S. Diop, K. Toure, M. Ndiaye, A.G. Diop, M.M. Ndiaye (Senegal)
- OP 1.30.03** A step forward to the future: UPDRS kinematic measures for telemedicine
G. Albani, C. Azzaro, F. Parisi, C. Ferraris, M. Giuberti, L. Contin, D. Pianu, L.G. Pradotto, V. Cimolin, M. Galli, R. Nerino, G. Ferrari, A. Mauro (Italy)
- OP 1.30.05** Longer duration of Parkinson's disease is associated with reduced prevalence of hypertension
V. Brandi, D. Vetrano, M.S. Pisciotta, M.R. Lo Monaco, A. Laudisio, G. Onder, R. Bernabei, G. Zuccalà (Italy)
- OP 1.30.06** Gastroesophageal dysmotility in advanced Parkinson's disease
F. Mancini, L. Manfredi, M. Lacerenza, C. Colombo A. Bestetti (Italy)
- OP 1.30.07** Speech disorders and Parkinson's disease
M. Pettorino, E. Pellegrino, M.G. Busà (Italy)
- OP 1.30.08** An alternative perspective on interpretation of the secondary motor symptoms of Parkinson's disease
L. Vucolova (USA)
- OP 1.30.09** An alternative perspective on interpretation of the cardinal motor symptoms of Parkinson's disease
L. Vucolova (USA)
- OP 1.30.10** Falling direction is important predictors for mechanism of falls in patients with Parkinson's disease
J. Youn, M. Hwang, D. Kim, J.W. Cho (South Korea)
- OP 1.30.11** Frequency and risk of falls in Parkinson's disease in Ibadan
T. Farombi, M. Owolabi, A. Ogunniyi (Nigeria)
- OP 1.30.12** Falls in Parkinson's disease: effects on health related quality of life
T. Farombi, J. Yaria, M. Owolabi, A. Ogunniyi (Nigeria)

14.00 Break

14.30-16.00

SILVER HALL

CLINICAL PARALLEL SESSION**1.11 UPDATE ON OTHER DEGENERATIVE MOVEMENT DISORDERS**Chairmen: **F. Cardoso** (Brazil), **G.B. Landwehrmeyer** (Germany)

- 14.30 Huntington disease
G.B. Landwehrmeyer (Germany)
- 15.00 Spino-cerebellar ataxia
A. Dürr (France)
- 15.30 Neurodegenerations with brain iron accumulation
S.A. Schneider (Germany)

14.30-16.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**1.21 WHAT IS NEW IN TAUOPATHIES**Chairmen: **C. Colosimo** (Italy), **B.S. Jeon** (South Korea)

- 14.30 Phenotypic spectrum
G. Höglinger (Germany)
- 15.00 Neuropathology
D. Irwin (USA)
- 15.30 Imaging biomarkers
D.J. Brooks (Denmark)

14.30-16.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**1.41 MENTAL DYSFUNCTION IN PARKINSON'S DISEASE**Chairman: **J. Kulisevsky** (Spain)

- 14.30 Cognitive deterioration
J. Kulisevsky (Spain)
- 15.00 Depression
P. Barone (Italy)
- 15.30 Psychosis
T. van Laar (The Netherlands)

14.30-16.00

YELLOW HALL 3

ORAL POSTER SESSION (1.30.13-1.30.24)Chairmen: **A. Elia** (Italy), **F. Mancini** (Italy)

- OP 1.30.13** A prospective study of cumulative incidence and course of RLS in de novo PD patients during chronic dopaminergic therapy
S. Calzetti, E. Marchesi, M. Goldoni, A. Negrotti (Italy)
- OP 1.30.14** Semantic and phonemic verbal fluency in patients with Parkinson's disease (PD)
A.D. Roesch, A. Meyer, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 1.30.15** Emotion recognition and emotion expression in Parkinson's disease: an unifying emotional mirror mechanism?
L. Ricciardi, F. Visco-Comandini, R. Erro, F. Morgante*, M. Bologna*, A. Fasano, D. Ricciardi*, M. Edwards, J. Kilner** (United Kingdom, *Italy, **Canada)
- OP 1.30.16** Association of depressive symptoms with circadian blood pressure alterations in Parkinson's disease
M.S. Pisciotta, D.L. Vetrano, V. Brandi, M.R. Lo Monaco, A. Laudisio, D. Fusco, G. Onder, R. Bernabei, G. Zuccalà (Italy)
- OP 1.30.17** Blood biomarkers associated with cognitive decline in early stage and drug-naive Parkinson's disease patients
J. Santiago, J. Potashkin (USA)
- OP 1.30.18** Impact of gender on impulse control disorders and other non-motor symptoms among Parkinson's disease patients
N. Kovács, G. Deli, Z. Aschermann, A. Makkos, J. Janszky, M. Kovács (Hungary)
- OP 1.30.19** Effects of Parkinson's disease on cognitive action control: insights on impulsive response tendencies using an oculomotor Simon task
J. Duprez, J. Houvenaghel, S. Argaud, M. Vérin, P. Sauleau (France)
- OP 1.30.20** Sensory attenuation and Parkinson's disease: a new pathophysiological framework of bradykinesia
A. Macerollo, J. Chen, P. Korlipara, T. Foltynie, J. Rothwell, M. Edwards, J. Kilner (United Kingdom)
- OP 1.30.21** Fine motor function skills in patients with Parkinson's disease (PD) with and without mild cognitive impairment (MCI)
P. Dahdal, A. Meyer, M. Chaturvedi, K. Nowak, A.D. Roesch, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 1.30.24** Continuous monitoring of PD with an affordable novel computerised motor test based on a tablet
M. Da Lio, M. De Cecco, P. Bosetti, M. Malaguti (Italy)

16.00 Break

16.30-18.00

SILVER HALL

PLENARY SESSION**1.1 PARKINSON'S DISEASE PHARMACOTHERAPEUTICAL INTERVENTIONS**Chairman: **E.Ch. Wolters** (The Netherlands)

- 16.30 Parkinson's disease-related non-motor symptoms
K. Ray Chaudhuri (United Kingdom)
- 17.00 Levodopa based strategies
P.A. LeWitt (USA)
- 17.30 Enzyme-based strategies
F. Stocchi (Italy)

18.30-20.00

SILVER HALL

PLENARY SESSION**OPENING CEREMONY**Welcoming words by the IAPRD President and the Congress Chair
E.Ch. Wolters (The Netherlands), **A. Antonini** (Italy)

Welcoming words

L. Battistin (Italy)**A. Berardelli** (Italy)

Transplantation in Parkinson's disease

A. Bjorklund (Sweden)

8.30-10.00

SILVER HALL

CLINICAL PARALLEL SESSION**2.10 BEHAVIOURAL DISORDERS IN PARKINSONISM**Chairmen: **D. Aarland** (Sweden), **J. Kulisevsky** (Spain)

- 8.30 Impulsivity and compulsivity in Parkinson's disease
M. Samuel (United Kingdom)
- 9.00 Psychosis
M. Onofrj (Italy)
- 9.30 Deep brain stimulation-effect on emotions and behaviour
E. Moro (France)

8.30-10.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**2.20 ADVANCES IN PARKINSON'S DISEASE IMAGING (1)**Chairmen: **U. Bonuccelli** (Italy), **A. Strafella** (Canada)

- 8.30 Optimizing diagnosis in Parkinson's disease
A.J. Stoessl (Canada)
- 9.00 Structural connectivity
A. Tessitore (Italy)
- 9.30 Functional connectivity
I. Rektorova (Czech Republic)

8.30-10.00

BLUE HALL

INTERACTIVE PARALLEL SESSION**2.30 UNUSUAL MOVEMENT DISORDERS (1) - video session**Coordinator: **F. Morgante** (Italy)Speakers: **F. Morgante** (Italy), **F. Cardoso** (Brazil), **M. Stamelou** (Greece)

8.30-10.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**2.40 GENETICS**Chairmen: **V. Bonifati** (The Netherlands), **E. Melamed** (Israel) †

- 8.30 Genetics of Parkinson's disease - Genotypes
V. Bonifati (The Netherlands)
- 9.00 Genetics of Parkinson's disease - Phenotypes
Z.K. Wszolek (USA)
- 9.30 Genetic entities mimicking Parkinson's Disease
O. Ross (USA)

8.30-10.00

YELLOW HALL 3

ORAL POSTER SESSION (2.50.01-2.50.12)Chairmen: **A. Elia** (Italy), **I. Isaías** (Germany)

- OP 2.50.01** Relationship between stay-at-home patients' understanding of information regarding their Parkinson's disease and the burden of spouse caregivers
H. Takamoto, M. Hori (Japan)
- OP 2.50.02** Restoration of tensegrity equilibrium can lead to beneficial modification of Parkinson disease's motor symptoms
L. Vucolova (USA)
- OP 2.50.03** Use of three-dimensional gait analysis to assess the effectiveness of conventional rehabilitation protocols in people with Parkinson's disease
M. Pau, F. Corona, C. Casula, R. Pili, M. Murgia, M. Guicciardi (Italy)
- OP 2.50.04** The worse is the clinical status of the patient with Parkinson, the higher is the stride length percentage of improvement after automated mechanical peripheral stimulation
A. Kleiner, M. Galli, M. Gaglione, D. Hildebrand*, P. Sale, G. Albertini, F. Stocchi, M.F. De Pandis (Italy, *Brazil)
- OP 2.50.05** Stress Reduction Training in PD Patients - Influence on neuropsychiatric symptoms?
A. Meyer, A. Hadinia, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 2.50.06** Cognitive Behavioral Group Therapy (CBT) for stress reduction in patients with Parkinson's disease. A randomized control trial
A. Hadinia, A. Meyer, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 2.50.07** Quality of life measured by PDQ39 and SEIQoL during anti-stress training for Parkinson's disease (PD) patients
K. Nowak, A. Meyer, M. Chaturvedi, A. Hadinia, U. Gschwandtner, P. Fuhr (Switzerland)

- OP 2.50.08 Cortisol measurements as a laboratory biomarker for stress reduction in Parkinson's disease (PD) patients
K. Nowak, A. Meyer, A. Hadinia, M. Chaturvedi, A.D. Roesch, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 2.50.09 Effects of cognitive loading on standing balance and postural stability in Parkinson's disease patients with freezing of gait
W. Buated, P. Lolekha*, T. Fujinami, S. Hidaka, N. Kashyap (Japan, *Thailand)
- OP 2.50.10 Theatre is a valid complementary therapeutic interventions for emotional rehabilitation of Parkinson's patients
G. Mirabella, P. De Vita, S. Rampelli, F. Lena, F. Dilettuso, M. Iacopini, R. D'Avella, M.C. Borghese, S. Mazzotta, D. Lanni, M. Grano, S. Lubrani, **N. Modugno** (Italy)
- OP 2.50.11 Pharmaceutical design in Parkinson's disease: what do patients prefer?
K. Lefterj, F. Liu, M. Brown (United Kingdom)
- OP 2.50.12 Unlocking Alzheimers and Parkinsonism - Do you dream for cure?
J. Joy (India)
- 10.00 Short break

10.15-11.45

SILVER HALL

PLENARY SESSION**2.1 PARKINSON'S DISEASE NON-PHARMACOLOGICAL INTERVENTIONS**Chairmen: **A. Antonini** (Italy), **G. Pezzoli** (Italy)

- 10.15 Rehabilitation
G. Abbruzzese (Italy)
- 10.45 Transcranial stimulation
A. Priori (Italy)
- 11.15 Genetic, dietary and pharmacological determinants of urate and their impact on Parkinson's disease
M.A. Schwarzschild (USA)

12.00-13.30

EXHIBITION AREA

SELECTED TOPIC SESSION (2.60.01-2.60.06)Chairmen: **A. Elia** (Italy), **I. Isaías** (Germany)

- OP 2.60.01** An explorative assessment of antioxidant and inflammatory biomarkers for identification of prodromal Parkinson's disease (PD)
J. Campolo, R. De Maria, L. Cozzi, M. Parolini, P. Proserpio, L. Nobili, G. Gelosa, I. Piccolo, P. Marraccini (Italy)
- OP 2.60.02** Autonomic dysfunction in Parkinson's disease associated with common glucocerebrosidase gene mutations
F. Del Sorbo, A.E. Elia, L.M. Romito, P. Soliveri, C. Barzaghi, B. Garavaglia, P. Cortelli, A. Albanese (Italy)
- OP 2.60.03** Impulsive-compulsive behaviors in Parkin-associated Parkinson's disease: a case-control study
F. Morgante, A. Fasano*, M. Ginevrino, S. Petrucci, L. Ricciardi**, F. Bove, C. Criscuolo, M. Moccia, A.R. Bentivoglio, M.T. Pellecchia, G. Di Michele**, P. Barone, E.M. Valente (Italy, *Canada, **United Kingdom)
- OP 2.60.04** Recognition of life-long curiosity in Parkinson's disease treatment developments
P. Riederer (Germany)
- OP 2.60.05** Effect of pharmacist-led interventions on motor symptoms in Parkinson's patients: a pilot study
C. Stuijt, T. Van Laar (The Netherlands)
- OP 2.60.06** Long-term effectiveness of NUPLAZID™ (pimavanserin) in PD psychosis: Data from 2 open-label studies
R. Mills, S. Isaacson, J. Azulay*, J. Ferreira**, D. Kreitzman, T. Ilic***, K. Chi-Burris, H. Williams (USA, *France, **Portugal, ***Serbia)

12.00-13.30

EXHIBITION AREA

POSTER SESSION I (1.001-2.036)

13.45-15.15

SILVER HALL

PLENARY SESSION**2.2 WHAT EXACTLY DO THE BASAL GANGLIA DO?**Chairmen: **A. Berardelli** (Italy), **A.M. Cenci Nilsson** (Sweden)

- 13.45 Volitional moving
M. Hallett (USA)
- 14.15 Role of (in)direct pathway in action control
R.M. Costa (Portugal)
- 14.45 Basal ganglia modulation of limbic circuits in learning and memory processes
P. Calabresi (Italy)
- 15.15 Short break

15.30-17.00

SILVER HALL

CLINICAL PARALLEL SESSION**2.11 IATROGENIC MOTOR DISORDERS**Chairmen: **A.J. Espay** (USA), **M. Stamelou** (Greece)

- 15.30 Clinical phenotype
A.J. Espay (USA)
- 16.00 Imaging characterization
M. Tinazzi (Italy)
- 16.30 Therapeutic approach
F. Morgante (Italy)

15.30-17.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**2.21 UPDATE ON SLEEP DISORDERS**Chairmen: **P. Cortelli** (Italy), **A. Iranzo** (Spain)

- 15.30 Restless eye movement behavior disorder
L. Ferini-Strambi (Italy)
- 16.00 Excessive daytime sleepiness and sleep attacks
C. Baumann (Switzerland)
- 16.30 Restless legs syndrome
C. Bassetti (Switzerland)

15.30-17.00

BLUE HALL

INTERACTIVE PARALLEL SESSION**2.31 INTERACTIVE DISCUSSION CLINICAL-GENETIC-PATHOLOGICAL CASES**Coordinator: **C. Adler** (USA)Speakers: **C. Adler** (USA), **N. Hattori** (Japan),
W.D.J. van de Berg (The Netherlands)

15.30-17.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**2.41 MANAGEMENT OF PARKINSON'S DISEASE COMPLICATIONS**Chairman: **P. Odin** (Sweden)

- 15.30 Motor complications
P. Odin (Sweden)
- 16.00 Non-motor fluctuations
A. Storch (Germany)
- 16.30 Impulse control disorders
M.C. Rodriguez-Oroz (Spain)

15.30-17.00

YELLOW HALL 3

ORAL POSTER SESSION (2.50.13-2.50.24)Chairman: **R. Cilia** (Italy)

- OP 2.50.13** Pharmacogenetics of levodopa: an algorithm for dose prediction
V. Altmann, **M. Rieck**, **A. Schumacher-Schuh**, **S. Callegari-Jacques**, **C. de Mello Rieder**, **M. Hutz** (Brazil)
- OP 2.50.14** Treatment with l-dopa normalize learning as measured with CVLT-2 in drug naive patients with Parkinson's disease
H.T.J. Sari, **O.B. Tysnes**, **J.P. Larsen**, **A. Gramstad**, **G.O. Skeie** (Norway)
- OP 2.50.16** Onset and duration of motor effects with IPX066, levodopa-carbidopa extended-release capsules: comparison with immediate-release levodopa-carbidopa and with levodopa-carbidopa+entacapone
S. Gupta, **S. Khanna**, **R. Rubens**, **N. Modi** (USA)
- OP 2.50.17** Outpatient levodopa-carbidopa intestinal gel titration in patients with advanced Parkinson's disease
R. Rodriguez, **M. Lobatz**, **J. Dubow**, **S. Eaton**, **C. Hall**, **K. Chatamra**, **J. Benesh** (USA)
- OP 2.50.18** Effects of levodopa-carbidopa intestinal gel on non-motor symptoms and safety of outpatient titration: a new phase 3 study in patients with advanced Parkinson's disease
D. Standaert, **J. Slevin**, **C. Hall**, **J. Dubow**, **S. Eaton**, **K. Chatamra**, **J. Benesh** (USA)

- OP 2.50.19 Determination of minimal important difference thresholds for Parkinson's Disease Questionnaire-39 in advanced Parkinson's disease patients
A. Antonini, E. Dansie Bacci*, K. Sait*, Y.J. Jalundhwala*, P.L. Kandukuri*, T. Marshall*, K. Chatamra*, I. Wiklund**, D. Revicki* (Italy, *USA, **United Kingdom)
- OP 2.50.20 Gastrointestinal safety of levodopa-carbidopa intestinal gel in advanced Parkinson's disease patients: GLORIA long-term registry interim results
D. Domagk, S. Dam-Larsen*, **A. Antonini, **L. Bergmann*****, A. Yegin***, W. Poewe**** (Germany, *Denmark, **Italy, ***USA, ****Austria)
- OP 2.50.21 Antiparkinsonian medication adjustments following deep brain stimulation of subthalamic nucleus in patients with advanced Parkinson's disease
A. Gamaleya, E. Bril, A. Tomskiy, N. Gubareva, A. Poddubskaya, N. Fedorova, V. Shabalov (Russia)
- OP 2.50.22 Comparison of the antiparkinsonian and antidyskinetic effects of hemantane and amantadine
E. Ivanova, I. Kapitsa, E. Valdman, T. Voronina (Russia)
- OP 2.50.24 A study of real life tolerability of rotigotine transdermal patch in Parkinson's disease across all motor stages
R. Barreto, A. Sauerbier, A. Rizos, R. Chaudhuri (United Kingdom)

17.00 Short break

17.15-18.45

RED HALL 2

TRANSLATIONAL PARALLEL SESSION

2.22 NEUROREHABILITATION FOR PARKINSON'S DISEASE: FUTURE PERSPECTIVES

Chairmen: **G. Abbruzzese** (Italy), **K.B. Bhattacharyya** (India)

- 17.15 Gait and posture
J.-P. Azulay (France)
- 17.45 Behavioural adaptation
B.R. Bloem (The Netherlands)
- 18.15 Exercise
M. Hirsch (USA)

17.15-18.45

BLUE HALL

INTERACTIVE PARALLEL SESSION**2.32 DEVICE-AIDED PARKINSON'S DISEASE TREATMENTS:
PRACTICAL ISSUES**Chairmen: **E. Dietrichs** (Norway), **L. Lopiano** (Italy)

