

# FINAL PROGRAM



WORLD CONGRESS ON PARKINSON'S  
DISEASE AND RELATED DISORDERS  
A COMPREHENSIVE EDUCATIONAL PROGRAM

LYON / FRANCE

2018

19 – 22 August



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## WELCOME WORDS

On behalf of the Board of the International Association of Parkinsonism and Related Disorders, it is our pleasure to welcome you for an exciting and comprehensive educational program at the [XXIII World Congress on Parkinson's Disease and Related Disorders](#) in Lyon, France!

Lyon, the second largest city in France, is situated in the Auvergne-Rhône-Alpes region at the confluence of the Rhône and Saône Rivers. Lyon was the ancient capital of Roman Gaul and has a rich and long-standing history. Today, Lyon is a dynamic city attracting an increasing number of companies and talent, notably in biotechnologies. These features attract clinicians and scientists from around the world to gain insights, learn from one another, and advance the field of movement disorders for the benefit of patients worldwide.

The Congress will begin each morning and afternoon with Plenary Sessions providing overviews of the phenomenology, pathophysiology, and current diagnostic and therapeutic strategies of various movement disorders. These sessions will be followed by Parallel Tracks, permitting participants to select specific diagnostic or therapeutic areas for more concentrated study. A highlight of the Congress will be the Grand Parade of Movement Disorders – an evening video session during which faculty and attendees will showcase the most interesting presentations of movement disorders from around the world. Experts will present Skills Workshops – practical sessions on deep brain stimulation surgeries, pump technologies, and botulinum toxin injections – as well as demonstrations on how to examine patients with movement disorders!

The final day will begin with Plenary Sessions on the emerging diagnostic tools and therapies in Parkinson disease and other movement disorders. We will finish with powerful debates on controversial issues facing our specialty today. The Congress will also offer Meet the Professor Sessions to allow young clinicians and scientists to interact with and learn from accomplished senior faculty members. Oral Poster Sessions will allow delegates a chance to share their research discoveries and observations, and Sponsored Sessions will update delegates on the latest areas of focus from our industry partners.

We look forward to an educational and interactive Congress in this beautiful city. Thank you very much for your participation and enjoy the spirit of summer!



*Daniel Truong, MD, Prof hc  
President of IAPRD*



*Elena Moro, MD, PhD  
Congress Chair*

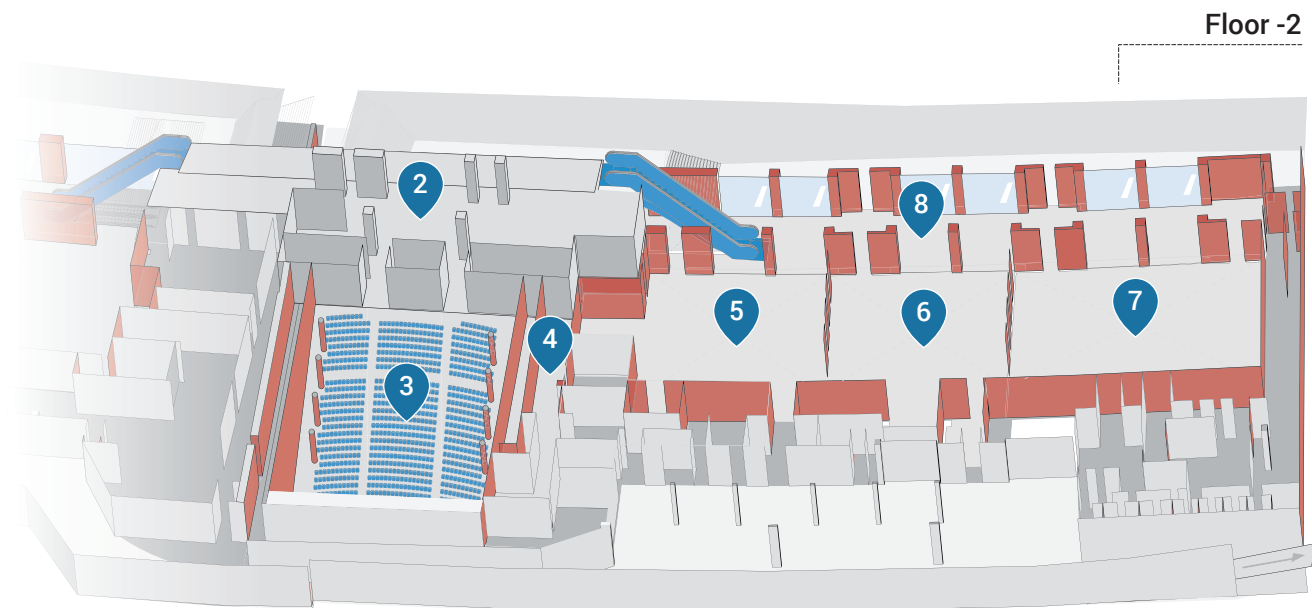
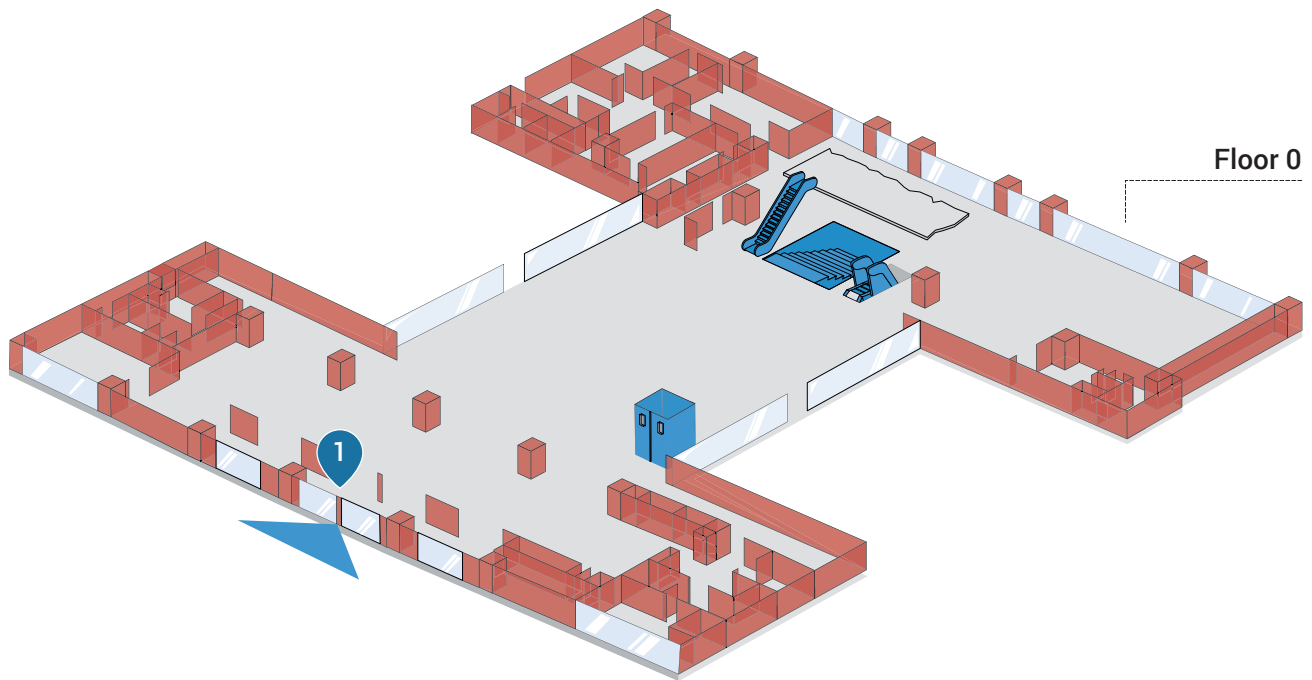