17.15 Selecting the right patient

P. Odin (Sweden)

17.45 Infusion therapies

T. van Laar (The Netherlands)

18.15 Deep brain stimulation

F. Valldeoriola (Spain)

17.15-18.45

RED HALL 1

EDUCATIONAL PARALLEL SESSION**2.42 MANAGEMENT OF AUTONOMIC DYSFUNCTION IN PARKINSONISM**Chairman: **H. Kaufmann** (USA)

17.15 Blood pressure

H. Kaufmann (USA)

17.45 Urogenital

P. Cortelli (Italy)

18.15 Gastrointestinal

F. Stocchi (Italy)

17.15-18.45

YELLOW HALL 3

ORAL POSTER SESSION (2.50.25-2.50.37)Chairmen: **R. Cilia** (Italy), **P. Martinez-Martin** (Spain), **G. Riboldazzi** (Italy)

- OP 2.50.25** Rotigotine efficacy on sleep disturbances in Parkinson's Disease patients: evidence from a polysomnographic study
C. Liguori, M. Pierantozzi, F. Placidi, A. Stefani (Italy)
- OP 2.50.26** Efficacy of sublingual apomorphine (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease
A. Agro, J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, H. Shill*, R. Hauser* (Canada, *USA)
- OP 2.50.27** Baseline disease severity not predictive of sublingual apomorphine (APL-130277) dose needed to convert a PD patient from the OFF to ON state
J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, A. Agro (Canada)
- OP 2.50.28** Minimum MDS-UPDRS part iii change needed to convert a Parkinson's disease patient from the OFF to full ON state with sublingual apomorphine (APL-130277)
J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, A. Agro (Canada)
- OP 2.50.29** Differences between apomorphine (APO) and lisuride (LIS) in PD therapy
R. Horowski (Germany)
- OP 2.50.30** The effect of bilateral sub-thalamic nucleus deep brain stimulation (STN-DBS) on prosody of speech of Parkinson's disease
F. Majdinasab, S.A.H. Habibi, E. Ghorbani, M. Khoddami (Iran)
- OP 2.50.31** Can intraoperative clinical testing predict stimulation-induced effects of STN-DBS?
J. Blume, E. Rothenfußer-Korber, A. Janzen, U. Bogdahn, J. Schlaier, M. Lange (Germany)
- OP 2.50.32** The impact of microelectrode recording on selecting the most optimal trajectories for electrode implantation
M. Nagy, N. Kovács, Z. Aschermann, G. Deli, I. Balás (Hungary)
- OP 2.50.33** Reflex saccades evaluation can estimate long-term symptom progression in DBS STN vs only medically treated Parkinson's disease patients
S. Szlufik, A. Przybyszewski, J. Dutkiewicz, P. Habela, T. Mandat, D. Kozirowski (Poland)
- OP 2.50.34** High frequency repetitive transcranial magnetic stimulation can improve the quality of life and depression in Parkinson's disease: a randomized, double-blind, placebo-controlled study
N. Kovács, G. Deli, Z. Aschermann, A. Makkos, M. Kovács, J. Janszky, E. Pál (Hungary)
- OP 2.50.35** The impact of STN DBS on kinetic tremor in Parkinson's disease patients
S. Szlufik, M. Szumilas, J. Dutkiewicz, D. Kozirowski, T. Mandat, E. Stubowska (Poland)
- OP 2.50.36** The combined depletion of monoamines alters the effectiveness of subthalamic deep brain stimulation
E. Faggiani, C. Delaville, A. Benazzouz (France)
- OP 2.50.37** Unilateral deep brain stimulation of subthalamic nuclei does not affect reactive inhibition in Parkinson's patients
G. Mirabella, G. Giannini, M. Fragola, M. Santilli, N. Modugno (Italy)

8.30-10.00

SILVER HALL

CLINICAL PARALLEL SESSION**3.10 INTERVENTIONS IN PARKINSONISM (MULTIPLE SYSTEM ATROPHY/PROGRESSIVE SUPRANUCLEAR PALSY/CORTICO BASAL DEGENERATION)**Chairmen: **C. Colosimo** (Italy), **G. Högl** (Germany)

- 8.30 Multiple system atrophy
G.K. Wenning (Austria)
- 9.00 Progressive supranuclear palsy
M. Stamelou (Greece)
- 9.30 Cortico basal degeneration
C. Colosimo (Italy)

8.30-10.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**3.20 ADVANCES IN PARKINSON'S DISEASE IMAGING (2)**Chairmen: **I. Rektorova** (Czech Republic), **M. Samuel** (United Kingdom)

- 8.30 Biomarkers of atypical Parkinsonism
A. Antonini (Italy)
- 9.00 Imaging correlates of Parkinson cognitive impairment
R. Biundo (Italy)
- 9.30 Molecular imaging and neural networks in impulse control disorders
A. Strafella (Canada)

8.30-10.00

BLUE HALL

INTERACTIVE PARALLEL SESSION**3.30 UNUSUAL MOVEMENT DISORDERS (2) - Video Session**Coordinator: **A.J. Espay** (USA)Speakers: **K. Bhatia** (United Kingdom), **F. Cardoso** (Brazil),
A.J. Espay (USA)

8.30-10.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**3.40 UPDATE ON TREMOR**Chairmen: **A. Friedman** (Poland), **R. Helmich** (The Netherlands)8.30 Tremor: Pathophysiology
R. Helmich (The Netherlands)9.00 Tremor: Clinical aspects
E.D. Louis (USA)9.30 Tremor: Treatment
F. Vingerhoets (Switzerland)

8.30-10.00

YELLOW HALL 3

ORAL POSTER SESSION (3.50.01-3.50.10)Chairmen: **R. Cilia** (Italy), **I. Isaías** (Germany)**OP 3.50.01** Case study of sporadic multiple system atrophy at a young age
B. Muinjonov, E. Giyazitdinova (Uzbekistan)**OP 3.50.02** Vascular parkinsonism as a common manifestation of second stage of CADASIL syndrome
B. Muinjonov, E. Giyazitdinova (Uzbekistan)**OP 3.50.03** Hyperkinesia in ancient China: perspectives and prescriptions
J. Liu, L. Wang (China)**OP 3.50.04** Cortical and subcortical neurodegeneration in chorea-acanthocytosis and Huntington's disease: more differences than similarities
J. Liu, H. Heinsen*, **T. Arzberger***, **B. Bader***, **C. Schmitz***, **M. Kiessling***, **A. Danek***
(China, *Germany)**OP 3.50.05** Novel GNAL mutation with intra-familial clinical heterogeneity: expanding the phenotype
M. Carecchio, C. Panteghini, C. Reale, C. Barzaghi, V. Monti, L. Romito, F. Sasanelli, B. Garavaglia (Italy)**OP 3.50.06** DYT16/PRKRA founder mutation causes childhood-onset generalized dystonia in a family from Southern Italy
M. Quadri, S. Olgiati, M. Sensi*, **F. Gualandi***, **E. Groppo***, **V. Rispoli***, **J. Graafland, G.J. Breedveld, G. Fabbrini*, V. Bonifati** (The Netherlands, *Italy)**OP 3.50.07** Frequency of the pain and sleep problems at dystonia patients and influence of deep brain stimulation
V. Vuletic (Croatia)**OP 3.50.08** Tobacco increases dystonia risk but may ameliorate symptoms
C. Hellberg, A. Puschmann (Sweden)

OP 3.50.09 Wilson disease: acute dystonia during treatment with SSRI or SNRI
L. Wictor, K. Wictorin, H. Widner, A. Puschmann (Sweden)

OP 3.50.10 Differential induction of dyskinesia and inflammatory responses by intermittent versus continuous L-DOPA delivery in the 6-OHDA model of Parkinson's disease
A.R. Carta, G. Mulas, S. Spiga, D. Lecca E. Pillai (Italy)

10.00 Short break

10.15-11.45

SILVER HALL

PLENARY SESSION

3.1 BIOMARKERS IN PARKINSON'S DISEASE

Chairmen: **N. Hattori** (Japan), **H. Reichmann** (Germany)

10.15 Biomarkers in Parkinson's disease
R. Uitti (USA)

10.45 Plasma and cerebro spinal fluid biomarkers in Parkinson's disease
S. Saiki (Japan)

11.15 In-life diagnostic accuracy
C. Adler (USA)

11.45 Short break

12.00-13.30

EXHIBITION AREA

SELECTED TOPIC SESSION (3.60.01-3.60.06)

Chairmen: **D. Calandrella** (Italy), **A. Merola** (Italy), **L. Romito** (Italy)

OP 3.60.01 PANDA: prolonged release oxycodone/naloxone (OXN PR) for severe Parkinson's disease (PD)-related pain
K.R. Chaudhuri, **P. Martinez-Martin***, **O. Rascol****, **M. Lomax**, **J. Decesare**, **M. Hopp*****
(United Kingdom, *Spain, **France, ***Germany)

OP 3.60.02 Chronic subcutaneous infusion therapy with apomorphine in advanced Parkinson's disease: effects on motor and non motor symptoms with brain metabolism correlations
M. Auffret, **A. Maurus**, **M. Vérin**, **J. Houvenaghel**, **F. Le Jeune**, **S. Drapier** (France)

OP 3.60.03 Clinical and neuropathological features of rapid progressive dementia with lewy bodies
A. Geut, **D. Hepp**, **A. Ingrassia**, **Y. Gatis**, **E. Foncke**, **A. Lemstra**, **A. Rozemuller**, **W. Van De Berg**
(The Netherlands)

OP 3.60.04 Epigenome-wide DNA methylation analysis in brothers and monozygotic twins discordant for Parkinson's disease
O. Kaut, **I. Schmitt**, **S. Witt**, **J. Tost***, **U. Wüllner** (Germany, *France)

OP 3.60.05 Unprecedented therapeutic potential with a combination of A2A/NR2B receptor antagonists as observed in the 6-OHDA lesioned rat model of Parkinson's disease
A. Michel, P. Downey, J. Nicolas, D. Scheller (Belgium)

OP 3.60.06 Understanding the differential regulation of GBA and GBAP1 expression
 V. Rimoldi, G. Rovaris, L. Straniero, G. Pezzoli, S. Goldwurm, G. Soldà, R. Asselta, **S. Duga** (Italy)

12.00-13.30

EXHIBITION AREA

POSTER SESSION II (2.037-3.087)

13.45-15.15

SILVER HALL

PLENARY SESSION

3.2 DYSTONIA REVISITED

Chairmen: **M. Hallett** (USA), **J. Jankovic** (USA)

13.45 Dystonia revisited
A. Albanese (Italy)

14.15 Pharmacological interventions in dystonia
D. Truong (USA)

14.45 Surgical interventions in dystonia
J. Volkmann (Germany)

15.15 Short break

15.30-17.00

SILVER HALL

CLINICAL PARALLEL SESSION

3.11 NON-MOTOR SYMPTOMS IN MOVEMENT DISORDERS

Chairmen: **C. Adler** (USA), **E.D. Louis** (USA)

15.30 Non-motor symptoms in Parkinson's disease
R. Pfeiffer (USA)

16.00 Non-motor symptoms in essential tremor
E.D. Louis (USA)

16.30 Non-motor symptoms in dystonia
A. Berardelli (Italy)

15.30-17.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**3.21 NEURODEGENERATION**Chairmen: **P. Riederer** (Germany), **M.C. Rodriguez-Oroz** (Spain)

- 15.30 Mitochondrial function
A. Schapira (United Kingdom)
- 16.00 Role of iron
H. Reichmann (Germany)
- 16.30 Role of mitochondrial biogenesis
M.B.H. Youdim (Israel)

15.30-17.00

BLUE HALL

INTERACTIVE PARALLEL SESSION**3.31 HANDS ON DYSTONIA: BOTULINUM TOXIN WORKSHOP**Coordinator: **C. Colosimo** (Italy)Speakers: **C. Colosimo** (Italy), **D. Dressler** (Germany), **D. Truong** (USA)

15.30-17.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**3.41 DYSTONIA**Chairman: **A. Albanese** (Italy)

- 15.30 Pathophysiology/Classification
A. Albanese (Italy)
- 16.00 Clinical aspects
J. Jankovic (USA)
- 16.30 Surgical interventions
A. Fasano (Canada)
- 17.00 Short break

17.15-18.45

SILVER HALL

CLINICAL PARALLEL SESSION**3.12 DEEP BRAIN STIMULATION**Chairmen: **M.F. Contarino** (The Netherlands), **A. Fasano** (Canada)

- 17.15 Indications of deep brain stimulation
E. Moro (France)
- 17.45 Sensing technology: rationale
P. Brown (United Kingdom)
- 18.15 Adaptive deep brain stimulation: state of the art and where are we heading to
A. Priori (Italy)

17.15-18.45

BLUE HALL

INTERACTIVE PARALLEL SESSION**3.32 ANIMAL MODELS IN MOVEMENT DISORDERS**Chairmen: **A.M. Cenci Nilsson** (Sweden), **M.B.H. Youdim** (Israel)

- 17.15 Animal models of neurodegeneration in Parkinson's disease
F. Blandini (Italy)
- 17.45 Symptomatic models of motor- and non-motor features in Parkinson's disease
A.M. Cenci Nilsson (Sweden)
- 18.15 Huntington animal model
S.M. Hersch (USA)

17.15-18.45

RED HALL 1

EDUCATIONAL PARALLEL SESSION**3.42 DIAGNOSTIC CHALLENGES**Chairman: **G.K. Wenning** (Austria)

- 17.15 Multiple system atrophy vs Parkinson's disease
G.K. Wenning (Austria)
- 17.45 Progressive supranuclear palsy subtypes
M. Stamelou (Greece)
- 18.15 Cortico basal degeneration and cortico basal syndrome
C. Colosimo (Italy)

17.15-18.45

YELLOW HALL 3

ORAL POSTER SESSION (3.50.11-3.50.22)Chairmen: **D. Calandrella** (Italy), **A. Merola** (Italy), **L. Romito** (Italy)

- OP 3.50.11** Interoceptive awareness in patients with functional motor disorders
B. Demartini, L. Ricciardi*, L. Crucianelli*, C. Krahé*, M.J. Edwards*, A. Photopoulou* (Italy, *United Kingdom)
- OP 3.50.12** Center of pressure velocity and its fast alternating deviations as an objective measure of balance – normal values and their sensitivity investigated in SCA patients
A. Sobanska, M. Rakowicz, L. Czerwosz, A. Sulek, I. Stepniak, R. Rola (Poland)
- OP 3.50.13** Clinical profile of hundred patients with Ataxia Telangiectasia from India
M. Mahadevappa, D.V. Santhosh, M. Netravathi, R. Yadav, P.K. Pal (India)
- OP 3.50.14** Altered functional topography of the striatum in resting state FMRI in Parkinson's disease
S.N. Tan, Y. Zhang, A. Liu, J. Wang, M.J. Mckeown (Canada)
- OP 3.50.15** Is the mechanism of nervous cells death in Parkinson different than in other neurodegenerations - arguments from MRI study?
A. Friedman, R. Kulinski, J. Galazka-Friedman (Poland)
- OP 3.50.16** Putaminal diffusivity changes correlates with motor progression in Parkinson's disease on 6-year follow-up
L.L. Chan, K.M. Ng, C.S. Yeoh, H.H. Li, H. Rumpel, E.K. Tan (Singapore)
- OP 3.50.17** Fatigue in Parkinson's disease and striatum dopamine transporter scan (DaTscan) uptake
A. Sauerbier, P. Martinez-Martin*, M. Politis, A. Rizos, N. Trojanovic, N. Mulholland, G. Vivian, B. Corcoran, D. Trivedi, L. Perkins, R. Inniss, T. Chiwera, R. Barreto, M. Parry, A. Martin, N. Dimitrov, R. Brown, K. Ray Chaudhuri (United Kingdom, *Spain)
- OP 3.50.18** The MIBG scintigraphy and DAT SPECT contribute to the diagnosis of PD and other related disorders, and evaluations of the course and stage of PD
S. Tada, R. Ando, H. Iwaki, T. Tsujii, Y. Yabe, N. Nishikawa, M. Nagai, M. Nomoto (Japan)
- OP 3.50.19** Characteristic metabolic brain pattern in Slovenian Parkinson's disease patients
P. Tomse, R. Tomaz, Z. Pirtošek, Y. Ma*, D. Eidelberg*, M. Trost (Slovenia, *USA)
- OP 3.50.20** Updated long-term safety from ongoing phase 3 trials of levodopa-carbidopa intestinal gel in patients with advanced Parkinson's disease
R. Rodriguez, N. Schmulewitz, D. Stein, W. Robieson, C. Hall, S. Eaton, K. Chatamra, J. Benesh, A. Espay (USA)
- OP 3.50.21** Opioid K receptor variant delays the onset of dyskinesias in Parkinson's disease
R. Cilia, R. Asselta, R. Benfante, E. Cereda, D. Vallauri, L. Marabini, D. Fornasari, S. Goldwurm, G. Pezzoli (Italy)
- OP 3.50.22** Motor effects of phosphodiesterase 9 inhibition in the non-human primate model of Parkinson's disease
G. Masilamoni, A. Singh, X. Tang, A. McRiner, L. Leventhal, S. Papa (USA)

8.30-10.00

SILVER HALL

CLINICAL PARALLEL SESSION**4.10 MOVEMENT DISORDERS DEVELOPMENTS 2014-2015: BEST PARKINSON RELATED DISEASES ARTICLES**Chairmen: **S.M. Calne** (Canada), **R. Pfeiffer** (USA), **Z.K. Wszolek** (USA)**R. Rodnitzky** (USA)**J.H. Friedman** (USA)

8.30-10.00

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**4.20 SENSOR AND SLEEP DEFICITS IN PARKINSON'S DISEASE**Chairmen: **A. Antonini** (Italy), **P. Riederer** (Germany)

8.30

Vision

I. Bodis-Wollner (USA)

9.00

Auditory

C. Vitale (Italy)

9.30

Sleep

R. Bhidayasiri (Thailand)

8.30-10.00

RED HALL 1

EDUCATIONAL PARALLEL SESSION**4.40 DIAGNOSIS OF UNCOMMON MOVEMENT DISORDERS**Chairman: **V.S. Kostic** (Serbia and Montenegro)

8.30

Myoclonus

V.S. Kostic (Serbia and Montenegro)

9.00

Chorea and tics

J. Roth (Czech Republic)

9.30

Cerebellar syndromes

A. Dürr (France)

8.30-10.00

YELLOW HALL 3

ORAL POSTER SESSION (4.50.01-4.50.12)Chairman: **P. Martinez-Martin** (Spain)

- OP 4.50.01** Synaptic homeostasis in Parkinson's disease: an high-density EEG study in different stage of the disease
V. Trendafilov, S. Sarasso*, J. Moeller, C. Staedler, A. Kaelin-Lang, **S. Galati** (Switzerland, *Italy)
- OP 4.50.02** Brain network changes in relation to beginning apathy in PD patients
F. Hatz, A. Meyer, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 4.50.03** Functional connectivity underpinnings of fatigue in "drug-naïve" patients with Parkinson's disease
A. Giordano, A. Tessitore, R. De Micco, G. Caiazza, A. Russo, M. Cirillo, F. Esposito, G. Tedeschi (Italy)
- OP 4.50.04** Correlation of the EEG frequency with cognitive performance in Parkinson's disease - six-months follow-up
V. Cozac, M. Chaturvedi, F. Hatz, A. Meyer, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 4.50.05** Alertness as assessed by clinical testing and alpha reactivity does not correlate with executive function decline in Parkinson's disease (PD)
R. Sturzenegger, A. Meyer, M. Chaturvedi, V. Cozac, F. Hatz, U. Gschwandtner, P. Fuhr (Switzerland)
- OP 4.50.06** EEG features of dyskinesias, complicated by levodopa therapy in patient with parkinson's disease
U. Askhonov, B. Gafurov, G. Ashanov (Uzbekistan)
- OP 4.50.07** Electromyographic diagnostics of Parkinson's disease and detection risk groups among relatives of patients
D. Ayupova (Uzbekistan)
- OP 4.50.08** Identification of the globus pallidus interna based on time patterns analysis in Parkinson's disease
D.S. Andres, C. Daniel*, M. Merello* (Switzerland, *Argentina)
- OP 4.50.09** Identification of novel PD genes by whole-exome sequencing in Italian families
L. Straniero, G. Soldà, R. Asselta, I. Guella*, G. Pezzoli, M. Farrer*, S. Goldwurm, S. Duga (Italy, *Canada)
- OP 4.50.10** DNAJC6 mutations associated with early-onset Parkinson's disease
S. Olgiati, M. Quadri, M. Fang, J.P. Rood, J.A. Saute*, H.F. Chien*, C.G. Bouwkamp, J. Graafland, M. Minneboo, G.J. Breedveld, J. Zhang*, F.W. Verheijen, W. Mandemakers, A.J. Boon, A.J. Kievit, L.B. Jardim*, E.R. Barbosa*, C.R. Rieder*, K.L. Leenders, J. Wang**, V. Bonifati** (The Netherlands, *Brazil, **China)
- OP 4.50.12** Defective glucocerebrosidase in GBA1 mutant Parkinson's disease fibroblasts is rescued by chemical chaperone ambroxol through modulation of lysosomal factors
G. Ambrosi, C. Ghezzi, R. Zangaglia, G. Levandis, C. Pacchetti, F. Blandini (Italy)

10.00 Short break

10.15-11.45

SILVER HALL

PLENARY SESSION**4.1 COGNITIVE IMPAIRMENT IN PARKINSON'S DISEASE**Chairmen: **P. Barone** (Italy), **A.J. Stoessel** (Canada)

- 10.15 Mild cognitive impairment
J. Kulisevsky (Spain)
- 10.45 Disrupted functional connectivity and other markers of cognitive decline in Parkinson's Disease
O. Monchi (Canada)
- 11.15 Parkinson's disease dementia and dementia with Lewy bodies
D. Aarsland (Sweden)

11.45-13.15

SILVER HALL

PLENARY SESSION**4.2 PSYCHOGENIC MOVEMENT DISORDERS**Chairmen: **K. Bhatia** (United Kingdom), **M. Hallett** (USA)

- 11.45 Epidemiology and pathophysiology of psychogenic movement disorders
M. Edwards (United Kingdom)
- 12.15 Clinical presentations
M. Hallett (USA)
- 12.45 Electrophysiological evaluation
P. Pal (India)

13.15-13.45

EXHIBITION AREA

POSTER SESSION III (3.088-6.070)

13.45-15.15

SILVER HALL

CLINICAL PARALLEL SESSION**4.11 DISEASE ASSOCIATIONS IN MOVEMENT DISORDERS: CONTROVERSIES**Chairmen: **U. Bonuccelli** (Italy), **P. Martinez Martin** (Spain),
M. Onofrj (Italy)

- 13.45 Alzheimer's disease and Parkinson's disease
A. Korczyn (Israel)
- 14.15 Essential tremor and Parkinson's disease
J. Jankovic (USA)
- 14.45 Vascular parkinsonism and Parkinson's disease
I. Rektor (Czech Republic)

13.45-15.15

RED HALL 2

TRANSLATIONAL PARALLEL SESSION**4.21 RECENT ADVANCES IN ESSENTIAL TREMOR**Chairmen: **E.D. Louis** (USA), **J. Volkmann** (Germany)

- 13.45 Refining diagnostic criteria
M. Edwards (United Kingdom)
- 14.15 Genetics
E.K. Tan (Singapore)
- 14.45 Surgical treatment
A. Fasano (Canada)

13.45-15.15

RED HALL 1

EDUCATIONAL PARALLEL SESSION**4.41 INSTRUMENTAL HALLMARKS OF PARKINSONISM**Chairman: **R. Ceravolo** (Italy)

- 13.45 Neuropathology
W.D.J. van de Berg (The Netherlands)
- 14.15 Magnetic resonance imaging
A. Tessitore (Italy)
- 14.45 Position Emission Tomography/Single-Photon Emission Computed Tomography
R. Ceravolo (Italy)

13.45-15.15

YELLOW HALL 3

ORAL POSTER SESSION (4.50.13-4.50.23)Chairman: **A. Antonini** (Italy)

- OP 4.50.13** Caffeine intake and genetic susceptibility to Parkinson's disease
P. Sharan, E.K. Tan (Singapore)
- OP 4.50.15** Ameliorative effects of 1,3,4-thiadiazole derivatives on scopolamine induced cognitive deficits in mice
A. Kulshreshtha, P. Piplani (India)
- OP 4.50.16** c-Rel deficient mice, a mouse model of "spreading" PD-like pathology
E. Parrella, A. Bellucci, V. Porrini, A. Lanzillotta, M. Benarese, G. Vegezzi, C. Baiguera, A. Antonini, P.F. Spano, M. Pizzi (Italy)
- OP 4.50.17** Integration of cortical and basal ganglia inputs in motor thalamus of parkinsonian animal models
G. Orban, W. Song, A. Kaelin-Lang, S. Galati (Switzerland)
- OP 4.50.20** Role of dopaminergic receptors and post synaptic signaling in arsenic induced neurotoxicity: ameliorative effect of curcumin
P. Srivastava, Y. Dhuriya, R. Gupta, R. Shukla, A.B. Pant, V.K. Khanna (India)
- OP 4.50.21** Antiparkinson and antioxidant effect of pyridylpyrazolonyl substituted heterosteroids in LPS induced neuroinflammation model of neurodegenerative disorders
R. Singh, R. Bansal (India)
- OP 4.50.22** Inhibition of PERK and NFKB pathway can reduce death of stressed dopaminergic neurons differentiated from human stem cell line
Z.L. Chaudhry, B. Ahmed (United Kingdom)
- OP 4.50.23** Oral intake of anti-hangover substance increases aldehyde dehydrogenase activity: new preventive and therapeutic potentials for oxidative neuronal injury?
C. Bang, B. Kang, S. Choung, K. Choi (South Korea)

15.15-15.30

SILVER HALL

PLENARY SESSION**CLOSING CEREMONY**

POSTER SESSION 1 (1.001-2.036)

- P 1.001 The study of the prevalence of Parkinson disease
K. Karbozova (Kyrgyzstan)
- P 1.002 Sex differences in Parkinson's disease
U. Fiszer, M. Michałowska, T. Szatanowski (Poland)
- P 1.003 An unexpected higher prevalence of Parkinson's disease in females than males in the province of Trento (Italy): a clues for the etiopathogenesis?
M.C. Malaguti, N. Vanacore, S. Ferrari, S. Piffer, R. Pertile, R. Roni, A. Polverino, M. Gentilini, F. Cembrani, V. Bertozzi, M. Pellegrini, D. Orrico (Italy)
- P 1.004 Parkinson's disease in Senegal: epidemiologic, clinical and therapeutic aspects
N.M. Gaye, L.B. Seck, N.S. Diagne, A.D. Sow, A.M. Diop, O. Cisse, A.B. Faye, M.S. Diop, K. Toure, M. Ndiaye, A.G. Diop, M.M. Ndiaye (Senegal)
- P 1.006 Birth month and Parkinson's disease: Is there any relationship?
R. Kurisaki, H. Hori, K. Nakahara, A. Kuratomi, Y. Nishida, K. Uekawa (Japan)
- P 1.008 A step forward to the future: UPDRS kinematic measures for telemedicine
G. Albani, C. Azzaro, F. Parisi, C. Ferraris, M. Giuberti, L. Contin, D. Pianu, L.G. Pradotto, V. Cimolin, M. Galli, R. Nerino, G. Ferrari, A. Mauro (Italy)
- P 1.009 Occupational exposure to Organic solvents and welding fumes and risk of Parkinson's disease
K. Kovendan, R. Chandirasekar, K. Murugan, S. Vincent (India)
- P 1.011 An explorative assessment of antioxidant and inflammatory biomarkers for identification of prodromal Parkinson's disease (PD)
J. Campolo, R. De Maria, L. Cozzi, M. Parolini, P. Proserpio, L. Nobili, G. Gelosa, I. Piccolo, P. Marraccini (Italy)
- P 1.012 Urinary biomarkers of oxidative stress in early Parkinson's disease
S. Calzetti, R. Andreoli, A. Negrotti, G. De Palma, E. Marchesi, S. Riccardi, A. Mutti (Italy)
- P 1.013 A comparative study of oxidative stress markers between the tremor dominant and akinetic-rigid subtypes of patients with Parkinson's disease
R. Naduthota, R. Christopher, R. Yadav, P.K. Pal (India)
- P 1.014 The relationship between serum and cerebrospinal fluid inflammatory biomarkers in Parkinson's disease
I. Miliukhina, A. Kudrevatykh, E. Gracheva, M. Karpenko (Russia)
- P 1.015 Level of S100B protein in blood plasma depending on the form Parkinson's disease
M. Juraev, R. Matmurodov, K. Khalimova (Uzbekistan)
- P 1.016 Intestinal dysbiosis and lowered serum lipopolysaccharide-binding protein in PD
M. Hirayama, S. Hasegawa, T. Minato, T. Asahara, K. Nomoto, H. Tsuji, A. Okamoto, K. Ohno (Japan)
- P 1.017 Changes in serum level of interferon-gamma, alpha tumor necrosis factor and autoantibodies in Parkinson's disease
E. Giyazitdinova, G. Rakhimbayeva, Y. Musayeva, B. Muinjonov (Uzbekistan)

- P 1.018 Blood lipid parameters in patients with Parkinson's disease
E. Giyazitdinova, B. Muinjonov, G. Rakhimbayeva, Y. Musayeva (Uzbekistan)
- P 1.019 CSF levels of heart fatty acid binding protein in Parkinson's and Alzheimer's disease
D. Chiasserini, L. Biscetti, P. Eusebi, L. Farotti, N. Tambasco, P. Calabresi, L. Parnetti (Italy)
- P 1.020 Cancer comorbidity among Parkinson's Disease patients ; a population based large-scale cohort study
R. Gurel, N. Giladi, V. Rosani, T. Gurevich, B. El-Ad, B. Hemo, J. Tzamer, C. Peretz (Israel)
- P 1.021 Association between cancers and risk of Parkinson disease: a cohort study
R. Piri, M. Naghavi-Behzad (Iran)
- P 1.022 Risk of cancer among patients with Parkinson disease
M. Naghavi-Behzad, R. Piri (Iran)
- P 1.023 Cancer in Parkinson's disease
P. Tacik, S. Curry, A. Strongosky, S. Fujioka, M. Heckman, Z.K. Wszolek (USA)
- P 1.024 Intraventricular tumour presenting as progressive supranuclear palsy-like phenotype
M. Morelli, F. Fera, F. Bono, A. Fratto, G. Arabia, A. Quattrone (Italy)
- P 1.025 A case of premenstrual tremor
S. Khachatryan, K. Harutyunyan, A. Voskanyan, G. Avagyan, H. Amirjanyan, I. Gabrielyan, M. Hovhannes* (Armenia)
- P 1.026 Motor and cognitive deterioration in advanced young-onset PD: a cautionary tale
N. Zupancic Kriznar, B. Meglic, M. Trost, M. Kramberger Gregoric, L. Ocepek, R. Rajnar, Z. Pirtošek (Slovenia)
- P 1.027 Progression of Parkinson's disease during the 5-year follow-up
M. Petrovic, E. Stefanova, T. Stojkovic, V. Kostic (Serbia)
- P 1.028 Changes of resting state EEG in patients with left-sided and right-sided Parkinson's disease
N. Kozhemiako, S. Kryzhanovskiy, A. Cherninskyi, I. Karaban, N. Karasevich (Ukraine)
- P 1.029 Evaluation of serum amino acid profile in patients with advanced Parkinson's disease
M. Figura, K. Kusmierska, E. Bucior, S. Szlufik, D. Koziorowski, Z. Jamrozik, A. Friedman, P. Janik (Poland)
- P 1.030 Hospitalisation in early Parkinson's disease using Hospital Episodes Statistics from the PD MED trial
S. Muzerengi, R. Woolley, C. Rick, N. Ives, R. Gray, F. Dowling, C.E. Clarke (United Kingdom)
- P 1.031 Hospitalisation coding errors in Parkinson's disease in a large UK teaching hospital
S. Muzerengi, C. Rick, I. Begaj, N. Ives, F. Evison, R. Woolley, C.E. Clarke (United Kingdom)
- P 1.032 Hospital-based study on emergency admission in patients with Parkinson's disease
S. Fujioka, J. Fukae, H. Ogura, T. Mishima, S. Yanamoto, M. Higuchi, G. Umemoto, Y. Tsuboi (Japan)
- P 1.033 Usefulness of Parkinson's KinetiGraph in a Parkinson's disease clinic - Survey of 82 patients
L. Klingelhofer, A. Rizo*, A. Sauerbier*, D. Trivedi*, R. Inniss*, L. Perkins*, H. Reichmann*, K.R. Chaudhuri* (Germany, *United Kingdom)

- P 1.034 Premotor symptoms as predictors of outcome in Parkinson's disease: a nationwide population-based and case-control study
M. Chang (Taiwan)
- P 1.036 Non motor symptoms impact quality of life (QOL) in de novo Parkinson's disease (PD)
C. Toyoda, T. Umehara, H. Matsuno, H. Oka (Japan)
- P 1.037 Clinical manifestations at stage de novo of Parkinson disease in the neurological clinic of Fann National Teaching Hospital
O. Cisse, A.M. Basse, E.H.M. Ba, S.M.L. Dadah, N.M. Gaye, M.A. Diop, F.Y. Fogang, A.D. Sow, M.S. Diop, A. Diatta, M. Ndiaye, A.G. Diop, M.M. Ndiaye (Senegal)
- P 1.038 Assessing the non-motor symptom burden progression in a longitudinal study of 411 Parkinson's patients, using the non-motor symptom questionnaire
M. Grilo, D. Trivedi, E. Moti, R. Barreto, A. Sauerbier, A. Rizos, L. Perkins, R. Inniss, T. Chiwera, K.R. Chaudhuri (United Kingdom)
- P 1039 Quality of life in patients with Parkinson's Disease in Uzbekistan
N. Tolibova, M. Khanova, O. Turgunkhujaev (Uzbekistan)
- P 1.040 Validation of the Italian Non Motor Symptoms Questionnaire and Non Motor Symptoms Scale for Parkinson's disease
I. Cova, N. Vanacore, P. Contri, G. Meco, S. Pomati, G. Grande, E. Lacorte, A. Priori, C. Mariani (Italy)
- P 1.041 Parkinson's disease non-motor profile and MAPT haplotypes
M.E. Di Battista, A. Rubino, C. Papi, M. Valente, E. Pascale, C. Purcaro, G. Meco (Italy)
- P 1.042 Sleep and mood predict quality of life change in Parkinson's disease: a longitudinal study
K.M. Prakash, N. Nadkarni, W. Lye, M. Yong, E. Tan (Singapore)
- P 1.043 Frequency and sleep stage sequence of SOREM periods in Parkinson's disease
T. Murer, E. Werth, R. Poryazova, Y. Gavrilov, D. Waldvogel, C. Baumann, P. Valko (Switzerland)
- P 1.044 REM sleep behavior disorder and cognitive functions in Parkinson's disease
E. Lyashenko, O. Levin, M. Poluektov (Russia)
- P 1.045 REM Sleep Behavior Disorder (RBD) as a predictor of development of daytime hypersomnia and nocturia in Parkinson's disease (PD)
M. Nodel, N. Yakhno, J. Ukraintseva (Russia)
- P 1.046 Sleep and motor symptoms in Parkinson's disease with REM sleep behavior disorder: a preliminary study
K.H. Park, C. Kim, Y. Sung (South Korea)
- P 1.047 Insomnia in Parkinson's disease
B. Muinjonoy, E. Giyazitdinova (Uzbekistan)
- P 1.048 Association between daytime sleepiness and the cholinergic ascending reticular activating system in Parkinson's disease
M. Iijima, M. Osawa, K. Kitagawa (Japan)
- P 1.049 The painful dimension of Parkinson's disease – relation between pain, depression and sleep
N. Horia, I. Serbanoiu, C. Panea (Romania)

- P 1.050 The first Parkinson's Disease Pain Questionnaire (King's PD Pain Quest) – An interim analysis of a multicentre study of the patient's perspective
A. Rizos, P. Martinez-Martin*, S. Pal, C. Carroll, D. Martino, R. Sophia, C. Falup-Pecurariu**, B. Kessel, A. Sauerbier, A. Martin, M. Parry, R. Inniss, L. Parkins, D. Trivedi, T. Chiwera, P. Odin***, A. Antonini****, K.R. Chaudhuri
(United Kingdom, *Spain, **Romania, ***Sweden, ****Italy)
- P 1.051 ON-OFF fluctuations predict the re-emergence of fatigue in Parkinson's disease
I. Tamburini, D. Massucco, G. Abbruzzese (Italy)
- P 1.052 Visuospatial, visuoconstructive and visuoceptive functioning in patients with Parkinson's disease
M. Rodriguez-Violante, G. Arciniega-Martinez, A. Jorge De Sarachaga, Y. Rodriguez-Agudelo, A. Cervantes-Arriaga, M. Chavez-Oliveros (Mexico)
- P 1.054 The importance of Ishihara Testing in early diagnosing of Parkinson's disease
S. Mirdedaev (Uzbekistan)
- P 1.055 Somatization factor in Parkinson's disease: a preliminary study
L. Bonanni, D. Carrozzini*, M. Fulchieri, M. Onofri, S. Delli Pizzi, A. Thomas (Italy, *Denmark)
- P 1.056 Autonomic disorders in Parkinson's disease
J. Toshev, N. Nurmetov, O. Kurbanov, Z. Ibdullaev (Uzbekistan)
- P 1.057 The ability of autonomic function tests to detect the possible deterioration of autonomic system in PD patients - Preliminary results
A. Strasz, W. Niewiadomski, A. Gasiorowska, A. Karbowniczek, M. Zylinski, M. Skupinska, G. Cybulski, E. Palasz, G. Niewiadomska (Poland)
- P 1.058 Autonomic dysfunction in Parkinson's disease associated with common glucocerebrosidase gene mutations
F. Del Sorbo, A.E. Elia, L.M. Romito, P. Soliveri, C. Barzaghi, B. Garavaglia, P. Cortelli, A. Albanese (Italy)
- P 1.059 Orthostatic hypotension and cardiac sympathetic denervation in Parkinson disease patients with REM sleep behavioral disorder
S.H. Lee, J.S. Kim (South Korea)
- P 1.060 Longer duration of Parkinson's disease is associated with reduced prevalence of hypertension
V. Brandi, D. Vetrano, M.S. Pisciotto, M.R. Lo Monaco, A. Laudisio, G. Onder, R. Bernabei, G. Zuccalà (Italy)
- P 1.061 Clinical course of migraine in Parkinson patients
M. Lotfinia (Iran)
- P 1.062 Vegetative nervous system status according to cardiointervalogram data of ethnic Kyrgyz people with Parkinson disease
N. Chekeeva (Kyrgyzstan)