*Hubert H. Fernandez, MD  
Chair, Scientific Program  
Executive Committee*



# SCIENTIFIC PROGRAM

# FLOOR PLAN



- |                             |                        |
|-----------------------------|------------------------|
| 1 Main Entrance             | 5 Forum 1              |
| 2 Registration / Cloak Room | 6 Forum 2              |
| 3 Auditorium Lumière        | 7 Forum 3 / Exhibition |
| 4 Speakers Centre           | 8 Foyer Forum          |



## SESSION DESCRIPTIONS AND TYPES

### PLENARY SESSIONS

These sessions will include lectures on phenomenology, and overviews of the pathophysiology, diagnostic and therapeutic approaches to various movement disorders. Each lecture within a plenary theme will be 30 minutes (25 minutes of didactic followed by 5 minutes of Q and A), delivered by world-renowned faculty members.

### PARALLEL TRACKS

The sessions within a track are arranged to provide a deep dive into a diagnostic or therapeutic area. Each session will be 30 minutes of interactive lecture (25 minutes of didactic followed by 5 minutes of Q and A).

### GRAND PARADE OF MOVEMENT DISORDERS

An evening video session where both faculty and attendees present pre-selected cases from around the globe to showcase the amazing breadth of movement disorders. This event will be co-hosted by two of our most astute and experienced clinical experts.

### SKILLS WORKSHOP

Each of these sessions will provide 1.5 hours of practical information and/or demonstrations on the proper utilization of botulinum toxin, deep brain stimulation surgery, pump therapy in Parkinson disease, ultrasound application in movement disorders, and the optimal examination of patients with hypo- and hyperkinetic disorders.

### COFFEE WITH THE PROFESSOR

These are brief mentoring sessions sprinkled throughout the duration of the Congress where young and aspiring clinicians and scientists can engage with a renowned faculty member, in a relaxed setting, over a cup of coffee.

### Corporate Sessions (over Lunch)

These sessions, sponsored by our industry partners, will all be held during lunchtime.

### ORAL POSTER SESSIONS

Poster authors are expected to present their poster and answer questions by the moderator as well as by the audience of the Oral Poster Session Tour. The author or presenter must be registered for the congress.

### PARKINSONISM AND RELATED DISORDERS JOURNAL: SPECIAL SESSION AND AWARDS

A tour de force compilation of the most relevant 2017-2018 articles in Parkinsonism and Related Disorders. Awards will also be given during this session to the Best Clinical Poster and Best Basic/ Translation Science Poster prior.