- P 1.063 Cardiac sympathetic denervation predicts levodopa-induced dyskinesia in patients with Parkinson's disease
S. Kang, J.Y. Ahn, H. Kim (South Korea)
- P 1.064 Structural and functional myocardial abnormalities in patients with Parkinson's disease compared with control group: an echocardiography study
A. Gonzalez-Martinez, A. Lopez-Garcia, J. Piqueras-Flores, A. Moreno-Reig, J. Vaamonde-Gamo (Spain)
- P 1.065 Relationship S100 Protein levels in blood plasma with a frequency of occurrence of cardiovascular complications Parkinson's disease
M. Juraev, R. Matmurodov, K. Khalimova (Uzbekistan)
- P 1.067 Colonic volume and gastrointestinal symptoms in Parkinson's disease
K. Knudsen, T. Fedorova, P. Borghammer (Denmark)
- P 1.068 Gastroesophageal dysmotility in advanced Parkinson's disease
F. Mancini, L. Manfredi, M. Lacerenza, C. Colombo, A. Bestetti (Italy)
- P 1.069 Alpha-synuclein immunohistochemistry studies of gastrointestinal tissue from patients with prodromal Parkinson's disease
M. Gersel Stokholm, S.J. Hamilton-Dutoit, E.H. Danielsen, P. Borghammer (Denmark)
- P 1.071 What can go wrong? Sexual dysfunction in Parkinson's disease
I. Serbanoiu, H. Nicolae, C. Panea (Romania)
- P 1.072 Pulmonary function and clinical characteristics of Parkinson's disease
S. Cheon, M. Park, J.W. Kin (South Korea)
- P 1.073 Character of respiratory disorders in Parkinson's disease
J. Toshev, N. Nurmetov, O. Nurmetov, Z. Ibodullaev (Uzbekistan)
- P 1.074 Dysphagia, pneumonia and hospital admissions in Parkinson's Disease: a multicentre observational study
E. Moti, K. Lauckaite*, R. Barreto, C. Bitsara, M. Grilo, S. Diaconu, I. Chiwera, A. Rizos, J. Johnson, S. Bostantjopoulou***, C. Falup-Pecurariu***, K. Ray Chaudhuri** (United Kingdom, *Lithuania, **Romania, ***Greece)
- P 1.075 Speech disorders and Parkinson's disease
M. Pettorino, E. Pellegrino, M.G. Busà (Italy)
- P 1.076 Positional nystagmus from BPPV in polysomnography of PD patients
E. Werth, C. Baumann, D. Straumann, P. Valko, K. Weber, Y. Valko (Switzerland)
- P 1.077 An alternative perspective on interpretation of the secondary motor symptoms of Parkinson's disease
L. Vuocolova (USA)
- P 1.078 An alternative perspective on interpretation of the cardinal motor symptoms of Parkinson's disease
L. Vuocolova (USA)
- P 1.079 Prevalence of anxiety in Parkinson's disease
K. Mengesha (Ethiopia)

- P 1.080 Can arm swing be clinical predictors of postural instability in Parkinson's disease?
W. Buated, P. Lolekha*, S. Hidaka, N. Kashyap, T. Fujinami (Japan, *Thailand)
- P 1.081 Clinical predictors of postural instability in Parkinson's disease: the Nintendo Wii Balance Board Posturographic Study
P. Lolekha, W. Buated*, S. Hidaka*, N. Kashyap*, T. Fujinami* (Thailand, * Japan)
- P 1.082 Postural instability detected by stabiloplatform examination in the patients with vascular mild cognitive impairment and Parkinson's disease patients with mild cognitive impairment
I. Miliukhina, T. Sergeev, A. Kudrevatykh, E. Gracheva, M. Didour (Russia)
- P 1.083 Clinical and objective evaluation of turning in floor squares of various sizes in patients with Parkinson's disease and healthy controls
L. Stuhlinger, U. Fietzek, A. Plate, C. Hamann, K. Bötzel, A. Ceballos-Baumann (Germany)
- P 1.084 Posturography evaluation and balance tests as potential markers of assessment of postural disability progression in Parkinson's disease patients after DBS STN implantation
S. Szlufik, M. Kloda, D. Kozirowski, I. Potrzebowska, J. Dutkiewicz, K. Gregier, T. Mandat, A. Friedman (Poland)
- P 1.085 Postural sensory correlates of gait freezing in Parkinson's disease
Y.E. Huh, J. Youn, Y.S. Kim, M. Hwang, J.W. Cho (South Korea)
- P 1.086 Alterations in the dynamic balance level in elderly with Parkinson's disease
B. Mendez-Rial, J.M. Cancela Carral, C. Ayan, M.H. Vila (Spain)
- P 1.087 Evaluation of spatiotemporal parameters in Parkinson's disease and their correlation with UPDRS motor score about 32 cases
D. Kadi, N. Ababou, S. Daoudi, M. Aderkichi (Algeria)
- P 1.088 Using the "StartReact" paradigm to investigate postural instability in Parkinson's disease
J. Tan, T. Perera, J. Mcginley, W. Thevathasan (Australia)
- P 1.089 Timed up and Go and its application in older adults with Parkinson's disease. Systematic review
I. Mollinedo-Cardalda, J.M. Cancela Carral, G. Rodriguez-Fuentes (Spain)
- P 1.090 Factors influencing the falls in patients with Parkinson's disease
N. Skripkina, O. Levin (Russia)
- P 1.091 Falling direction is important predictors for mechanism of falls in patients with Parkinson's disease
J. Youn, M. Hwang, D. Kim, J.W. Cho (South Korea)
- P 1.092 Frequency and risk of falls in Parkinson's disease in Ibadan
T. Farombi, M. Owolabi, A. Ogunniyi (Nigeria)
- P 1.093 Falls in Parkinson's disease: effects on health related quality of life
T. Farombi, J. Yaria, M. Owolabi, A. Ogunniyi (Nigeria)
- P 1.094 A prospective study of cumulative incidence and course of RLS in de novo PD patients during chronic dopaminergic therapy
S. Calzetti, E. Marchesi, M. Goldoni, A. Negrotti (Italy)

- P 1.095 Semantic and phonemic verbal fluency in patients with Parkinson's disease (PD)
A.D. Roesch, A. Meyer, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- P 1.096 Facial emotion recognition in Parkinson's disease
S. Kalampokini, E. Lyros, M. Luley, J. Spiegel, M. Unger (Germany)
- P 1.097 Emotion recognition and emotion expression in Parkinson's disease: an unifying emotional mirror mechanism?
L. Ricciardi, F. Visco-Comandini, R. Erro, F. Morgante*, M. Bologna*, A. Fasano**, D. Ricciardi*, M. Edwards, J. Kilner (United Kingdom, *Italy, **Toronto - Canada)
- P 1.098 Mentally and emotional disorders of Parkinson's disease
K. Khasanova (Uzbekistan)
- P 1.099 Behavioral and psychological symptoms in Korean patients with early Parkinson's disease
J. Ahn, H. Kim, J. Heo (South Korea)
- P 1.100 Prevalence of depression in Parkinson's disease patients
A.M. Woldehana (Ethiopia)
- P 1.101 Prevalence of depression and dementia in Parkinson's disease
F. Yunusov, G. Rakhimbaeva (Uzbekistan)
- P 1.102 Clinical correlates of depression and anxiety in patients with Parkinson's disease
H. Hambarzumyan, H. Manvelyan (Armenia)
- P 1.103 Suicidal ideation in Parkinson's disease
M.M. Dumitru (Romania)
- P 1.104 Is there any relationship between olfactory dysfunction and depression in Parkinson's disease?
K. Hasegawa, H. Onuma, S. Nakamura, A. Kumon, E. Horiuchi (Japan)
- P 1.105 Association of depressive symptoms with circadian blood pressure alterations in Parkinson's disease
M.S. Pisciotta, D.L. Vetrano, V. Brandi, M.R. Lo Monaco, A. Laudisio, D. Fusco, G. Onder, R. Bernabei, G. Zuccalà (Italy)
- P 1.106 Vascular risk factors and depressive symptoms in Parkinson's disease dementia
M.H. Park, J.Y. Min (South Korea)
- P 1.107 Clinical impact of mood disorders on non-motor symptoms in Parkinson's disease
T. Shinoda, T. Maeda (Japan)
- P 1.108 Parkinson's disease and cognitive reserve
S. Guzzetti, A. Caporali, F. Mancini, L. Manfredi, R. Daini, A. Antonini (Italy)
- P 1.109 Is cognitive function influenced to the self-assessment about the psychological symptom in PD?
A. Kumon, Y. Kobayashi, M. Saruwatari, N. Kawashima, K. Hasegawa (Japan)
- P 1.110 Theory of the mind in subjects with Parkinson's disease: a case-control study
G.G. Arciniega-Martinez, A. Jorge De Sarachaga, J.E. Simancas-Ruiz, M.S. Escobar-Barrios, E.E. Carreon-Bautista, L.F. Balboa-Alegría, A. Cervantes-Arriaga, M. Rodriguez-Violante (Mexico)

- P 1.111 The heterogeneity of cognitive impairments in Parkinson's disease
L. Alonso Recio, P. Martín Plasencia, J.M. Serrano Rodríguez (Spain)
- P 1.112 Cognitive profile in non-demented GBA-carriers Parkinson's disease patients
C. Siri, E. Reali, B. Pozzi, A. Colombo, R. Cilia, M. Canesi, C.B. Mariani, N. Meucci, G. Sacilotto, S. Tesei, A.L. Zecchinelli, M. Zini, G. Pezzoli, S. Goldwurm (Milan)
- P 1.113 Description of cognitive disorders of Alzheimer's disease and Parkinson's disease
D. Toliboy, G. Rakhimbaeva (Uzbekistan)
- P 1.114 Cognitive disorders in Parkinsonism
S. Karakhonova, G. Ishanhodjaeva (Uzbekistan)
- P 1.115 Cognitive impairment in Parkinson's disease is associated with reduced cerebrovascular reactivity
A. Rubino, T. Romeo, M.E. Di Battista, M. Valente, C. Papi, P. Giacomini, G. Meco (Italy)
- P 1.116 MoCA vs. MMSE sensitivity as screening instruments of cognitive impairment in PD, MSA and PSP patients
E. Fiorenzato, L. Weis, C. Falup-Pecurariu*, A. Antonini, R. Biundo (Italy, *Romania)
- P 1.117 Blood biomarkers associated with cognitive decline in early stage and drug-naive Parkinson's disease patients
J. Santiago, J. Potashkin (USA)
- P 1.118 Visual Hallucination Inventory (VHI) and NMS Questionnaire (NMSQ) in identification and characterisation of visual hallucinations (VH) in elderly patients with Parkinson's disease (PD)
S. Gangadharan, G. Padmakumar, M. Rees, A. Johnson, A. Withanage, C.P. Padmakumar (Australia)
- P 1.119 Impact of gender on impulse control disorders and other non-motor symptoms among Parkinson's disease patients
N. Kovács, G. Deli, Z. Aschermann, A. Makkos, J. Janszky, M. Kovács (Hungary)
- P 1.120 Pathological gambling in Parkinson's disease patients: dopaminergic medication or personality traits fault?
L. Brusa, V. Pavino, R. Ceravolo, M.C. Massimetti, A. Stefani, P. Stanzione (Italy)
- P 1.121 Impulsive-compulsive behaviors in Parkin-associated Parkinson's disease: a case-control study
F. Morgante, A. Fasano*, M. Ginevrino, S. Petrucci, L. Ricciardi**, F. Bove, C. Crisculo, M. Moccia, A.R. Bentivoglio, M.T. Pellecchia, G. Di Michele**, P. Barone, E.M. Valente (Italy, *Canada, **United Kingdom)
- P 1.122 Compulsive eating and olfaction in Parkinson's disease
A. Gonçalves, A. Mendes, N. Vila-Chã, I. Moreira, J. Fernandes, J. Damásio, S. Cavaco (Portugal)
- P 1.123 Effects of Parkinson's disease on cognitive action control: insights on impulsive response tendencies using an oculomotor Simon task
J. Duprez, J. Houvenaghel, S. Argaud, M. Vérin, P. Sauleau (France)
- P 1.124 Sensory attenuation and Parkinson's disease: a new pathophysiological framework of bradykinesia
A. Macerollo, J. Chen, P. Korlipara, T. Foltynie, J. Rothwell, M. Edwards, J. Kilner (United Kingdom)

- P 1.125 Fine motor function skills in patients with Parkinson's disease (PD) with and without mild cognitive impairment (MCI)
P. Dahdal, A. Meyer, M. Chaturvedi, K. Nowak, A.D. Roesch, U. Gschwandtner, P. Fuhr (Switzerland)
- P 1.126 The relationship between impulse control disorders and dyskinesia in Parkinson's disease: the ALTHEA study
R.J. Vorovenci, L. Weiss, R. Biundo, A. Antonini (Italy)
- P 1.130 Continuous monitoring of PD with an affordable novel computerised motor test based on a tablet
M. Da Lio, M. De Cecco, P. Bosetti, M. Malaguti (Italy)
- P 1.131 N30 somatosensory evoked potential is negatively correlated with motor function in Parkinson's disease
S.Y. Kang, H. Ma, H. Song, Y.H. Soh (South Korea)
- P 1.132 Reconsidering diagnosis and prevalence of neuropathy in PD
A. Rubino, M.E. Di Battista, M. Valente, L. De Lipsis, G.O.R. Valente, G. Meco (Italy)
- P 1.133 Methylmalonic acid is an important factor that cause peripheral neuropathy in Idiopathic Parkinson's disease
J.-S.Park, P.-W. Go, K. Kang, H.-W. Lee (South Korea)
- P 1.134 A case series of coexisting Parkinson's disease and epilepsy
A. Son, D. Kaminski, A. Gurevich, M. Biagioni, B. Stone, R. Gilbert, M. Nirenberg, A. Di Rocco (USA)
- P 1.135 Parkinson's disease with congenital porencephalia
M. Khanova, N. Tolibova, O. Turgunhujaev, K. Maksudova (Uzbekistan)
- P 2.001 Recognition of life-long curiosity in Parkinson's disease treatment developments
P. Riederer (Germany)
- P 2.002 Review of interventions to reduce hospitalisation in Parkinson's disease
S. Muzerengi, C. Herd, C. Rick, C.E. Clarke (United Kingdom)
- P 2.003 Does premorbid educational attainment modify motor compensation in Parkinson's disease?
Y.H. Sohn, M.K. Sunwoo, P.H. Lee (South Korea)
- P 2.004 Relationship between stay-at-home patients' understanding of information regarding their Parkinson's disease and the burden of spouse caregivers
H. Takamoto, M. Hori (Japan)
- P 2.005 Usefulness of the well being map for the follow-up of Parkinson's disease patients
B. Schuller, Y. Zouitina, M. Lefranc, O. Godefroy, M. Tir, P. Krystkowiak (France)
- P 2.006 Pilates method guidelines for physical therapy in patients with Parkinson's disease
I. Mollinedo-Cardalda, J.M. Cancela Carral, G. Rodriguez-Fuentes (Spain)
- P 2.007 Restoration of tensegrity equilibrium can lead to beneficial modification of Parkinson disease's motor symptoms
L. Vucolova (USA)
- P 2.008 Impact of the whole body vibration training on the motor symptoms in Parkinson's disease patients
A. Karbowniczek, W. Niewiadomski, A. Gasiorowska, A. Strasz, G. Cybulski, E. Palasz, G. Niewiadomska (Poland)

- P 2.009** Impact of the whole body vibration training on activity of daily living and quality of life in Parkinson's disease patients
A. Karbowniczek, W. Niewiadomski, A. Gasiorowska, A. Strasz, G. Cybulski, E. Palasz, G. Niewiadomska (Poland)
- P 2.010** Changes in maximum static force of knee extensors caused by prolonged whole body vibration training in Parkinson's disease patients
W. Niewiadomski, A. Strasz, A. Karbowniczek, A. Gasiorowska, M. Zylinski, K. Pariaszewska, G. Cybulski, E. Palasz, G. Niewiadomska (Poland)
- P 2.011** Cases of negative effect of chronic whole-body vibration on the dynamics of the flow and the quality of life in patients with Parkinson's disease
U. Turqunhujaev, N. Tolibova, M. Khanova, R. Matmurodov, K. Khalimova (Uzbekistan)
- P 2.012** Longitudinal study of the effect of a combined exercise program (land and water) on the physical condition in elderly with Parkinson's disease
B. Mendez-Rial, J.M. Cancela Carral, C. Ayan, M.H. Vila, M. Seijo (Spain)
- P 2.013** The control of quiet stance in persons with Parkinson's disease
C. Rigoldi, M. Galli, L. Mainardi, G. Guffanti, A. Maras, G. Riboldazzi (Italy)
- P 2.014** Effects of trunk proprioceptive neuromuscular facilitation on dynamic balance, mobility and quality of life in Parkinson's disease
B.S. Sneha, S. Karthikbabu, N. Syed*, L.K. Prashanth (India, *Canada)
- P 2.015** Use of three-dimensional gait analysis to assess the effectiveness of conventional rehabilitation protocols in people with Parkinson's disease
M. Pau, F. Corona, C. Casula, R. Pili, M. Murgia, M. Guicciardi (Italy)
- P 2.016** A pilot study: evaluation of a tactile cueing device prototype for patients with Parkinson's disease
R. Schweinfurth, M. Herold-Nadig, V. Klamroth-Marganska, S. Neumann, S. Brühlmann, A. Menig, D. Zutter, J.C. Möller, M. Oechsner, R. Riener (Switzerland)
- P 2.019** Center of pressure displacements during gait initiation in individuals with Parkinson's disease
C. Rigoldi, M. Galli, A. Maras, G. Riboldazzi (Italy)
- P 2.020** The worse is the clinical status of the patient with Parkinson, the higher is the stride length percentage of improvement after automated mechanical peripheral stimulation
A. Kleiner, M. Galli, M. Gaglione, D. Hildebrand*, P. Sale, G. Albertini, F. Stocchi, M.F. De Pandis (Italy, *Brazil)
- P 2.021** Neurofeedback in Parkinson's disease
S. Esmail, D. Linden (United Kingdom)
- P 2.022** A pilot randomised controlled trial (RCT) of real-time fMRI neurofeedback and motor training for the treatment of Parkinson's disease (PD)
L. Subramanian, M. Busse, M. Brosnan*, D. Turner, H. Morris, D. Linden (United Kingdom, *Ireland)
- P 2.023** Effects of virtual reality exercise program on balance in lower parkinsonism patients
G. Lee (South Korea)