# PROGRAM OVERVIEW / SUNDAY, 19 AUGUST 2018

SUNDAY, 19 August 2018

Room	Auditorium Lumière	Forum 1	Forum 2	Foyer Forum	Exhibition Forum 3
11:00 – 12:30	IAPRD Annual General Meeting (for full IAPRD members only)				
12:30 – 13:30					
13:30 – 15:00	The Structure and Function of the Basal Ganglia				
15:00 – 15:30	Coffee Break				15:00 – 19:00
15:30 – 17:00	Clinical Presentations of Basal Ganglia Disorders				
17:00 – 17:30	Coffee Break				
17:30 – 19:00	Opening Ceremony / Melvin Yahr Lectures				Poster Exhibition



Plenary Session



Skills Workshop



Grand Parade Session



Corporate Sessions  
(over Lunch)



Parallel Track



Oral Poster Session



Coffee with the Professor



## Plenary Session

Auditorium Lumière

13:30 – 15:00

### **The Structure and Function of the Basal Ganglia**

Chair: *Peter Riederer, Wuerzburg, Germany*

Chair: *Thomas Bruecke, Vienna, Austria*

13:30 – 14:00

### **Untangling the Neurophysiology of the Basal Ganglia**

Speaker: *Hagai Bergman, Jerusalem, Israel*

14:00 – 14:30

### **Deconstructing the Neurochemistry of the Basal Ganglia**

Speaker: *Angela Cenci-Nilsson, Lund, Sweden*

14:30 – 15:00

### **Basal Ganglia Circuits: A Review with Lessons from Neuromodulation**

Speaker: *Michael Okun, Gainesville, United States*



## Plenary Session

Auditorium Lumière

15:30 – 17:00

### **Clinical Presentations of Basal Ganglia Disorders**

Chair: *Erik Ch. Wolters, Amsterdam, The Netherlands*

Chair: *Marie Vidailhet, Paris, France*

15:30 – 16:00

### **Motor Manifestations of Basal Ganglia Disorders**

Speaker: *Hui-Fang Shang, Chengdu, Sichuan, China*

16:00 – 16:30

### **Behavioral Manifestations of Basal Ganglia Disorders**

Speaker: *Ergun Uc, Iowa City, United States*

16:30 – 17:00

### **Cognitive Dysfunction in Basal Ganglia Disorders**

Speaker: *Jennifer Goldman, Chicago, United States*



## Plenary Session

Auditorium Lumière

17:30 – 19:00

### **Opening Ceremony / Melvin Yahr Lectures**

Chair: *Hubert Fernandez, Cleveland, United States*

Chair: *Elena Moro, Grenoble, France*

Welcome message by Daniel Truong, President IAPRD, Elena Moro, Congress Chair and Emmanuel Broussolle, on behalf of the Local Organizing Committee

#### **Lifetime Achievement Award**

#### **The Brain and Passage of Time**

Speaker: *Yves Agid, Paris, France*

#### **Melvin Yahr Lecture I**

#### **My Gut Reaction: The Story of Parkinson Disease from Mouth to the Colon**

Speaker: *Ronald Pfeiffer, Portland, United States*

#### **Melvin Yahr Lecture II**

#### **Searching for the Holy Grail: Lessons Learned from My Journey as a Clinician Scientist**








Speaker: *Michael Schwarzschild, Boston, United States*

At the end of the Opening Ceremony all participants are invited to join the Networking Reception in the exhibition area.

# PROGRAM OVERVIEW / MONDAY, 20 AUGUST 2018

MONDAY, 20 August 2018

Room	Auditorium Lumière	Forum 1	Forum 2	Foyer Forum	Exhibition Forum 3
08:00 – 10:00	Parkinsonism – Capturing the Giant				09:00 – 17:00 Poster Exhibition
10:00 – 10:30	Coffee Break			Coffee with the Professor 1	
10:30 – 12:00	Imaging and Pathology in Parkinsonian Disorders	Other Diagnostic Tools in Parkinsonian Disorders	Examining the Parkinsonian Patient	Oral Poster Session I – Behavior and Cognition, Deep Brain Stimulation	
12:00 – 12:15					
12:15 – 13:45		Corporate Session 1	Corporate Session 2		
13:45 – 15:15	PD and Parkinson-Plus Therapy – Current Treatments for PD and Parkinson-Plus Syndromes				
15:15 – 15:45	Coffee Break			Coffee with the Professor 2	
15:45 – 17:15	Challenging Features in Parkinsonian Disorders	Alternative and Palliative Therapies in Parkinson Disease	Gastrointestinal Issues in Parkinson Disease supported by Merz Pharmaceuticals GmbH with an unrestricted grant	Oral Poster Session II – Ataxias, Tics, and/or Myoclonus, Dystonia, Gait and Other MD, Tremors	
17:15 – 17:45	Coffee Break			Coffee with the Professor 3	
17:45 – 19:15	Parkinson Disease Care in Unique Settings	Practical Issues on Deep Brain Stimulation Therapy for PD	Pumps and Infusions in Parkinson Disease	Oral Poster Session III – Parkinson Disease	

	Plenary Session		Skills Workshop		Grand Parade Session		Corporate Sessions (over Lunch)
	Parallel Track		Oral Poster Session		Coffee with the Professor		