- P 2.024 Stress Reduction Training in PD Patients - Influence on neuropsychiatric symptoms?
A. Meyer, A. Hadinia, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- P 2.025 Cognitive Behavioral Group Therapy (CBT) for stress reduction in patients with Parkinson's disease. A randomized control trial
A. Hadinia, A. Meyer, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- P 2.026 Quality of life measured by PDQ39 and SEIQoL during anti-stress training for Parkinson's disease (PD) patients
K. Nowak, A. Meyer, M. Chaturvedi, A. Hadinia, U. Gschwandtner, P. Fuhr (Switzerland)
- P 2.027 Cortisol measurements as a laboratory biomarker for stress reduction in Parkinson's disease (PD) patients
K. Nowak, A. Meyer, A. Hadinia, M. Chaturvedi, A.D. Roesch, U. Gschwandtner, P. Fuhr (Switzerland)
- P 2.028 Effects of cognitive loading on standing balance and postural stability in Parkinson's disease patients with freezing of gait
W. Buated, P. Lolekha*, T. Fujinami, S. Hidaka, N. Kashyap (Japan, *Thailand)
- P 2.029 Learning rhythm: an innovative multifunctional neuro-rehabilitative method to improve cognitive performances in Parkinson's disease patients
S. Minella, S. Guzzetti, F. Mancini (Italy)
- P 2.030 The potential of cognitive-behavioral intervention for anxiety in Parkinson's disease
G.O. Reynolds, D.H. Barlow, A. Cronin-Golomb (USA)
- P 2.031 Short and long term effect of cognitive rehabilitation in mild cognitive impairment subtypes in Parkinson's disease
M. Diez-Cirarda, N. Ojeda, J. Peña, O. Lucas-Jimenez, M.Á. Gómez-Beldarrain, J.C. Gómez-Esteban, N. Ibarretxe-Bilbao (Spain)
- P 2.032 Treatment and diagnosis with the use of neuropsychological scale in patients with subcortical parkinsonian dementia
N. Sokhibnazarov, F. Muratov (Uzbekistan)
- P 2.033 Theatre is a valid complementary therapeutic interventions for emotional rehabilitation of Parkinson's patients
G. Mirabella, P. De Vita, S. Rampelli, F. Lena, F. Dilettuso, M. Iacopini, R. D'Avella, M.C. Borghese, S. Mazzotta, D. Lanni, M. Grano, S. Lubrani, N. Modugno (Italy)
- P 2.034 Beneficial role of voice inter-relating process and OM mantra enchanting in Parkinson's disease patients in south Delhi metro population
V. Sharma (India)
- P 2.035 New opportunities for innovation and internet technologies in rehabilitation of patients with Parkinson's disease in the Aral Sea region of the Republic of Uzbekistan
G. Izyumova, D. Izyumov (Uzbekistan)
- P 2.036 Zero non-motor symptoms in a martial arts' expert
L. Jaffe (USA)

POSTER SESSION 2 (2.037-3.087)

- P 2.037 Pharmaceutical design in Parkinson's disease: what do patients prefer?
K. Lefteri, F. Liu, M. Brown (United Kingdom)
- P 2.038 Effect of pharmacist-led interventions on motor symptoms in Parkinson's patients: a pilot study
C. Stuijt, T. Van Laar (The Netherlands)
- P 2.039 Unlocking Alzheimers and Parkinsonism - Do you dream for cure?
J. Joy (India)
- P 2.040 Protective effects of superoxide dismutation activity in genetic models of Parkinson's disease
A. Bioso, F. Roberta, V.K. Godena*, A. Sanchez-Martinez*, L. Bubacco, M. Beltrami, A.J. Whitworth*, M. Bisaglia (Italy, *United Kingdom)
- P 2.041 Randomized double-blind, placebo-controlled multi-center trial for determining efficacy of molecular hydrogen water for Parkinson's disease, baseline characteristics
A. Yoritaka, N. Hattori, The Hydrogen Water Parkinson Study Group (Japan)
- P 2.042 Pharmacogenetics of levodopa: an algorithm for dose prediction
V. Altmann, M. Rieck, A. Schumacher-Schuh, S. Callegari-Jacques, C. de Mello Rieder, M. Hutz (Brazil)
- P 2.043 Gait analysis in Parkinson's disease assessing the effect of levodopa using a validated electronic walkway
B. Mondal, S. Choudhury, R. Banerjee, P. Chatterjee, M.U. Kulsum, S. Chatterjee, K. Chatterjee, S. Sen, A. Ghoshal, S. Shubham, D. Naskar, S.S. Anand, H. Kumar (India)
- P 2.044 Treatment with L-dopa normalize learning as measured with CVLT-2 in drug naive patients with Parkinsons` disease
H.T.J. Sari, O.B. Tysnes, J.P. Larsen, A. Gramstad, G.O. Skeie (Norway)
- P 2.045 Dopaminergic therapy: on a number of complications as increasing of libido in patients with Parkinson's disease and Parkinson's syndrome
S. Mirdedaev (Uzbekistan)
- P 2.046 Dyskinesia and L-dopa treatment
J. Nunomura, M. Tomiyama, C. Suzuki, A. Arai, H. Nishijima, R. Haga, T. Ueno, T. Kon, Y. Funamizu (Japan)
- P 2.047 Role of striatal projection neurons in the generation of L-DOPA-induced dyskinesia
C. Alcaccer, I. Sebastianutto, T. Fieblinger, J. Jakobsson, A. Cenci (Sweden)
- P 2.048 The effectiveness of amantadine and dopamine in the treatment of Guillain-Barre syndrome
M. Tadjenov, R. Sadikov, Y. Musaeva, S. Kuranbaeva (Uzbekistan)
- P 2.049 Efficacy of rasagiline in PD patients with mild cognitive impairment
D. Weintraub, R.A. Hauser, M. Davis, A. Choudhry (USA)
- P 2.050 Symptomatic efficacy of rasagiline in early PD: a meta-analysis
R.A. Hauser, R. Eliaz, E. Eyal, V. Abler, T. Schilling (USA)

- P 2.051 H-3 receptor antagonist and JNK-3 inhibitor: a new therapeutic approach to treat Parkinson's disease
N. Ambhore, S. Mohire, R.R. Kalidindi, S. Mulukutala, V. Murthy*, E. Kannan (India, *USA)
- P 2.052 Motor effects of phosphodiesterase 9 inhibition in the non-human primate model of Parkinson's disease
G. Masilamoni, A. Singh, X. Tang, A. McRiner, L. Leventhal, S. Papa (USA)
- P 2.053 Impact of current antipsychotic medications on comparative mortality and adverse events in people with Parkinson's disease psychosis (PDP)
R. Mills, C. Ballard*, S. Isaacson, H. Williams, A. Corbett*, B. Coate, R. Pahwa, O. Rascol, D. Burn*** (USA, *United Kingdom, **France)
- P 2.054 Parkinson's disease with psychosis (PDP): role of 5-HT_{2A} receptors
R. Horowski, P.-A. Loeschmann, P. Riederer (Germany)
- P 2.055 Efficacy and tolerability of NUPLAZID™ (pimavanserin) in PD psychosis: analysis of an integrated phase 3 placebo-controlled dataset
R. Mills, J. Friedman, W. Ondo, R. Pahwa, K. Black, K. Chi-Burris, H. Williams (USA)
- P 2.056 Long-term effectiveness of NUPLAZID™ (pimavanserin) in PD psychosis: Data from 2 open-label studies
R. Mills, S. Isaacson, J. Azulay*, J. Ferreira, D. Kreitzman, T. Ilic***, K. Chi-Burris, H. Williams** (USA, *France, **Portugal, ***Serbia)
- P 2.057 Antiparkinsonian medication adjustments following deep brain stimulation of subthalamic nucleus in patients with advanced Parkinson's disease
A. Gamaleya, E. Brit, A. Tomskiy, N. Gubareva, A. Poddubskaya, N. Fedorova, V. Shabalov (Russia)
- P 2.060 Onset and duration of motor effects with IPX066, levodopa-carbidopa extended-release capsules: comparison with immediate-release levodopa-carbidopa and with levodopa-carbidopa+entacapone
S. Gupta, S. Khanna, R. Rubens, N. Modi (USA)
- P 2.061 Outpatient levodopa-carbidopa intestinal gel titration in patients with advanced Parkinson's disease
R. Rodriguez, M. Lobatz, J. Dubow, S. Eaton, C. Hall, K. Chatamra, J. Benesh (USA)
- P 2.062 Evodopa-Carbidopa intestinal gel treatment in patients with < 10 years of Parkinson's disease: GLORIA Registry interim results
A. Antonini, K.R. Chaudhuri*, L. Bergmann, A. Yegin**, K. Onuk**, W. Poewe***** (Italy, *United Kingdom, **USA, ***Austria)
- P 2.063 The impact of levodopa-carbidopa intestinal gel on health-related quality of life in Parkinson's disease
N. Kovács, G. Deli, Z. Aschermann, P. Ács, A. Makkos, M. Kovács, J. Janszky, S. Komoly (Hungary)
- P 2.064 Effects of levodopa-carbidopa intestinal gel on non-motor symptoms and safety of outpatient titration: a new phase 3 study in patients with advanced Parkinson's disease
D. Standaert, J. Slevin, C. Hall, J. Dubow, S. Eaton, K. Chatamra, J. Benesh (USA)

- P 2.065** Telemedicine facilitates efficient and safe home titration of Levodopa/Carbidopa Intestinal Gel (LCIG) in patients with advanced Parkinson's disease
T. Willows, N. Dizdar, D. Nyholm, H. Widner, K. Groth, J. Larsson, J. Permert, S. Kjellander (Sweden)
- P 2.066** Determination of minimal important difference thresholds for Parkinson's Disease Questionnaire-39 in advanced Parkinson's disease patients
A. Antonini, E. Dansie Bacci*, K. Sait*, Y.J. Jalundhwala*, P.L. Kandukuri*, T. Marshall*, K. Chatamra*, I. Wiklund, D. Revicki*** (Italy. *USA, **United Kingdom)
- P 2.067** Gastrointestinal safety of levodopa-carbidopa intestinal gel in advanced Parkinson's disease patients: GLORIA long-term registry interim results
D. Domagk, S. Dam-Larsen*, **A. Antonini, L. Bergmann*, A. Yegin***, W. Poewe****** (Germany. *Denmark. **Italy. ***USA, ****Austria)
- P 2.068** Updated long-term safety from ongoing phase 3 trials of levodopa-carbidopa intestinal gel in patients with advanced Parkinson's disease
R. Rodriguez, N. Schmulewitz, D. Stein, W. Robieson, C. Hall, S. Eaton, K. Chatamra, J. Benesh, A. Espay (USA)
- P 2.069** Italian survey on intraduodenal levodopa gel treatment in advanced Parkinson disease: state of the art 10 years after marketing
M. Sensi, G. Cossu, F. Mancini, N. Modugno, M. Pilleri, R. Quatrate, F. Tamma, M. Zibetti, M. Aguggia, A. Antonini, L. Bartolomei, M. Amboni, D. Calandrella, M. Canesi, M.G. Ceravolo, R. Ceravolo, P. Cortelli, R. Eleopra, E. Grassi, M. Guido, G. Gusmaroli, M. Coletti, P. Marano, F. Morgante, C. Pacchetti, G. Riboldazzi, S. Rossi, A. Stefani, G. Meco, A. Tessitore, G. Fabbrini, M.V. Saggi (Italy)
- P 2.070** Comparison of the antiparkinsonian and antidyskinetic effects of hemantane and amantadine
E. Ivanova, I. Kapitsa, E. Valdman, T. Voronina (Russia)
- P 2.071** Favourable effect of safinamide on mood over 2-year treatment of fluctuating Parkinson's disease patients
C. Cattaneo, R. La Ferla, E. Müller*, M. Sardina (Italy. *Germany)
- P 2.072** Post-hoc analysis of safinamide studies as add-on therapy to levodopa in mid- to late-stage fluctuating Parkinson's Disease patients
C. Cattaneo, R. La Ferla, E. Bonizzoni, M. Sardina (Italy)
- P 2.073** Efficacy and safety of istradefylline for the treatment of non-motor symptoms and quality of life (QOL) in patients with Parkinson's disease
K. Abe, S. Kitamura, J. Ogura, M. Fujita, H. Yoshikawa (Japan)
- P 2.075** Clinical characteristics of Parkinson's disease patients responsive to Istradefylline treatment
T. Hazama, K. Fukada, Y. Mitani, M. Kinoshita, K. Takata, Y. Kokunai, J. Sawada (Japan)
- P 2.076** Efficacy and safety of istradefylline for the treatment of non-motor symptoms and quality of life (QOL) in patients with Parkinson's disease and QOL in their caregivers
K. Abe, S. Kitamura, J. Ogura, M. Fujita, H. Yoshikawa (Japan)

- P 2.077** One-year follow-up of opicapone's efficacy and safety in patients with Parkinson's disease and motor fluctuations (BIPARK I)
J. Ferreira, A. Lees*, A. Santos, N. Lopes, J. Rocha, P. Soares-da-Silva (Portugal, *United Kingdom)
- P 2.078** The 1-Methylxantine affinity for A2A adenosine receptors is similar to caffeine, theobromine, theophylline and adenosine. The importance of xanthine core
L.C. Jimenez-Botello, R.B. Muñoz-Soto, I. Castilla De Cortazar Larrea, M. Garcia-Magariño Alonso, M.A. Soriano-Ursua, J. Correa-Basurto (Mexico)
- P 2.079** Meta-analysis: donepezil in the treatment of cognitive impairment & dementia in patients with Parkinson's disease
E. Barcelon, L. Shiong Shu, P.M. Pasco (Philippines)
- P 2.080** Pooled efficacy of opicapone as adjunctive therapy to levodopa in patients with Parkinson's disease and motor fluctuations
J. Ferreira, A. Lees*, N. Lopes, A. Santos, J. Rocha, P. Soares-da-Silva (Portugal, *United Kingdom)
- P 2.081** Pooled safety and tolerability of opicapone in the treatment of Parkinson's disease and motor fluctuations
A. Lees, J. Ferreira*, H. Gama*, C. Oliveira*, N. Lopes*, J. Rocha*, P. Soares-da-Silva* (United Kingdom, *Portugal)
- P 2.082** PANDA: prolonged release oxycodone/naloxone (OXN PR) for severe Parkinson's disease (PD)-related pain
K.R. Chaudhuri, P. Martinez-Martin*, O. Rascol, M. Lomax, J. Decesare, M. Hopp***** (United Kingdom, *Spain, **France, ***Germany)
- P 2.083** A study of real life tolerability of rotigotine transdermal patch in Parkinson's disease across all motor stages
R. Barreto, A. Sauerbier, A. Rizos, R. Chaudhuri (United Kingdom)
- P 2.084** Rotigotine efficacy on sleep disturbances in Parkinson's Disease patients: evidence from a polysomnographic study
C. Liguori, M. Pierantozzi, F. Placidi, A. Stefani (Italy)
- P 2.085** Chronic subcutaneous infusion therapy with apomorphine in advanced Parkinson's disease: effects on motor and non motor symptoms with brain metabolism correlations
M. Auffret, A. Maurus, M. Vérin, J. Houvenaghel, F. Le Jeune, S. Drapier (France)
- P 2.086** Efficacy of sublingual apomorphine (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease
A. Agro, J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, H. Shill*, R. Hauser* (Canada, *USA)
- P 2.087** The effects of sublingual apomorphine (APL-130277) by disease severity on the acute reversal of OFF episodes in Parkinson's disease patients
J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, A. Agro (Canada)
- P 2.088** Baseline disease severity not predictive of sublingual apomorphine (APL-130277) dose needed to convert a PD patient from the OFF to ON state
J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, A. Agro (Canada)

- P 2.089 Safety of sublingual apomorphine (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease
A. Agro, J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, S. Isaacson* (Canada, *USA)
- P 2.090 Minimum MDS-UPDRS part III change needed to convert a Parkinson's disease patient from the OFF to full ON state with sublingual apomorphine (APL-130277)
J. Dubow, B. Dzyngel, T. Bilbault, A. Giovinazzo, A. Agro (Canada)
- P 2.091 Differences between apomorphine (APO) and lisuride (LIS) in PD therapy
R. Horowski (Germany)
- P 2.092 A multicenter epidemiological and clinical study on Deep Brain Stimulation (DBS) for Parkinson's disease: the pilot study
E. Scelzo, E. Beghi, M. Rosa, E. Bianchi, C. Pacchetti, A. Antonini, L. Romito, L. Lopiano, N. Modugno, F. Tamma, A. Priori (Italy)
- P 2.093 A comparison of deep brain stimulation and continuous intrajejunal levodopa infusion in advanced Parkinson's disease: The INVEST study
D. Van Poppelen, R.M. De Bie, J.M. Dijk (The Netherlands)
- P 2.094 Multicenter experience of mixed deep brain stimulation implants for movement disorders
F. Preda, C. Cavandoli, A. Antonini, R. Eleopra, M. Mondani, S. Sarubbo, A. Martinuzzi, M. Pilleri, M. Cavallo, A. Landi, M. Sensi (Italy)
- P 2.095 Effect of bilateral subthalamic DBS on gait in patients with idiopathic Parkinson's disease
R. Borgohain, R.M. Kandada, V.P.V. Kagita, A.K. Puligopu, S.A. Jabeen, M.A. Kanikannan (India)
- P 2.096 The effect of bilateral sub-thalamic nucleus deep brain stimulation (STN-DBS) on prosody of speech of Parkinson's disease
F. Majdinasab, S.A.H. Habibi, E. Ghorbani, M. Khoddami (Iran)
- P 2.097 The effect of deep brain stimulation of subthalamic nucleus on cognitive functions in Parkinson's disease - Pilot study
K. Potasz-Kulikowska, K. Kulikowski, A. Górecka-Mazur, W. Pietraszko, J. Polak, A. Krygowska-Wajs (Poland)
- P 2.098 The effect of subthalamic deep brain stimulation on ghrelin levels in Parkinson's disease
A. Chrobak, A. Furgata, S. Jeziorko, G. Siwek, W. Pietraszko, M. Moskała, K. Potasz-Kulikowska, U. Fiszer, A. Krygowska-Wajs (Poland)
- P 2.099 Can intraoperative clinical testing predict stimulation-induced effects of STN-DBS?
J. Blume, E. Rothenfußer-Korber, A. Janzen, U. Bogdahn, J. Schlaier, M. Lange (Germany)
- P 2.100 Subthalamic deep brain stimulation in Parkinson's disease: does the therapeutic range remain the same in the absence of clinical intraoperative testing?
Y. Zouitina, M. Lefranc, A. Benoist, P. Merle, D. Montpellier, M. Roussel, J.M. Constans, J.M. Macron, O. Godefroy, M. Tir, P. Krystkowiak (France)
- P 2.101 Deep brain stimulation of STN for advanced Parkinson disease with octopolar leads: programming electrical parameters guided for a neuroanatomical-3D-image software 12 months follow-up
G. Salazar (Spain)