## Plenary Session

Auditorium Lumière

08:00 – 10:00

### Parkinsonism – Capturing the Giant

Chair: *Elena Moro, Grenoble, France*

Chair: *Daniel Truong, Fountain Valley, United States*

08:00 – 08:30

### The Colorful Clinical Spectrum of Parkinsonism

Speaker: *Roongroj Bhidayasiri, Bangkok, Thailand*

08:30 – 09:00

### Revisiting the Definition of Parkinson Disease

Speaker: *Daniela Berg, Tübingen, Germany*

09:00 – 09:30

### Victories and Losses in the Search for Elusive Parkinson Biomarkers

Speaker: *Lorraine Kalia, Toronto, Canada*

09:30 – 10:00

### Environment and Genes: How They Create the Perfect Storm

Speaker: *Caroline Tanner, San Francisco, United States*



## Coffee with the Professor

Foyer Forum

10:00 – 10:30

### Coffee with the Professor 1

*Kailash Bhatia, London, United Kingdom*



## Parallel Tracks

Auditorium Lumière

10:30 – 12:00

### Imaging and Pathology in Parkinsonian Disorders

Chair: *Ioannis Isaias, Wuerzburg, Germany*

10:30 – 11:00

### Focus on Morphological Imaging in Parkinsonian Disorders

Speaker: *Stephane Lehericy, Paris, France*

11:00 – 11:30

### Focus on Functional Imaging in Parkinsonian Disorders

Speaker: *Stephane Thobois, Lyon, France*

11:30 – 12:00

### Current Pathological Understanding of Parkinsonian Disorders

Speaker: *Peter Riederer, Wuerzburg, Germany*



## Parallel Tracks

Forum 1

10:30 – 12:00

### Other Diagnostic Tools in Parkinsonian Disorders

Chair: *Raymond Rosales, Quezon City, Philippines*

10:30 – 11:00

### How Sleep Studies are Shedding Light on our Understanding of Parkinsonian Disorders

Speaker: *Ronald Postuma, Montreal, Canada*

11:00 – 11:30

### Can the Gut be the Missing Piece in Uncovering PD Pathogenesis?

Speaker: *Pascal Derkinderen, Nantes, France*

11:30 – 12:00

### Acknowledging the Giant Elephant: The Utility of Cognitive and Behavioral Assessments in PD

Speaker: *Jaime Kulisevsky, Barcelona, Spain*



## Skills Workshop

Forum 2

10:30 – 12:00

### Examining the Parkinsonian Patient

Chair: *Shinsuke Fujioka, Fukuoka, Japan*

10:30 – 11:00

### How To Examine a Parkinsonian Patient Like an Expert

Speaker: *Leonard Verhagen, Chicago, United States*

11:00 – 11:30

### Recognizing Red Flags that Suggest Parkinson-Plus Syndromes

Speaker: *Roongroj Bhidayasiri, Bangkok, Thailand*

11:30 – 12:00

### Learning from Experience: Pitfalls and Misconceptions in Parkinsonian Presentations

Speaker: *Alberto Albanese, Milan, Italy*



## Oral Poster Presentation

Foyer Forum

10:30 – 12:00

OP-01

### Oral Poster Session I – Behavior and Cognition, Deep Brain Stimulation

(4 minutes oral presentations followed by 1 minute Q&A)

Moderator: *Daniel Weintraub, Philadelphia, United States*

Moderator: *Raja Mehanna, Houston, United States*

OP-01-01

### Freezing of gait in Parkinson's disease: Is it just a motor problem or more?

Speaker: *Moulika Mandal, Mumbai, India*

OP-01-03

### Cognition in subjects with REM sleep behavior disorder and cumulative signs of prodromal Parkinson's disease

Speaker: *Géraldine Hipp, Belvaux, Luxembourg*

OP-01-04

### Visuospatial working memory and executive function deficits in single-versus multiple-domain amnesic mild cognitive impairment: A combined ERP and sLORETA study

Speaker: *Lihua Gu, Nanjing, China*

OP-01-05

### Cognitive and histopathological phenotypes in new rat models of cortical synucleinopathy

Speaker: *M. Angela Cenci, Lund, Sweden*

OP-01-06

### Association between post-operative delirium and Parkinson disease following common US surgical procedures

Speaker: *Bhavpreet Dham, Rochester, United States*

OP-01-07

### Cortical 123I-FP-CIT binding deficits are associated with mild cognitive impairment in Parkinson's disease

Speaker: *Andrea Pilotto, Brescia, Italy*

OP-01-08

### Subthalamic deep brain stimulation for advanced Parkinson's disease beyond the 5-year follow-up

Speaker: *Anna Gamaleya, Moscow, Russian Federation*

OP-01-09

### Deep brain stimulation of the nucleus basalis of Meynert as a treatment for Parkinson's Disease Dementia: A systematic review of animal studies

Speaker: *Muhammad Nazmuddin, Groningen, Netherlands*

OP-01-10	<b>Long-term effect of subthalamic deep brain stimulation in young- and late-onset Parkinson's disease: 10-year follow-up study</b> Speaker: <i>Mi Sun Kim, Seoul, Republic of Korea</i>
OP-01-11	<b>Bilateral GPi DBS improves medically intractable postural and kinetic tremor in patients with Parkinson's disease</b> Speaker: <i>Chong Sik Lee, Seoul, Republic of Korea</i>
OP-01-12	<b>Non-motor symptoms in dystonia patients and influence of deep brain stimulation and botulinum toxin on them</b> Speaker: <i>Vladimira Vuletic, Rijeka, Croatia</i>
OP-01-13	<b>The subthalamic nucleus activity at gait initiation in Parkinson's disease</b> Speaker: <i>Ioannis Isaias, Wuerzburg, Germany</i>
OP-01-14	<b>Long-term clinical outcome of deep brain stimulation for PKAN syndrome</b> Speaker: <i>Victoria Gonzalez, Montpellier, France</i>
OP-01-15	<b>Finding ways to improve axial symptoms in patients with chronic STN DBS for Parkinson's disease</b> Speaker: <i>Jessica Karl, Chicago, United States</i>
OP-01-16	<b>Battery longevity of neurostimulators in Parkinson-disease: A historic cohort study</b> Speaker: <i>Anna Luce Sette, Grenoble, France</i>
OP-01-17	<b>Suicide after STN-DBS in Parkinson' disease: Who, when and how to prevent?</b> Speaker: <i>Giulia Giannini, Bologna, Italy</i>
	<b>Corporate Session</b> Forum 1
12:15 – 13:45	<b>Corporate Session 1: Please see page 77</b>
	<b>Corporate Session</b> Forum 2
12:15 – 13:15	<b>Corporate Session 2: Please see page 77</b>
	<b>Plenary Session</b> Auditorium Lumière
13:45 – 15:15	<b>PD and Parkinson-Plus Therapy – Current Treatments for PD and Parkinson-Plus Syndromes</b> Chair: <i>Tanya Simuni, Chicago, United States</i> Chair: <i>Franck Durif, Clermont Ferrand, France</i>
13:45 – 14:15	<b>Current Approach to PD Motor Treatment: An Emerging Consensus?</b> Speaker: <i>Marcelo Merello, Buenos Aires, Argentina</i>
14:15 – 14:45	<b>Addressing the Behavioral and Cognitive Complications in PD</b> Speaker: <i>Irena Rektorova, Brno, Czech Republic</i>
14:45 – 15:15	<b>Progress in the Treatment of Parkinson-Plus Syndromes</b> Speaker: <i>Irene Litvan, San Diego, United States</i>



## Coffee with the Professor

Foyer Forum

15:15 – 15:45

### Coffee with the Professor 2

*Caroline Tanner, San Francisco, United States*



## Parallel Tracks

Auditorium Lumière

15:45 – 17:15

### Challenging Features in Parkinsonian Disorders

*Chair: Pramod Pal, Bengaluru, Karnataka, India*

15:45 – 16:15

### Preventing Falls and Fractures: The Approach to Freezing and Gait Instability

*Speaker: Ioannis Isaïas, Wuerzburg, Germany*

16:15 – 16:45

### A Deep Dive into the Sea of Dysautonomic Complication in PD

*Speaker: Paola Sandroni, New York, United States*

16:45 – 17:15

### Sensible Strategies for Sleep Dysfunction in the PD Patient

*Speaker: Christian Baumann, Zurich, Switzerland*



## Parallel Tracks

Forum 1

15:45 – 17:15

### Alternative and Palliative Therapies in Parkinson Disease

*Chair: Hrishikesh Kumar, West Bengal, India*

15:45 – 16:15

### The Evidence of Exercise in Enhancing the Management of PD

*Speaker: Bettina Debu, Grenoble, France*

16:15 – 16:45

### The Ever Expanding Role of Botulinum Toxins in Parkinsonian Disorders

*Speaker: Mark Lew, Los Angeles, United States*

16:45 – 17:15

### Completing the Chapter of Care: End of Life Issues in PD

*Speaker: Miguel Coelho, Lisbon, Portugal*



## Parallel Tracks

Forum 2

15:45 – 17:15

### Gastrointestinal Issues in Parkinson Disease

*supported by Merz Pharmaceuticals GmbH with an unrestricted grant*

*Chair: Ronald Pfeiffer, Portland, United States*

15:45 – 16:15

### How Relevant is Nutrition in PD Care and Management?

*Speaker: Emanuele Cereda, Pavia, Italy*

16:15 – 16:45

### Upper Gastrointestinal Challenges in Parkinson Disease

*Speaker: Heinz Reichmann, Dresden, Germany*

16:45 – 17:15

### Lower Gastrointestinal Challenges in Parkinson Disease

*Speaker: Ronald Pfeiffer, Portland, United States*



## Oral Poster Presentation

Foyer Forum

15:45 – 17:15

OP-02

### Oral Poster Session II – Ataxias, Tics, and/or Myoclonus, Dystonia, Gait and Other Movement Disorders, Tremors

(4 minutes oral presentations followed by 1 minute Q&A)

*Moderator: Maria Stamelou, Athens, Greece*

*Moderator: Diego Torres-Russotto, Omaha, United States*



- OP-02-02 **Frequencies, genetic, clinical and radiologic characterization of spinocerebellar ataxia in Korea**  
Speaker: *Minkyong Kim, Seoul, Republic of Korea*
- OP-02-04 **Subcortical brain areas correlate genetic characteristics in spinocerebellar ataxia type 2 patients**  
Speaker: *Dibashree Tamuli, New Delhi, India*
- OP-02-05 **Clinical and genetic aspects of Huntington's disease in 11 Malian families: The largest cohort genetically confirmed in Sub-Saharan Africa**  
Speaker: *Abdoulaye Bocoum, Bamako, Mali*
- OP-02-06 **Immunogenicity of daxibotulinumtoxinA for injection in adults with cervical dystonia from a phase 2 dose-escalation multicenter study**  
Speaker: *Dirk Dressler, Hannover, Germany*
- OP-02-07 **Intero- and exteroceptive mirroring and overflow movements are useful in assessing writer's cramp**  
Speaker: *Shi-Ni Tan, Singapore, Singapore*
- OP-02-08 **Hyperkinetic movement disorders induced by mirtazapine: Unusual case report and clinical analysis of reported cases**  
Speaker: *Won Tae Yoon, Seoul, Republic of Korea*
- OP-02-09 **Deep brain stimulation parameters for dystonia: A systematic review**  
Speaker: *Bakhtigul Kholmuratova, Tashkent, Uzbekistan*
- OP-02-10 **Approach to health care shaped by Generational Expectations (the AGE study): Patients' preferences for healthcare providers**  
Speaker: *Diana Hengartner, Cleveland, United States*
- OP-02-11 **Effects of long-term valbenazine on tardive dyskinesia and patient-reported outcomes: Results from the KINECT 4 study**  
Speaker: *Scott Siegert, San Diego, United States*
- OP-02-13 **The neural mechanism of freezing of gait in patients with Parkinson's disease**  
Speaker: *Nicolò G. Pozzi, Wuerzburg, Germany*