- P 2.102 The impact of microelectrode recording on selecting the most optimal trajectories for electrode implantation
M. Nagy, N. Kovács, Z. Aschermann, G. Deli, I. Balás (Hungary)
- P 2.103 Effect of high versus low frequency subthalamic nucleus deep brain stimulation in freezing of gait
S. Asaadi, Z. Gholizadeh Ghozloujeh, A. Zali, F. Ashrafi, R. Jalili Khoshnood (Iran)
- P 2.104 Comparative study of microrecording-based STN location and MRI-based STN location
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- P 2.105 Three new techniques for improving DBS therapy: what are we waiting for?
L. Bour, F. Contarino, S. Van Gils (The Netherlands)
- P 2.106 Reflex saccades evaluation can estimate long-term symptom progression in DBS STN vs only medically treated Parkinson's disease patients
S. Szlufik, A. Przybyszewski, J. Dutkiewicz, P. Habela, T. Mandat, D. Kozirowski (Poland)
- P 2.107 High frequency repetitive transcranial magnetic stimulation can improve the quality of life and depression in Parkinson's disease: a randomized, double-blind, placebo-controlled study
N. Kovács, G. Deli, Z. Aschermann, A. Makkos, M. Kovács, J. Janszky, E. Pál (Hungary)
- P 2.108 The impact of STN DBS on kinetic tremor in Parkinson's disease patients
S. Szlufik, M. Szumilas, J. Dutkiewicz, D. Kozirowski, T. Mandat, E. Slubowska (Poland)
- P 2.109 Weight gain after subthalamic nucleus deep brain stimulation in PD: the role of electrodes position, hormonal setting and clinical outcome
M. Fichera, D. Baroncini, R. Balestrino, A. Franzin, G. Comi, M.A. Volonté (Italy)
- P 2.110 The three-dimensional motion analysis system as an useful tool in evaluation of gait disorders in Parkinson's disease patients treated with DBS STN
S. Szlufik, M. Stolarczyk, J. Dutkiewicz, A. Stolarczyk, T. Mandat, A. Friedman, J.M. Deszczynski, D. Kozirowski (Poland)
- P 2.111 Current status of the treatment with Deep Brain Stimulation (DBS) conducted in Ehime, Japan
H. Yabe, K. Tanaka, R. Ando, H. Iwaki, N. Nishikawa, M. Nagai, M. Nomoto (Japan)
- P 2.112 The combined depletion of monoamines alters the effectiveness of subthalamic deep brain stimulation
E. Faggiani, C. Delaville, A. Benazzouz (France)
- P 2.113 Unilateral deep brain stimulation of subthalamic nuclei does not affect reactive inhibition in Parkinson's patients
G. Mirabella, G. Giannini, M. Fragola, M. Santilli, N. Modugno (Italy)
- P 2.114 Impact of gait and balance training on advanced Parkinson's disease patients after bilateral STN-DBS
V.P.V. Kagita, D.R. Borgohain, D.A. Kumar, D.R.M. Kandadai, S.A. Jabeen, M.A. Kanikannan (India)
- P 2.115 Is emotional prosody of speech affected by Quality of life and depression in bilateral sub-thalamic nucleus deep brain stimulation (STN-DBS) of Parkinson's disease?
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- P.2.116 Impulse control disorders in Parkinson's disease and effect of bilateral STN DBS on them
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- P.2.117 Mortality of advanced Parkinson's disease patients who received deep brain stimulation surgery
H. Ryu, M. Kim, S. You, M. Kim, Y.J. Kim, J. Kim, K. Kim, S.J. Chung (South Korea)
- P.2.118 Infections related to deep brain stimulation in patients with Parkinson's disease: clinical characteristics and risk factors
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- P.2.119 Deep brain stimulation babies
E. Scelzo, J. Mehrkens*, K. Bötzel*, P. Krack, A. Mendes**, S. Chabardes, M. Polosan, E. Seigneuret, E. Moro, V. Fraix (France, *Germany, **Portugal)
- P.2.120 Photo-stimulating effect of low reactive level laser can improve overactive bladder in a patient with Parkinson disease?
T. Uchiyama, T. Yamamoto, Y. Watanabe, T. Kadowaki, K. Suzuki, K. Hashimoto, K. Kaga, C. Shibata-Yamaguchi, T. Yamanishi, R. Sakakibara, S. Kuwabara, K. Hirata (Japan)
- P.2.121 A comparison study for the optimal stimulation site of high-frequency repetitive transcranial magnetic stimulation in Parkinson's disease
M. Yokoe, T. Maruo, K. Hosomi, T. Shimokawa, H. Kishima, S. Oshino, S. Morris, Y. Kageyama, Y. Goto, T. Shimizu, H. Mochizuki, T. Yoshimine, Y. Saitoh (Japan)
- P.2.122 Transcranial magnetic stimulation for rehabilitation of axial symptoms in Parkinson's disease
M. Biagioni, S. Agarwa, K. Sticklor, G. Dacpano, A. Cucca*, A. Son, P. Kumar, D. Kaminski, A. Gurevich, M. Brys, F. Battenberg, A. Quartarone, A. Di Rocco (USA, *Italy)
- P.2.123 Adult neural progenitor cells auto transplantation in a non-human primate model of Parkinson's disease: a pre-clinical study
J. Cottet, S. Badoud, S. Borgognon, P. Chatagny, M. Fregosi, V. Moret, J. Bloch, J. Brunet, E. Rouiller (Switzerland)
- P.2.124 Differential induction of dyskinesia and inflammatory responses by intermittent versus continuous L-DOPA delivery in the 6-OHDA model of Parkinson's disease
A.R. Carta, G. Mulas, S. Spiga, D. Lecca E. Pillai (Italy)
- P.2.125 Association of α -synuclein gene expression with Parkinson's disease is attenuated with higher serum urate in the PPMI cohort
M. Schwarzschild, K. Fitzgerald, R. Bakshi, E. Macklin, C. Scherzer, A. Ascherio (USA)
- P.2.126 The experience of the Unit of Functional Neurosurgery - Hopital des Specialites Rabat - in the surgical management of movements disorders
E. Hakkou, A. Melhaoui, Y. Arkha, W. Regragui, M. Jiddane, A. El Khamlichi, A. El Ouahabi (Morocco)
- P.3.001 Clinical and neuropathological features of rapid progressive dementia with lewy bodies
A. Geut, D. Hepp, A. Ingrassia, Y. Galis, E. Foncke, A. Lemstra, A. Rozemuller, W. Van De Berg (The Netherlands)
- P.3.002 Clinical usefulness of F18-FP-CIT PET/CT in possible dementia with Lewy bodies: preliminary study
J. Ahn, J. Heo, H. Kim (South Korea)

- P 3.003** The association with cognitive function in Lewy body disease: The study of serum biomarkers
S. Nakashita, Y. Tajiri, K. Wada-Isoe, K. Nakashima (Japan)
- P 3.004** Lysosomal enzyme activities in postmortem brain tissue of patients with Lewy Body disease
T. Moors, S. Paciotti*, A. Ingrassia, D. Chiasserini*, P. Eusebi*, L. Parnetti*, T. Beccari*, W. Van De Berg (The Netherlands, *Italy)
- P 3.005** The plasma level of alpha-synuclein in lysosomal storage diseases
B. Muinjonov, E. Giyazitdinova (Uzbekistan)
- P 3.006** Lewy body disease as pure autonomic failure with more than 20 years history: a post mortem study
K. Oiwa, Y. Hasegawa, K. Yasui, Y. Iwasaki, M. Yoshida, A. Takahashi (Japan)
- P 3.007** Typical atypical or atypical atypical Parkinsonism?
S.T. Hirschbichler, R. Erro, M. Stamelou*, B. Balint, K. Bhatia (United Kingdom, *Greece)
- P 3.008** Gastrointestinal symptom is a significant indicator of nigrostriatal dopaminergic degeneration in idiopathic REM sleep behavior disorder patients
J. Lee, C.M. Shin, E.J. Yun, Y. Kim, B.S. Jeon (South Korea)
- P 3.009** Case study of sporadic multiple system atrophy at a young age
B. Muinjonov, E. Giyazitdinova (Uzbekistan)
- P 3.010** The earliest finding of brain MRI in a case with the Parkinson variant of multiple system atrophy: clinical usefulness of diffusion-weight imaging
K.Y. Kwon (South Korea)
- P 3.011** Anatomical profile of cognitive impairment in MSA
E. Fiorenzato, R. Biundo, L. Weis, K. Seppi*, M. Onofrj, P. Cortelli, H. Kaufmann, F. Krismer**°, G. Wenning*, A. Antonini** (Italy, *Austria, **USA)
- P 3.012** Case report: multiple system atrophy C
L. Fazzi, P.R.J.P. Gianotti, J.R.T. Ponte Junior, I.F.D.S. Massaia, M.A.G.T. Silva, M.L. Gorzoni, R.A.J. Ocha, W.L. Sanvito, B.G. Dutra (Brazil)
- P 3.013** Cognitive function in multiple system atrophy-C (cerebellar type)
Y. Yang (South Korea)
- P 3.014** Generation and characterization of iPSC-derived cortical pyramidal neurons from patients affected by multiple system atrophy
G. Monzio Compagnoni, E. Frattini, S. Salani, F. Fortunato, N. Bresolin, G.P. Comi, S. Corti, A. Di Fonzo (Italy)
- P 3.015** Confocal laser microscopy and 3D reconstruction of Pick-like and ring-like inclusions in atypical multiple system atrophy
B. Sikorska, G.G. Kovacs*, P.P. Liberski (Poland, *Austria)
- P 3.016** Hyposmia in progressive supranuclear palsy
B. Muinjonov, E. Giyazitdinova (Uzbekistan)
- P 3.017** Diagnosis of progressive supranuclear palsy in a memory clinic setting
C. Nilsson, K. Tilderkvist, A. Santillo, M. Landqvist Waldö, K. Nilsson, D. Van Westen, S. Vestberg, E. Englund (Sweden)

- P 3.018 Japanese Longitudinal Biomarker Study in PSP and CBD (JALPAC): a prospective multicenter PSP/CBD cohort study in Japan
H. Takigawa, T. Ikeuchi, I. Aiba, M. Morita, O. Onodera, T. Shimohata, T. Tokuda, S. Murayama, K. Nakashima, JALPAC Study Group (Japan)
- P 3.019 Progression of atrophy in brainstem structures for differentiation of progressive supranuclear palsy-parkinsonism from Parkinson's Disease
M. Hwang (South Korea)
- P 3.020 Regional brain atrophy and cognitive impairment of pure akinesia with gait freezing
J.Y. Hong, H.J. Yun, M.K. Sunwoo, J.H. Ham, J. Lee, Y. Sohn, P.H. Lee (South Korea)
- P 3.021 Corpus callosum volumetry as a tool to differentiate subtypes of progressive supranuclear palsy
A. Lenka, S.A. Pasha, S. Mangalore, K. Jhunjhunwala, R. Yadav, J. Saini, P.K. Pal (India)
- P 3.022 Parkinson's disease or symptomatic parkinsonism? Can they be combined?
A. Voskanyan, S. Khachatryan*, K. Harutyunyan, G. Avagyan, E. Khachatryan, H. Amirjanyan, I. Gabrielyan, H. Manvelyan (Armenia)
- P 3.023 Whether the Parkinson's disease develops in patients with chronic cerebral ischemia?
D. Izyumov, G. Izyumova (Uzbekistan)
- P 3.024 Comparative analysis of cognitive and affective disorders at vascular parkinsonism and Parkinson's disease
S. Djalitova, Z. Ibodullayev, A. Mamadaliyev, D. Abdullayeva (Uzbekistan)
- P 3.025 Vascular parkinsonism as a common manifestation of second stage of CADASIL syndrome
B. Muinjonov, E. Giyazitdinova (Uzbekistan)
- P 3.026 Neuroophthalmic disorders in children with cerebral palsy
I. Abdukadirova, Y. Madjidova (Uzbekistan)
- P 3.027 Did Charcot have vascular parkinsonism?
H. Teive, F.M. Branco Germiniani, R. Puppi Munhoz* (Brazil, * Canada)
- P 3.028 Movement disorders after stroke in third level hospital Marrakech morocco
A. Chahidi, M. Chraa*, N. Kissani* (France, *Morocco)
- P 3.030 Use of the drug choline ALFOSTERAT in combined treatment of vascular Parkinsonism
O. Kurbanov, N. Nurmetov, Z. Ibodullaev, D. Abdullaeva (Uzbekistan)
- P 3.031 Analysis of the effectiveness of CEA and evaluation of factors affecting its long-term results
M. Ataniyazov, G. Rakhimbaeva (Uzbekistan)
- P 3.032 Effect of rhythmic auditory stimulation on gait in patients with stroke
M. Fouad, G. Mousa (Egypt)
- P 3.033 Acute parkinsonism as a predominant sign of neuroleptic malignant syndrome in a patient with schizophrenia
P. Koprivnik (Slovenia)
- P 3.035 Parkinsonism in acute hepatic encephalopathy: Experimental evidence in rat
O. El Hiba, A. Abbaoui, H. Gamrani (Morocco)

- P 3.036 Parkinsonism in patient diagnosed as multiple sclerosis-case report
N. Khizanishvili, M. Beridze, M. Mdivani, E. Devidze, L. Shanidze, N. Kvirkvetia (Georgia)
- P 3.037 Implication of CD4 in progression of Parkinsonian syndrome on patients with lupus erythematosus
S. Bebitov, K. Mirzaeva, G. Rakhimbaeva (Uzbekistan)
- P 3.038 Enteric fever presenting as catatonia and parkinsonism: an unusual presentation
S.K. Jaiswal (India)
- P 3.039 Predictive value of [123I]FP-CIT-SPECT on surgical outcome in idiopathic adult chronic hydrocephalus: a pilot study
C. Del Gamba, F. Aquila, P. Perrini, D. Volterrani, U. Bonuccelli, N. Benedetto, R. Ceravolo (Italy)
- P 3.040 Impulse control disorders and punding in Perry syndrome
T. Mishima, S. Fujioka, R. Kurisaki, S. Yamamoto, M. Higuchi, J. Tsugawa, J. Fukae, R. Neshige, Y. Tsuboi (Japan)
- P 3.042 Parkinsonism and central nervous system disease among lead exposed workers
Y. Ahn (South Korea)
- P 3.043 Pesticide exposure and parkinsonism: a systematic review and meta-analysis
M. Chondrogiorgi, I. Tzoulaki, E. Evangelou, G. Ntritsos, X. Tseretopoulou, M. Pappa, S. Konitsiotis, E. Ntzani (Greece)
- P 3.044 Neurotoxic alterations in pesticide exposed population: a preliminary study
R.S. Yadav (India)
- P 3.045 The role of the motor cortex in essential tremor
S. Sharifi, F. Luft, T. Heida, W. Mugge, A. Schouten, L. Bour, A. Van Rootselaar (The Netherlands)
- P 3.046 Development of a wireless sensor for tremors analysis
D. Alimonti, P. Locatelli, M. Caldara, V. Re (Italy)
- P 3.047 Spike shape analysis of electromyography for parkinsonian tremor evaluation
J. Marusiak, R. Andrzejewska, D. wiercz, K. Kisiel-Sajewicz, A. Jaskólska, A. Jaskólski (Poland)
- P 3.048 Unrevealing the diagnoses of a sample of cases with hard-to-classify tremor and normal DaT-SPECT
M. Menendez-Gonzalez, T. Alvarez-Avellon, A. López-Muñiz, J. Vega Álvarez (Spain)
- P 3.049 Research on neuropsychiatric symptoms in patients with essential tremor and Parkinson's disease in Latvian population
L. Smeltre, V. Kuznecovs, R. Smelters (Latvia)
- P 3.050 Transcranial direct current stimulation in the treatment of essential tremor
N. Helvacı Yilmaz, B. Polat, L. Hanoglu (Turkey)
- P 3.051 Impact of an interdisciplinary deep brain stimulation screening model on post-surgical complications in essential tremor patients
M. Higuchi, M. Okun, Y. Tsuboi (Japan)
- P 3.052 Centrifugal progression of TDP-43 pathology along olfactory pathway in ALS patients in contrast to centripetal progression of alpha-synuclein pathology in PD patients
T. Takeda, M. Iijima, T. Uchiyama, C. Duyckaerts, S. Uchiyama, K. Kitagawa (Japan)

- P 3.053 Clinical profile of Filipino patients with amyotrophic lateral sclerosis seen in a tertiary hospital: a 5 year-retrospective study
M.A.K.D. Moll, J.P. Reyes (Philippines)
- P 3.054 Myokymia revealing multiple sclerosis
H. Tibar, E. Ait Benhaddou, W. Regragui, A. Benomar, M. Yahyaoui, N. Birouk, M. Jiddane (Morocco)
- P 3.055 Pathogenetic mechanisms myoclonic hyperkinesia
O. Kurbanov, N. Nurmetov, Z. Ibodullaev, D. Abdullaeva (Uzbekistan)
- P 3.056 Restless legs syndrome presenting as acute form in a patient with Guillain-Barre syndrome
M. Ozmenoglu, V.A. Cakmak, N. Usta, S. Gazioglu (Turkey)
- P 3.057 Analysis of weight and BMI among patients with Huntington's disease
N. Szejko, L. Milanowski, A. Gogol, Z. Jamrozik, P. Janik (Poland)
- P 3.059 Hyperkinesia in ancient China: perspectives and prescriptions
J. Liu, L. Wang (China)
- P 3.060 Cortical and subcortical neurodegeneration in chorea-acanthocytosis and Huntington's disease: more differences than similarities
J. Liu, H. Heinsen*, T. Arzberger*, B. Bader*, C. Schmitz*, M. Kiessling*, A. Daneke* (China, *Germany)
- P 3.062 The rise, the fall and the revival of hyperglycemic hemichorea
D. Lee, T. Ahn (South Korea)
- P 3.063 Inhaled steroid induced hemichorea-hemiballism
H.J. Kim, H.J. Kang, S. Han (South Korea)
- P 3.064 Reversible hemichorea-hemiballism associated with post-thrombolysis reperfusion
H.J. Kim, J.H. Jin, H. Roh, H.J. Kang, H.Y. Kim (South Korea)
- P 3.065 Tardive dyskinesia after long-term treatment with topical Prostaglandin F_{2α} analog (latanoprost)
B. Bulut, D. Ince Gunal, K. Agan Yildirim (Turkey)
- P 3.066 Neuroleptic Induced Dyskinesia or...?
K. Harutyunyan, I. Gabrielyan, H. Amirjanyan, S. Khachaturyan, G. Avagyan, A. Nazaryan, A. Voskanyan, H. Manvelyan (Armenia)
- P 3.067 Novel GNAL mutation with intra-familial clinical heterogeneity: expanding the phenotype
M. Carecchio, C. Panteghini, C. Reale, C. Barzaghi, V. Monti, L. Romito, F. Sasanelli, B. Garavaglia (Italy)
- P 3.068 Health-related quality of life in primary and secondary dystonia after pallidal deep brain stimulation
M. Nagy, N. Kovács, Z. Aschermann, G. Deli, I. Balás (Hungary)
- P 3.069 DYT16/PRKRA founder mutation causes childhood-onset generalized dystonia in a family from Southern Italy
M. Quadri, S. Olgiati, M. Sensi*, F. Gualandi*, E. Groppo*, V. Rispoli*, J. Graafland, G.J. Breedveld, G. Fabbrini*, V. Bonifati (The Netherlands, *Italy)

- P 3.070 Affected side is a prognostic factor in typist's cramp
S.Y. Kang, S.K. Song, J.Y. Hong, J.H. Ham, S.J. Kim, H. Song, P.H. Lee, Y.H. Sohn (South Korea)
- P 3.071 A questionnaire survey of musician's dystonia performed in a music college
K. Konaka, M. Mihara, H. Mochizuki (Japan)
- P 3.072 Bias of visuo-spatial attention in cervical dystonia
G. Chillemi, A. Calamuneri, F. Morgante, C. Terranova, V. Rizzo, P. Girlanda, A. Quartarone (Italy)
- P 3.073 Frequency of the pain and sleep problems at dystonia patients and influence of deep brain stimulation
V. Vuletic (Croatia)
- P 3.074 A case of hemifacial spasm in young adult
I. Gabrielyan, K. Harutyunyan, H. Amirjanyan, G. Avagyan, H. Hambardzumyan, S. Khachatryan, A. Nazaryan, H. Manvelyan (Armenia)
- P 3.075 Atypical presentation of psychogenic movement disorder with jaw-opening dystonia: two cases reports
W.T. Yoon (South Korea)
- P 3.076 Tobacco increases dystonia risk but may ameliorate symptoms
C. Hellberg, A. Puschmann (Sweden)
- P 3.077 A cross-sectional structured survey of patients receiving botulinum toxin type A treatment for blepharospasm
D. Truong, J. Fezza, J. Burns, J. Woodward, T. Hedges, A. Verma (USA)
- P 3.078 Therapeutic assessment of botulinum toxin in the treatment of hemifacial spasm
H. Teive, J.P. Batisti, N. Galli, A.D. Kleinfelder (Brazil)
- P 3.079 Acute allergic reaction following injection of generic, government-provided botulinum toxin A (GGP-BTA) for hemifacial spasm
H. Teive, F.M. Branco Germiniani, R.H. Scola, R.N. Brito, G. Ribas, L. Fiuza Parolin, V. Scavasine, M. Canever, C.M. Borges, K.F. Miska Thölken, S. Zuneda Serafini (Brazil)
- P 3.080 Zolpidem in movement disorder after cardiac arrest
H. Teive, W. Arruda, M. Silva, D. Bertholdo (Brazil)
- P 3.081 Paradoxical effect of a high frequency stimulation protocol on temporal discrimination in dystonic patients
R. Erro, M. Tinazzi, J. Rothwell, K.P. Bhatia (United Kingdom)
- P 3.082 Dopaminergic medicines are drugs of choice for medicament-resistant facial nerve neuropathy
A. Azimov, R. Sadykov, S. Dadajonov, O. Azizova, R. Ismoilov (Uzbekistan)
- P 3.083 Dopaminergic medicines are drugs of choice for medicament-resistant facial nerve neuropathy: EMG study
A. Azimov, R. Sadykov, S. Dadajonov, O. Azizova, R. Ismoilov, E. Giyazitdinova (Uzbekistan)
- P 3.084 Late onset Wilson's disease with central pontine and extrapontine MRI changes
T. Biller, G. Fatterpekar, M. Nirenberg, M. Brys (USA)

- P 3.085 Wilson disease: acute dystonia during treatment with SSRI or SNRI
L. Wictor, K. Wictorin, H. Widner, A. Puschmann (Sweden)
- P 3.086 A clinicoradiologic study of hypertrophic olivary degeneration
T. Konno, A. Strongosky, D. Broderick, Z.K. Wszolek (USA)
- P 3.087 Interoceptive awareness in patients with functional motor disorders
B. Demartini, L. Ricciardi*, L. Crucianelli*, C. Krahé*, M.J. Edwards*, A. Photopoulou*
(Italy, *United Kingdom)

POSTER SESSION 3 (3.088-6.070)

- P 3.088 The distribution and progression pattern of adult onset cerebellar ataxias: hospital based study
J.S. Kim, J. Cho, J.E. Yoon, J. Youn (South Korea)
- P 3.089 Idiopathic very late-onset cerebellar ataxia: a Brazilian case series
H. Teive, A. Moro, M. Moscovich, W. Arruda, R. Munhoz (Brazil)
- P 3.090 Anthropometric profile of patients with Spinocerebellar Ataxia
H. Teive, C. Leite, D. Macedo, M.E. Schieferdecker, R. Vilela, A. Moro (Brazil)
- P 3.091 Anthropometric equations to assess muscle mass in patients with spinocerebellar ataxia
H. Teive, D. Macedo, C. Leite, M.E. Schieferdecker, R. Vilela, A. Moro, C. Taconeli (Brazil)
- P 3.092 Estimation of skeletal muscle mass in patients with spinocerebellar ataxia
H. Teive, C. Leite, D. Macedo, M.E. Schieferdecker, R. Vilela, A. Moro (Brazil)
- P 3.093 Comparison of Non-motors symptoms in patients with Spinocerebellar ataxia type 10 and type 3
A. Moro, M. Moscovich, M. Farah, R. Munhoz, W. Arruda, S. Raskin, T. Ashizawa, H. Teive (Brazil)
- P 3.094 Sleep architecture observed in the patients with SCA 10
E. London, A.C. Crippa, M. Moscovich, T. Ashizawa, H. Teive (Brazil)
- P 3.095 Center of pressure velocity and its fast alternating deviations as an objective measure of balance – Normal values and their sensitivity investigated in SCA patients
A. Sobanska, M. Rakowicz, L. Czerwosz, A. Sulek, I. Stepniak, R. Rola (Poland)
- P 3.096 The importance of the vestibular evaluation in the body balance prognosis and therapy in spinocerebellar ataxia
B.S. Zeigelboim, H.A.G. Teive, J.H. Faryniuk, G. Santos, M.I. Severiano, V.R. Fonseca (Brazil)
- P 3.097 Otoneurological findings prevalent in hereditary ataxias
B.S. Zeigelboim, H.A.G. Teive, G. Santos, M.I. Severiano, V.R. Fonseca, J.H. Faryniuk (Brazil)
- P 3.098 Labyrinth diseases in autosomal recessive ataxia
B.S. Zeigelboim, H.A.G. Teive, G. Santos, M.I. Severiano, E. Abdulmassih, J.H. Faryniuk (Brazil)
- P 3.099 Non-invasive biomarkers for spinocerebellar ataxias, types 2 & 12 patients and their correlation with cerebellar degeneration
R.R. Moganty, V. Swarup, A.K. Srivastava, M.V. Padma (India)
- P 3.100 Clinical profile of hundred patients with Ataxia Telangiectasia from India
M. Mahadevappa, D.V. Santhosh, M. Netravathi, R. Yadav, P.K. Pal (India)
- P 3.101 Burden of mitochondrial DNA variations in Friedreich's Ataxia (FRDA) patients and sharing of mitochondrial lineage with Caucasians
I. Singh, S. Sakhya, M. Behari, M.V.P. Srivastava, G. Shukla, V. Goyal, A.K. Srivastava, M. Faruq (India)
- P 3.102 Distal hereditary motor neuropathy with HSP1 chaperone mutation, presenting with peripheral motor neuropathy, associated to parkinsonism, and cerebellar ataxia. Case report
H. Teive, F. Kok, S. Raskin, W. Arruda (Brazil)

- P 3.103 Sporadic progressive ataxia with palatal tremor
S. Agarwal, A. Son, J. Rucker, M. Brys (USA)
- P 3.104 HMG-CoA Reductase Inhibitors-induced cerebellar ataxia. A Brazilian case series
A. Moro, M. Moscovich, W. Arruda, R. Munhoz, H. Teive (Brazil)
- P 3.105 Comparison of gait and cognitive function in the elderly with Alzheimer's disease dementia, mild cognitive impairment and normal control
S.W. Moon (South Korea)
- P 3.106 Movement disorders in Ethiopia
S. Belay (Ethiopia)
- P 3.107 The role and significance of neuron specific protein S100B at extrapyramidal disorders
M. Juraev, R. Matmurodov, K. Khalimova (Uzbekistan)
- P 4.002 Transcranial B-mode sonography in Parkinson's disease and parkinsonism: our experience on 403 patients
M. Ravagnani, K. Savio, P. Pastorello, D. Barbagli, M. Mongiovetti, G. Gusmaroli (Italy)
- P 4.003 Altered functional topography of the striatum in resting state FMRI in Parkinson's disease
S.N. Tan, Y. Zhang, A. Liu, J. Wang, M.J. Mckeown (Canada)
- P 4.004 Is the mechanism of nervous cells death in Parkinson different than in other neurodegenerations - Arguments from MRI study?
A. Friedman, R. Kulinski, J. Galazka-Friedman (Poland)
- P 4.005 Volumetry of the olfactory bulbs and tracts in the differential diagnosis of Parkinson's disease from parkinsonisms
M. Menendez-Gonzalez, A. López-Muñiz, J. Vega Álvarez (Spain)
- P 4.006 Apathy is associated to altered resting-state functional connectivity and structural changes in Parkinson's disease
O. Lucas-Jiménez, N. Ojeda, J. Peña, M. Díez-Cirarda, A. Cabrera, J.C. Gómez-Esteban, M. Gómez-Beldarrain, N. Ibarretxe-Bilbao (Spain)
- P 4.007 Structural changes in basal ganglia-thalamocortical circuits in Parkinson's disease with cognitive impairment
A. Son, M. Biagioni, S. Agarwal, Y. Li, M. Brys, A. Di Rocco, J. Galvin (USA)
- P 4.008 Magnetic resonance characteristic of Parkinson's disease based on the presence of cognitive impairments
N. Okiljonova, Y. Madjidova (Uzbekistan)
- P 4.009 White matter changes associated with cognitive impairment in Parkinson's disease
M. Chondrogorgi, L. Astrakas, A. Zikou, M. Argyropoulou, S. Konitsiotis (Greece)
- P 4.010 Putaminal diffusivity changes correlates with motor progression in Parkinson's disease on 6-year follow-up
L.L. Chan, K.M. Ng, C.S. Yeoh, H.H. Li, H. Rumpel, E.K. Tan (Singapore)

- P 4.011 Magnetic resonance characteristic of Parkinson's disease based on the presence of cognitive impairment
D. Farangis Bonu (Uzbekistan)
- P 4.012 The 2D-Medial Temporal lobe Atrophy (2D-MTA) correlates with memory in Parkinson's disease
T. Alvarez Avellón, M. Menendez Gonzalez, F. Cuetos Vega, R. Ribacoba Montero (Spain)
- P 4.013 Changes of cerebral morphometry in patients with cerebrovascular and Parkinson's diseases
R. Boqdanov, S. Borisova, S. Kotov, G. Stashuk (Russia)
- P 4.014 Abnormal white matter integrity in elderly patients with idiopathic normal-pressure hydrocephalus: a tract-based spatial statistics study
K. Kang, H. Lee, W. Choi, U. Yoon, J. Lee (South Korea)
- P 4.015 Exploring the grey matter correlates of Wilson's disease using voxel based morphometry
A.S. Sunny, L. George, K.R. Jhunjhunwala, A. Lenka, J. Saini, M. Netravathi, P.K. Pat (India)
- P 4.016 Arterial spin labeling (ASL) may be useful for diagnosing existence of dementia in Parkinson's disease
K. Abe, T. Yamamoto, M. Yamamoto, N. Akiyama, M. Fujita (Japan)
- P 4.017 Predictors of normal and abnormal outcome in clinical brain dopamine transporter imaging
E. Jaakkola, J. Joutsa, V. Kaasinen (Finland)
- P 4.018 Iodine-123-FP-CIT SPECT in familial parkinsonism
S. Onuma, K. Hasegawa, S. Nakamura, E. Horiuchi (Japan)
- P 4.019 Dopaminergic dysfunction and cognitive impairment in Parkinson's disease: evidence from a SPECT study in a large cohort of de-novo patients
D. Frosini, M. Giuntini, C. Pagni, E. Del Prete, G. Tognoni, D. Volterrani, U. Bonuccelli, R. Ceravolo (Italy)
- P 4.020 Fatigue in Parkinson's disease and striatum dopamine transporter scan (DaTscan) uptake
A. Sauerbier, P. Martinez-Martin*, M. Politis, A. Rizos, N. Trojanovic, N. Mulholland, G. Vivian, B. Corcoran, D. Trivedi, L. Perkins, R. Inniss, T. Chiwera, R. Barreto, M. Parry, A. Martin, N. Dimitrov, R. Brown, K. Ray Chaudhuri (United Kingdom, *Spain)
- P 4.021 The MIBG scintigraphy and DAT SPECT contribute to the diagnosis of PD and other related disorders, and evaluations of the course and stage of PD
S. Tada, R. Ando, H. Iwaki, T. Tsujii, Y. Yabe, N. Nishikawa, M. Nagai, M. Nomoto (Japan)
- P 4.022 Characteristic metabolic brain pattern in Slovenian Parkinson's disease patients
P. Tomse, R. Tomaz, Z. Pirtošek, Y. Ma*, D. Eidelberg*, M. Trost (Slovenia, *USA)
- P 4.023 Features neuroimaging and neurological disorders in Alzheimer's disease with parkinsonism
D. Tolibov, G. Rakhimbaeva (Uzbekistan)
- P 4.025 Can Quantitative EEG (QEEG) differentiate patients with Parkinson's disease (PD) from healthy controls?
M. Chaturvedi, F. Hatz, A. Meyer, V. Cozac, U. Gschwandtner, V. Roth, P. Fuhr

- P 4.026 Synaptic homeostasis in Parkinson's disease: an high-density EEG study in different stage of the disease
V. Trendafilov, S. Sarasso*, J. Moeller, C. Staedler, A. Kaelin-Lang, S. Galati (Switzerland, *Italy)
- P 4.027 Nigrostriatal dopamine-independent resting-state functional networks in Parkinson's disease
P.H. Lee, J.S. Baik, Y.H. Sohn (South Korea)
- P 4.028 Brain network changes in relation to beginning apathy in PD patients
F. Hatz, A. Meyer, U. Gschwandtner, P. Fuhr (Switzerland)
- P 4.029 Functional connectivity underpinnings of fatigue in "drug-naïve" patients with Parkinson's disease
A. Giordano, A. Tessitore, R. De Micco, G. Caiazzo, A. Russo, M. Cirillo, F. Esposito, G. Tedeschi (Italy)
- P 4.030 Classification of early stage Parkinson's disease in EEG and tremor time-frequency features space
O. Sushkova, Y. Obukhov, I. Kershner, A. Karabanov, A. Gabova (Russia)
- P 4.031 Correlation of the EEG frequency with cognitive performance in Parkinson's disease - Six-months follow-up
V. Cozac, M. Chaturvedi, F. Hatz, A. Meyer, K. Nowak, U. Gschwandtner, P. Fuhr (Switzerland)
- P 4.032 Alertness as assessed by clinical testing and alpha reactivity does not correlate with executive function decline in Parkinson's disease (PD)
R. Sturzenegger, A. Meyer, M. Chaturvedi, V. Cozac, F. Hatz, U. Gschwandtner, P. Fuhr (Switzerland)
- P 4.033 EEG features of dyskinesias, complicated by levodopa therapy in patient with Parkinson's disease
U. Ashkonov, B. Gafurov, G. Ashanov (Uzbekistan)
- P 4.034 Polysomnographic features of REM sleep behavior disorder with or without Parkinson's disease
C. Ha, E. Bae (South Korea)
- P 4.035 Electromyographic diagnostics of Parkinson's disease and detection risk groups among relatives of patients
D. Ayupova (Uzbekistan)
- P 4.036 Identification of the globus pallidus interna based on time patterns analysis in Parkinson's disease
D.S. Andres, C. Daniel*, M. Merello* (Switzerland, *Argentina)
- P 5.001 Mayo Clinic Florida Morris K. Udall. Center of excellence for Parkinson's research
A. Strongosky, R. Rademakers, O. Ross, R. Uitti, J. Van Gerpen, Z.K. Wszolek, D. Dickson (USA)
- P 5.002 Epigenetics role in Parkinson's disease
M. Dehbashi, M. Rouigari (Iran)
- P 5.003 Identification of novel PD genes by whole-exome sequencing in Italian families
L. Straniero, G. Soldà, R. Assetta, I. Guella*, G. Pezzoli, M. Farrer*, S. Goldwurm, S. Duga (Italy, *Canada)
- P 5.004 Antioxidant kinase inhibitors for LRRK2 Parkinson's disease
P. Sharan, D.C. Angeles, P. Ho, B.W. Dymock, K. Lim, E. Tan (Singapore)

- P 5.006 LRRK2 and GBA mutation analysis in a cohort of Italian familial and sporadic PD
I. Trezzi, V. Melzi, G. Franco, L. Borellini, E. Monfrini, N. Bresolin, G.P. Comi, A. Di Fonzo (Italy)
- P 5.007 I2020T LRRK2 iPSC-derived neurons in the Sagamihara family exhibit increased Tau phosphorylation through the AKT/GSK-3beta signaling pathway
E. Ohta, T. Nihira, A. Uchino, Y. Imaizumi, Y. Okada, W. Akamatsu, K. Takahashi, M. Nagai, M. Ohyama, M. Ryo, M. Ogino, S. Murayama, A. Takashima, K. Nishiyama, Y. Mizuno, H. Mochizuki, F. Obata, H. Okano (Japan)
- P 5.008 Neuropsychological assessment in patients with Parkinson's disease associated with PARK2 gene mutations: a case-control study
P. Amami, C. Bagella, A. Elia, C. Barzaghi, B. Garavaglia, A. Albanese (Italy)
- P 5.010 Cytogenetic study and compared with measurements of oxidative stress and PINK1 gene in Parkinson's disease (PD) patients
J. Pichai Fenn, D. Shanwaz, S. Keshavarao, B. Vellingiri (India)
- P 5.011 DNAJC6 mutations associated with early-onset Parkinson's disease
S. Olgiati, M. Quadri, M. Fang, J.P. Rood, J.A. Saute*, H.F. Chien*, C.G. Bouwkamp, J. Graafland, M. Minneboo, G.J. Breedveld, J. Zhang***, F.W. Verheijen, W. Mandemakers, A.J. Boon, A.J. Kievit, L.B. Jardim*, E.R. Barbosa*, C.R. Rieder*, K.L. Leenders, J. Wang**, V. Bonifati (The Netherlands, *Brazil, **China)
- P 5.012 Novel compound heterozygous mutations of PLA2G6 in a Korean pedigree of young-onset Parkinson's disease: a study of whole genome sequencing
E.J. Choi, W. Lee, J. Shin, J. Seo, C.S. Lee (South Korea)
- P 5.013 Evaluation of genetic load in early-onset Parkinson's disease patients by next-generation sequencing
A. Seresini, T. Brambilla, C. Siri, G. Sacilotto, M. Zini, G. Pezzoli, M. Seia, S. Goldwurm (Italy)
- P 5.014 Association of TNF-alpha and IL-1beta genes polymorphism in Parkinson's disease
M. Subramaniam, S. Keshavarao*, I. Kim (South Korea, *India)
- P 5.016 Polymorphisms of dopamine receptor genes are associated to increased risk of visual hallucinations in Italian Parkinson's disease patients
C. Comi, M. Ferrari, F. Marino, G. Riboldazzi, S. Rosa, R. Cantello, G. Bono, M. Cosentino (Italy)
- P 5.017 Evaluation of clinical phenotypes associated with cytogenetic effects and Methylenetetrahydrofolate reductase (MTHFR) gene polymorphisms in Parkinson's disease in Coimbatore region, South India
M. Iyer, M. Gomathi, D. Shanwaz, B. Vellingiri, S. Keshavarao (India)
- P 5.018 A Molecular And Genetic basis study in POLG mutation of MtDNA in Parkinson's patients in South Indian population
K.K. Alagamuthu, M. Shafi Ahammed Khan, Y. Mohd, P. Krishnan, S. Keshvarao, B. Vellingiri (India)