**Coffee with the Professor**

**Foyer Forum**

- 17:15 – 17:45 **Coffee with the Professor 3**  
*Vincenzo Bonifati, Rotterdam, The Netherlands*



**Skills Workshop**

**Forum 1**

- 17:45 – 19:15 **Practical Issues in Deep Brain Stimulation Therapy for PD**  
Chair: *Elena Moro, Grenoble, France*
- 17:45 – 18:15 **Patient Selection: Combining Evidence with Experience**  
Speaker: *Jens Volkmann, Wuerzburg, Germany*
- 18:15 – 18:45 **Pearls and Pitfalls in DBS Programming**  
Speaker: *Joohi Jimenez-Shahed, Houston, United States*
- 18:45 – 19:15 **When Things Don't Go As Planned: Troubleshooting in DBS**  
Speaker: *Raja Mehanna, Houston, United States*



## Skills Workshop

Forum 2

17:45 – 19:15

### **Pumps and Infusions in Parkinson Disease**

Chair: *Thomas Mueller, Berlin, Germany*

17:45 – 18:15

### **Apomorphine Infusion: Setting up and Troubleshooting**

Speaker: *Marcelo Merello, Buenos Aires, Argentina*

18:15 – 18:45

### **Levodopa Intestinal Gel: Setting up and Troubleshooting**

Speaker: *David Grabli, Paris, France*

18:45 – 19:15

### **Which Pump to Use? Optimal Patient Selection for Each Advanced Therapy**

Speaker: *Emmanuel Flamand-Roze, Paris, France*



## Parallel Tracks

Auditorium Lumière

17:45 – 19:15

### **Parkinson Disease Care in Unique Settings**

Chair: *Yaroslau Compta Hirnyi, Barcelona, Spain*

17:45 – 18:15

### **When Time is of the Essence: Managing Care in Emergency Situations**

Speaker: *Pramod Pal, Bengaluru, Karnataka, India*

18:15 – 18:45

### **What To Do When Your Parkinson Patient Has To Undergo Surgery: From Pre- to Post-Operative State**

Speaker: *Leonard Verhagen, Chicago, United States*

18:45 – 19:15

### **Are We Really Ready for Telemedicine and Distance Health?**

Speaker: *Mark Guttman, Toronto, Canada*



## Oral Poster Presentation

Foyer Forum

17:45 – 19:15

OP-03

### **Oral Poster Session III – Parkinson Disease**

(4 minutes oral presentations followed by 1 minute Q&A)

Moderator: *Rupam Borgohain, Hyderabad, India*

Moderator: *Theresa Zesiewicz, Tampa, United States*

OP-03-01

### **Nilotinib increases dopamine metabolism and reduces oligomeric:total alpha-synuclein ratio in Parkinson's disease**

Speaker: *Fernando Pagan, Washington DC, United States*

OP-03-02

### **Clinical subtypes of excessive daytime sleepiness in Parkinson's disease**

Speaker: *Olga Iakovleva, Moscow, Russian Federation*

OP-03-03

### **Neuroprotective effects of Ethnodyn Neuro® (SNC-1), a natural product used in ayurvedic traditional medicine, on in vitro models of Parkinson's disease**

Speaker: *Alexandre Henriques, Gardanne, France*

OP-03-04

### **Propensity of Mucuna Pruriens to offset rotenone-induced biochemical, behavioral and oxidative dysfunctions in mice: Implications for Parkinson's disease**