- P 5.019 Association of mortalin (HSPA9) and other mitochondria-related genes with the risk of Parkinson's disease and Alzheimer's disease
S.J. Chung, M. Kim, H. Ryu, J. Kim, Y.J. Kim, K. Kim, S. You, S.Y. Kim, J. Lee (South Korea)
- P 5.020 Screening of spontaneous genomic alterations and p53 gene polymorphism in new onset of Parkinson's disease
J. Ramalingam, I. Mahalaxmi, M. Subramaniam, L. Thangamani, A. Meyyazhagan, B. Vellingiri (India)
- P 5.021 Identification and verification of novel FBX07 interacting proteins
W. Mandemakers, R. Masius, M. Minneboo, D. Dekkers, J. Demmers, M. Kros, V. Bonifati (The Netherlands)
- P 5.022 Defective glucocerebrosidase in GBA1 mutant Parkinson's disease fibroblasts is rescued by chemical chaperone ambroxol through modulation of lysosomal factors
G. Ambrosi, C. Ghezzi, R. Zangaglia, G. Levandis, C. Pacchetti, F. Blandini (Italy)
- P 5.023 "Benign" GBA variants may alter gene splicing in South African Parkinson's disease cases
M. Barkhuizen, D.G. Anderson, F.H. Van Der Westhuizen, A.F. Grobler (South Africa)
- P 5.024 Epigenome-wide DNA methylation analysis in brothers and monozygotic twins discordant for Parkinson's disease
O. Kaut, I. Schmitt, S. Witt, J. Tost*, U. Wüllner (Germany, *France)
- P 5.025 DNA methylation status and LINE-1 expression in rat brain
S. Mukherjee, K. Upadhyaya, D. Sharma (India)
- P 5.026 Caffeine intake and genetic susceptibility to Parkinson's disease
P. Sharan, E.K. Tan (Singapore)
- P 5.027 Interaction between a GWAS-linked genetic variant and caffeine intake in Parkinson's disease
Y.C. Cheng, M.H. Yong, E.K. Tan (Singapore)
- P 5.028 Interaction between caffeine intake and N-acetyltransferase 2 genotype in Parkinson's disease
J.W. Lim, M.H. Yong, J.C.J. Allen, S. Shenolikar, K.M. Prakash, E.K. Tan (Singapore)
- P 5.029 Systems biology analysis of the proteomic alterations in Parkinson's disease: common and disease-specific pathways
T. Alberio, C. Monti, H. Bondi, I. Colugnat, L. Lopiano, A. Chiò, M. Fasano (Italy)
- P 5.030 Two new SCL20A2 mutations identified in two southern Italy families with primary familial brain calcification
S. Scannapieco, M. Gagliardi, G. Annesi, M. Morelli, G. Iannello, G. Nicoletti, A. Gambardella, A. Quattrone (Italy)
- P 5.031 A novel nonsense CAMTA1 mutation presenting as a tremor predominant phenotype
S. Agarwal, R. Gilbert, H. Lau (USA)
- P 5.032 Exome sequencing in a family with autosomal-recessive mental retardation, polyneuropathy, ataxia and epilepsy
H. Hor, C. Wider (Switzerland)

- P 5.033 Vanishing white matter disease and juvenile lateral sclerosis type 4: possibly a novel genetic and clinical overlap
J. Good, F. Vingerhoets, C. Wider (Switzerland)
- P 5.034 Association of Parkinson's disease (PD) with heterozygous carriers of the Wilson disease (WD) gene
E. Ilycheva, T. Sankova, I. Milyukhina, M. Karpenko, L. Puchkova (Russia)
- P 5.035 Polymorphisms of genes of oxidative stress and glutamate excitotoxicity in patients with tardive dyskinesia in schizophrenia
N. Nurmetov, O. Kurbanov, Z. Ibodullaev, D. Abdullaeva (Uzbekistan)
- P 5.036 Cytogenetic, genotypic, gene sequencing and gene expression studies on the stroke patients. A case control study
R. Chandirasekar, K. Murugan, B. Lakshman Kumar, R. Jayakumar*, K. Sasikala (India, *Malaysia)
- P 5.037 Analysis of GABA and serotonin levels concordance with Vitamin D receptor gene (VDR) polymorphism in late onset Alzheimer disease (LOAD)
M. Shafi Ahammed Khan, K. Alagamuthu, J. Ramalingam, P. Krishnan, Y. Mohd, B. Vellingiri (India)
- P 5.038 Cytogenetic biomarkers and molecular study of PS1 gene in Alzheimer's disease in South Indian population
L. Thangamani, A. Meyyazhagan, S. Keshavarao, B. Vellingiri (India)
- P 5.039 Identification of chromosomal alteration and association study of neureligns and neurexins gene polymorphisms with Alzheimer's disease (ad) patients in Coimbatore population, TamilNadu, India
S. Srinivasan, A. Meyyazhagan, D. Shanwaz, B. Vellingiri (India)
- P 5.040 NcRNAs, Nutrition and Brain disorders
M. Dehbash, M. Rouigari (Iran)
- P 5.041 CREB expression in hippocampus of different age groups of wistar rats
S. Sharma, S. Rajput (India)
- P 5.042 Toward a pharmacological control of gene therapy for Parkinson's disease
M. Humbert-Claude, A. Chtarto* (Switzerland, *Belgium)
- P 6.001 Safinamide differentially modulates glutamate release in the basal ganglia nuclei
M. Morari, A. Brugnoli, C. Caccia, E. Melloni, G. Padoani, S. Vailati, M. Sardina (Italy)
- P 6.002 Safinamide and glutamate release: new insights
E. Melloni, A. Brugnoli, C. Caccia, M. Morari, G. Padoani, S. Vailati, M. Sardina (Italy)
- P 6.003 Restoration of biochemical, behavioral and ultrastructural changes in aging rat brain: neuroprotective role of 17 β -estradiol
P. Kumar, R.K. Kale, N.Z. Baquer (India)
- P 6.004 4i (N-(3-Chloro-2-methylphenyl) quinoxalin-2-carboxamide), a novel 5-HT₃ receptor antagonist alleviates depressive behavior evoked in streptozotocin-induced diabetic mice: role of oxidative stress
D. Gupta, M. Radhakrishnan (India)

- P 6.005 Functional connectivity changes in gait related neural network in PD with freezing of gait
M. Mihara, Y. Watanabe, K. Konaka, H. Otomune, H. Fujimoto, H. Mochizuki (Japan)
- P 6.006 Neuroprotective effects of Withania Someniferails on mice brain: a therapeutic potential drug for Parkinson's disease
V. Sharma, L. Singh (India)
- P 6.007 Effect of electroconvulsive therapy on visuospatial memory in rats
N. Lakkappa, P. Thaggikuppe Krishnamurthy (India)
- P 6.008 Anti-aging and neuro-protective effects of syzygium cumini (Jambolan) extract on spatial learning and memory of aging male rats
P. Pandey, S.F. Bashir (India)
- P 6.010 Ameliorative effects of 1,3,4-thiadiazole derivatives on scopolamine induced cognitive deficits in mice
A. Kulshreshtha, P. Piplani (India)
- P 6.011 Effect of combination therapy of caffeinated coffee and selective 5-HT4 agonist, prucalopride, in an Alzheimer's disease mouse model: possible implications on Amyloid Beta formation
N. Al-Shehaby, L. Mahran, K. Abou-Aisha, M. Rady, N. El-Sayed (Egypt)
- P 6.012 Possible involvement of janus kinase-signal transducers and activators of transcription (JAK/STAT) signaling pathway in vitamin e-mediated anti-depressant-like effects in a rat depression model
N. Alrasheed, M. Al-Samhari, S. Al-Rejaie, R. Ahmed, N. Dzimiri (Saudi Arabia)
- P 6.013 The mutation causing the motor and behavioral disorders in white mice
O. Turqunhujaev, R. Matmurodov, N. Tolibova, M. Khanova, Z. Absaitov (Uzbekistan)
- P 6.014 Genetic models of Parkinson's disease
M. Dehbashi, M. Rouigari (Iran)
- P 6.015 Progressive axonal degeneration of the striatonigral dopaminergic neurons in calcium-independent phospholipase A2 β -knockout mice
G. Beck, K. Shinzawa, H. Sumi-Akamaru, H. Mochizuki (Japan)
- P 6.016 c-Rel deficient mice, a mouse model of "spreading" PD-like pathology
E. Parrella, A. Bellucci, V. Porrini, A. Lanzillotta, M. Benarese, G. Vegezzi, C. Baiguera, A. Antonini, P.F. Spano, M. Pizzi (Italy)
- P 6.017 Neurodegeneration of the dopaminergic neurons due to the inhibition of platelet-derived growth factor receptors (PDGFR) In Zebrafish Larvae
A. Norazit, D. Wong, N. Abdul Halim, S. Mohd Noor (Malaysia)
- P 6.018 Integration of cortical and basal ganglia inputs in motor thalamus of parkinsonian animal models
G. Orban, W. Song, A. Kaelin-Lang, S. Galati (Switzerland)
- P 6.019 Role of brain neurotransmitters in Parkinson's induced rats
N. Kumar, R.K. Khanna (India)
- P 6.020 Spreading depression susceptibility is reduced in parkinson rat model
M. Lotfinia (Iran)

- P 6.021 The hippocampal serotonin system is related with the antidepressant effect of sertraline, venlafaxine, nortriptyline and L-tryptophan in the 6-OHDA-lesioned rats
M. Vital, Z. Thiago, M. Meira Santos Lima, C. Da Cunha, R. Andreatini, R. Santiago (Brazil)
- P 6.022 Weak static magnetic field exposure blocks 6-hydroxydopamine (6-OHDA)-induced neuronal degeneration
R. Uzan-Gueta, L. Schachter, Y. Loboda, J. Finberg (Israel)
- P 6.023 High fat diet feeding exacerbates the toxic effects of 6-hydroxydopamine in rats: Possible involvement of histone acetylation
S. Sharma, R. Taliyan (India)
- P 6.024 Unprecedented therapeutic potential with a combination of A2A/NR2B receptor antagonists as observed in the 6-OHDA lesioned rat model of Parkinson's disease
A. Michel, P. Downey, J. Nicolas, D. Scheller (Belgium)
- P 6.025 Opioid K receptor variant delays the onset of dyskinesias in Parkinson's disease
R. Cilia, R. Asselta, R. Benfante, E. Cereda, D. Vallauri, L. Marabini, D. Fornasari, S. Goldwurm, G. Pezzoli (Italy)
- P 6.027 Symptomatic and biochemical assessments using microdialysis method of an antidyskinetic compound in a L-DOPA induced dyskinesias rat model
S. Robelet, V. Girod, D. Revy, B. Audrey, B. Adeline (France)
- P 6.028 Increased serotonin innervation of the sensorimotor striatum in a primate model of Parkinson's disease
D. Gagnon, T. Di Paolo, M. Parent (Canada)
- P 6.029 Design and synthesis of coumarin based dual binding acetylcholinesterase inhibitors for the treatment of cognitive dysfunction
S. Shaffaj, P.P. Piplani (India)
- P 6.030 Increased density of large calretinin expressing interneurons in the striatum of parkinsonian monkeys
S. Petryszyn, M. Parent (Canada)
- P 6.032 Phosphorylation by okadaic acid enhances MPP⁺ induced hydroxyl radical generation in rat striatum
T. Obata, M. Nakajima (Japan)
- P 6.033 Studying pain-related manifestations in an MPTP-induced rat model of Parkinson's disease
M. Padurariu, A. Ciobica, R. Lefter, E. Anton (Romania)
- P 6.034 Exercising is reducing anxiety, depression and memory deficits induced by a MPTP-induced rat model of Parkinson's disease
A. Ciobica, M. Padurariu, R. Lefter, E. Anton (Romania)
- P 6.035 Computer aided movement analysis of MPTP mouse on inverted horizontal grid
W. Niewiadomski, E. Palasz, M. Skupinska, M. Zylinski, M. Steczkowska, A. Gasiorowska, G. Niewiadomska, G. Riedel* (Poland, *United Kingdom)
- P 6.036 Rolipram, a PDE-IV inhibitor protects against experimental Parkinsonism in mice
N. Kumar, R.K. Khanna (India)

- P 6.037 Crossbreeding two mice strains with differential susceptibility to 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine (MPTP) positively modulates nigral dopaminergic phenotype
D.J. Vidyadhara, H. Yarreiphang, T.R. Raju, P. Anand Alladi (India)
- P 6.038 Nigrostriatal degeneration dictates a top-down genetic program for neuroplasticity and neurorepair: focus on the hippocampus and Wnt/GSK-3 β / β -catenin signaling cascade
B. Marchetti, F. L'Episcopo, C. Tirolo, N. Testa, M.F. Serapide (Italy)
- P 6.039 Distribution, metabolism and elimination of opicapone in the rat and non-human primates
A.I. Loureiro, C. Fernandes-Lopes, P. Soares-da-Silva (Portugal)
- P 6.040 Pharmacokinetics of opicapone, a novel catechol-O-methyltransferase inhibitor, in the Wistar rat
D. Gonçalves, G. Alves, A. Fortuna, P. Soares-da-Silva, A. Falcão (Portugal)
- P 6.041 Opicapone improved the effect of L-DOPA on the MPTP-induced Parkinson's-like syndrome in cynomolgus monkeys
M.J. Bonifacio, F. Sousa, S. Medakkar*, J. Vivian*, P. Soares-da-Silva (Portugal, *Singapore)
- P 6.042 Opicapone improves the levodopa induced rotational behavior in 6-OHDA hemiparkinsonian rats
E. Moura, M.J. Bonifacio, P. Soares-da-Silva (Portugal)
- P 6.043 Perinatal arsenic exposure alters central dopaminergic system of rats
L.P. Chandravanshi, R. Gupta*, R.K. Shukla, V.K. Khanna, S.K. Trigun (India)
- P 6.044 Role of dopaminergic receptors and post synaptic signaling in arsenic induced neurotoxicity: ameliorative effect of curcumin
P. Srivastava, Y. Dhuriya, R. Gupta, R. Shukla, A.B. Pant, V.K. Khanna (India)
- P 6.045 Evidence of heavy metals implication in Parkinson's disease: involvement of serotonin and the beneficial therapeutic role of curcumin
H. Benammi, O. El Hiba, H. Gamrani (Morocco)
- P 6.046 Experimental model of extrapyramidal disorders caused by reserpine
D. Tursunov (Uzbekistan)
- P 6.047 Exogenous salsolinol influences gut-brain axis
M. Kurnik, K. Gil, M. Biatas, V. Aleksandrovych, A. Bugajski, P. Thor (Poland)
- P 6.048 Characterization of the lipopolysaccharide induced model of Parkinson's disease: role of oxidative stress and neuroinflammation
N. Sharma, B. Nehru (India)
- P 6.049 Antiparkinson and antioxidant effect of pyridylpyrazolonyl substituted heterosteroids in LPS induced neuroinflammation model of neurodegenerative disorders
R. Singh, R. Bansal (India)
- P 6.050 Apocyanin, a microglial NADPH oxidase inhibitor prevents dopaminergic neuronal degeneration in lipopolysaccharide induced Parkinson's disease model
N. Sharma, B. Nehru (India)
- P 6.051 Bacopa monnieri supplements offset motor and co-morbid behavioral pathology, oxidative impairments and neurotoxicity in a chronic environmental toxin model of Parkinson's disease in mice
G. Krishna, R. Hosamani*, M. Muralidhara (India, *USA)

- P 6.052 Neuroprotective effect of ethanolic extract of *Pandanus odoratissimus* Ln. to Paraquat mice model of Parkinson's disease
E.C. Sitepu, R. Adj, A.K. Tedja, S. Simanjaya (Indonesia)
- P 6.053 Alteration of striatal tetrahydrobiopterin in iron-induced unilateral model of Parkinson's disease
B. Aryal (Nepal)
- P 6.054 Copper poisoning induces neurobehavioral features of Parkinson's disease in rat: alters dopaminergic system and locomotor performance
A. Abbaoui, O. El Hiba, H. Gamrani (Morocco)
- P 6.055 Deciphering the mechanism of cadmium induced brain dopaminergic dysfunctions and assess the protective potential of quercetin in rats
R. Gupta, R.K. Shukla, L.P. Chandravanshi, P. Srivastava, Y. Dhuriya, A.V. Pant, V.K. Khanna (India)
- P 6.056 The protective effect of curcumin on dopaminergic system after chronic aluminum intoxication: possible link with Parkinson's disease
W. Laabbar, A. Elgot, H. Gamrani (Morocco)
- P 6.057 Origin of α -mannosidase in CSF
A. Tasegian, S. Paciotti, M.R. Ceccarini, M. Codini, T. Moors, D. Chiasserini, E. Albi, W.D. Van De Berg*, L. Parnetti, T. Beccari (Italy, *The Netherlands)
- P 6.058 Synapsin III alterations in Parkinson's disease
A. Bellucci, M. Zaltieri, F. Longhena, G. Faustini, J. Grigoletto, G. Favero, S. Castrezzati, R. Rezzani, M. Pizzi, F. Benfenati, M.G. Spillantini*, C. Missale, P. Spano (Italy, *United Kingdom)
- P 6.059 Understanding the differential regulation of GBA and GBAP1 expression
V. Rimoldi, G. Rovaris, L. Straniero, G. Pezzoli, S. Goldwurm, G. Soldà, R. Asselta, S. Duga (Italy)
- P 6.060 Astrocytes and microglia: new insights in oxidative metabolism of dopamine
A. De Juliis, L. Facci, S. Skaper, G. Arrigoni, M. Plebani, P. Giusti, A. Antonini (Italy)
- P 6.061 Structural analysis of alpha-synuclein oligomers via antibody fingerprinting
L. Nilsson, T. Islam, I. Iakovleva, K. Brännström, A. Olofsson (Sweden)
- P 6.062 Deregulation of miRNAs 103a, 30b and 29a in peripheral blood of L-dopa treated Parkinson's patients
A. Serafin*, L. Foco*, S. Zanigni*, H. Blankenburg*, A. Picard*, A. Zanon*, G. Giannini*, I. Pichler*, M.F. Facheris*, P. Cortelli*, P.P. Pramstaller*^o, A.A. Hicks*, F.S. Domingues*, C. Schwienbacher* (*Italy, ^oGermany)
- P 6.063 An experimental study of transplantation of human amniotic epithelial cells in the corpus striatum of Parkinson's induced wistar albino rats
P. Ravisankar (India)
- P 6.064 Inhibition of PERK and NFKB pathway can reduce death of stressed dopaminergic neurons differentiated from human stem cell line
Z.L. Chaudhry, B. Ahmed (United Kingdom)
- P 6.065 Oral intake of anti-hangover substance increases aldehyde dehydrogenase activity: new preventive and therapeutic potentials for oxidative neuronal injury?
C. Bang, B. Kang, S. Choung, K. Choi (South Korea)

- P 6.066 Blocking mitochondrial fission is protective in dopaminergic neuronal cells with inducible α -synuclein expression
R.Z. Fan, K. Tieu (United Kingdom)
- P 6.067 A novel histone deacetylase 1 and 2 isoform-specific inhibitor alleviates experimental Parkinson's disease
C. Choong, T. Sasaki, T. Yasuda, H. Hayakawa, K. Baba, Y. Hirata, S. Uesato, H. Mochizuki (Japan)
- P 6.068 IL-1beta induces MMP-9 expression associated with cell migration via NOX2-derived ROS signals in rat brain astrocytes
C. Yang, P. Yu (Taiwan)
- P 6.069 Effect of metal ions on aggregation of amyloid beta peptide
Z. Abbaskhani (Iran)
- P 6.070 Presenilins mutations within moroccan cases with Alzheimer disease
N. EL Kadmiri (Morocco)