Speaker: *Dharmendra Khatri, Mumbai, India*

- OP-03-05 **Effect of Tai Chi exercise to reduce falls and improve balance performance in Parkinson's disease: A meta-analysis**  
Speaker: *Hsin-Hsuan Liu, Taipei, Taiwan*
- OP-03-06 **Is Parkinson's disease with history of agent orange exposure different from idiopathic Parkinson's disease?**  
Speaker: *YoungSoon Yang, Seoul, Republic of Korea*
- OP-03-07  **$\alpha$ -Synuclein induced dopaminergic neurons mitochondrial dysfunction via cytochrome c oxidase subunit 2**  
Speaker: *Danyu Lin, Guangzhou, China*
- OP-03-08 **Dopaminergic treatment and speech in Parkinson's disease: Acoustic analysis and correlation with motor features and dyskinesia**  
Speaker: *Francesco Cavallieri, Modena, Italy*
- OP-03-09 **Video game-based dexterity training in patients with Parkinson's disease: A pilot feasibility study**  
Speaker: *Judith Jantine Willemijn van Beek, Lucerne, Switzerland*
- OP-03-10 **PROtein, LEucine And vitamin D Enhancing Rehabilitation (PRO-LEADER) in patients with Parkinson's disease or parkinsonism: An RCT**  
Speaker: *Emanuele Cereda, Pavia, Italy*
- OP-03-11 **Parkinson's disease: Social determinants of quality of life of patients in the central belt of Ghana**  
Speaker: *Vida Obese, Kumasi, Ghana*
- OP-03-12 **Exploration of the regulation of miR-4639-5p expression and its role in the pathogenesis of Parkinson's disease**  
Speaker: *Lu He, Shanghai, China*
- OP-03-13 **Biochemical studies in the brain of transgenic drosophila as a model of Parkinson's disease treated by ropinirole silver nanocomposite (RAgNC)**  
Speaker: *Falaq Naz, Aligarh, India*
- OP-03-14 **Rifampicin inhibits rotenone-induced inflammation by improving lysosomal function and autophagic flux in microglia**  
Speaker: *Yanran Liang, Guangzhou, China*
- OP-03-15 **Effects of transcranial magnetic stimulation on hypokinetic dysarthria in Parkinson's disease**  
Speaker: *Lubos Brabenec, Brno, Czech Republic*
- OP-03-16 **Bradykinesia assessment using evolutionary algorithms in Parkinson's disease: Clinical validation**  
Speaker: *Chao Gao, Shanghai, China*
- OP-03-18 **Genomic variants associated with cognitive impairment in Parkinson's disease**  
Speaker: *Sun Ju Chung, Seoul, Republic of Korea*
- OP-03-19 **Tear proteins as possible biomarkers for Parkinson's disease**  
Speaker: *Mark Lew, Los Angeles, United States*

# PROGRAM OVERVIEW / TUESDAY, 21 AUGUST 2018

TUESDAY, 21 August 2018

Room	Auditorium Lumière	Forum 1	Forum 2	Foyer Forum	Exhibition Forum 3
08:00 – 10:00	Hyperkinetic Disorders I – The Three Other Giants: Chorea, Tics and Dystonia				09:00 – 17:00  Poster Exhibition
10:00 – 10:30	Coffee Break			Coffee with the Professor 4	
10:30 – 12:00	Revisiting Tardive Dyskinesias	Botulinum Toxin Use in Hyperkinetic Disorders	Examining the Hyperkinetic Patient	Oral Poster Session IV – Imaging, Genetics and Biomarkers, Other Parkinsonian Disorders	
12:00 – 12:15					
12:15 – 13:45			Corporate Session 3		
13:45 – 15:15	Hyperkinetic Disorders II – The Smaller Giants: Tremors, Ataxia and Movement Disorders in Children				
15:15 – 15:45	Coffee Break			Coffee with the Professor 5	
15:45 – 17:15	Other Hyperkinetic Disorders	Surgical Therapies for Hyperkinetic Disorders	Rare and Misdiagnosed Movement Disorders	Oral Poster Session V – Parkinson Disease	
17:15 – 18:00		Spotlight Debate: Should we worry that pimavanserin might indeed increase mortality amongst Parkinson patients with psychosis? supported by Acadia® Pharmaceuticals with an unrestricted grant			
	Wine and Cheese Reception				
18:00 – 20:00	Grand Parade of Movement Disorders				



Plenary Session



Skills Workshop



Grand Parade Session



Corporate Sessions (over Lunch)



Parallel Track



Oral Poster Session



Coffee with the Professor

	<b>Plenary Session</b>	<b>Auditorium Lumière</b>
08:00 – 10:00	<b>Hyperkinetic Disorders I – The Three Other Giants: Chorea, Tics and Dystonia</b> Chair: <i>Raymond Rosales, Quezon City, Philippines</i> Chair: <i>Vincenzo Bonifati, Rotterdam, The Netherlands</i>	
08:00 – 08:30	<b>Meeting The Diverse Family of Hyperkinetic Disorders</b> Speaker: <i>Kailash Bhatia, London, United Kingdom</i>	
08:30 – 09:00	<b>Greatest Lessons Learned in Huntington's Disease</b> Speaker: <i>Tiago Mestre, Ottawa, Canada</i>	
09:00 – 09:30	<b>Tics, Tourette's and Stereotypies: Birds of the Same Feather that Do Not Flock Together</b> Speaker: <i>Davide Martino, Calgary, Canada</i>	
09:30 – 10:00	<b>The Colorful Spectrum of Dystonia and the Evolution of its Classification</b> Speaker: <i>Marie Vidailhet, Paris, France</i>	
	<b>Coffee with the Professor</b>	<b>Foyer Forum</b>
10:00 – 10:30	<b>Coffee with the Professor 4</b> <i>Tanya Simuni, Chicago, United States</i>	
	<b>Skills Workshops</b>	<b>Forum 1</b>
10:30 – 12:00	<b>Botulinum Toxin Use in Hyperkinetic Disorders</b> Chair: <i>Dirk Dressler, Hannover, Germany</i>	
10:30 – 11:00	<b>Do's and Don'ts in Botulinum Toxin Injections for Cervical Dystonia</b> Speaker: <i>Joohee Jimenez-Shahed, Houston, United States</i>	
11:00 – 11:30	<b>Injection Principles When Targeting the Face and Mouth</b> Speaker: <i>Dirk Dressler, Hannover, Germany</i>	
11:30 – 12:00	<b>Pearls and Pitfalls in Botulinum Toxin Injections for Limb Dystonia and Spasticity</b> Speaker: <i>Raymond Rosales, Quezon City, Philippines</i>	
	<b>Parallel Tracks</b>	<b>Auditorium Lumière</b>
10:30 – 12:00	<b>Revisiting Tardive Dyskinesias</b> Chair: <i>Emmanuel Broussolle, Lyon, France</i>	
10:30 – 11:00	<b>Setting the Record Straight: Nosology of Tardive Syndrome</b> Speaker: <i>Daniel Truong, Fountain Valley, United States</i>	
11:00 – 11:30	<b>Who Gets It and Why? A Review of the Risk Factors and Hypothesized Mechanisms for Tardive Dyskinesias</b> Speaker: <i>Karen Frei, Loma Linda, United States</i>	
11:30 – 12:00	<b>Current Treatment Options for Tardive Dyskinesias</b> Speaker: <i>Hubert Fernandez, Cleveland, United States</i>	



## Skills Workshop

Forum 2

10:30 – 12:00

### Examining the Hyperkinetic Patient

Chair: *Irena Rektorova, Brno, Czech Republic*

10:30 – 11:00

### How To Examine the Hyperkinetic Patient Like a Master Clinician

Speaker: *Zoltan Mari, Cleveland, United States*

11:00 – 11:30

### Recognizing Clues from the Eyes: Ophthalmological Examination in Movement Disorders

Speaker: *Vivek Lal, Chandigarh, India*

11:30 – 12:00

### Making a Confident Diagnosis of Functional Movement Disorders through Signs and Symptoms

Speaker: *Alberto Espay, Cincinnati, United States*



## Oral Poster Presentation

Foyer Forum

10:30 – 12:00

OP-04

### Oral Poster Session IV – Imaging, Genetics and Biomarkers, Other Parkinsonian Disorders

(4 minutes oral presentations followed by 1 minute Q&A)

Moderator: *Jennifer Goldman, Chicago, United States*

Moderator: *Eng-King Tan, Singapore, Singapore*

OP-04-01

### Imaging biomarkers for freezing of gait in patients with Parkinson's disease

Speaker: *Ruwei Ou, Chengdu, China*

OP-04-02

### Pathway based genetic markers reveals relation between stroke and Parkinson's disease

Speaker: *Himanshu Narayan Singh, Delhi, India*

OP-04-03

### A novel co-activation pattern analysis of resting-state fMRI networks in Parkinson's disease reveals reduced network dynamics that correlate with motor symptom severity

Speaker: *Ryan Walsh, Phoenix, United States*

OP-04-04

### Early Parkinson's disease is distinguished by a structural network backbone identified through graph theoretical analysis of diffusion MRI

Speaker: *Ryan Walsh, Phoenix, United States*

OP-04-05

### Oligogenic inheritance in Parkinson disease explained by multiple mitochondrial and lysosomal gene mutations

Speaker: *Stefanie Smolders, Antwerp, Belgium*

OP-04-06

### Distinct between-network functional connectivity changes in Parkinson's disease: A follow-up study

Speaker: *Patricia Klobusiakova, Brno, Czech Republic*

OP-04-07

### Diagnostic utility of a targeted resequencing technique of next generation sequencing in detecting copy number changes in PARK2

Speaker: *Yun Joong Kim, Anyang, Republic of Korea*

- OP-04-08 **Investigating glucocerebrosidase (GBA) gene mutations in Parkinson's disease**  
Speaker: *Ee Chien Lim, Singapore, Singapore*
- OP-04-09 **Correlations between white matter lesions and cognitive impairment in Parkinson's disease**  
Speaker: *Celeste Yan Teng Chen, Singapore, Singapore*
- OP-04-10 **Diagnostic utility of acute levodopa challenge test: Beyond levodopa responsiveness**  
Speaker: *Mrinal Kumar Acharya, Kolkata, India*
- OP-04-11 **Onset and progression of pathologic atrophy in patients with Huntington disease in Uzbekistan**  
Speaker: *Farkhod Yunusov, Tashkent, Uzbekistan*
- OP-04-12 **Frontal intermittent rhythmic delta activity (FIRDA) as a marker of Dementia with Lewy Body (DLB). A resting state conventional EEG study**  
Speaker: *Stefano Calzetti, Parma, Italy*
- OP-04-13 **Comparison of dystonia between Parkinson's disease and atypical parkinsonism: The clinical usefulness of dystonia distribution and characteristics in the differential diagnosis of parkinsonism**  
Speaker: *Won Tae Yoon, Seoul, Republic of Korea*
- OP-04-14 **Striato-nigral and cortical 123I-FP-CIT dopaminergic deficits in dementia with Lewy bodies and Parkinson's disease**  
Speaker: *Andrea Pilotto, Brescia, Italy*



### Corporate Session

Forum 2

- 12:15 – 13:45 **Corporate Session 3: Please see page 77**



### Plenary Session

Auditorium Lumière

- 13:45 – 15:15 **Hyperkinetic Disorders II – The Smaller Giants: Tremors, Ataxia and Movement Disorders in Children**  
Chair: *Maria Stamelou, Athens, Greece*
- 13:45 – 14:15 **Developing a Steady Approach to Shaking: The Classification of Tremors**  
Speaker: *Diego Torres-Russotto, Omaha, United States*
- 14:15 – 14:45 **Organizing the Chaotic World of Ataxia**  
Speaker: *Theresa Zesiewicz, Tampa, United States*
- 14:45 – 15:15 **The Unique Spectrum of Pediatric Movement Disorders**  
Speaker: *Jennifer Friedman, San Diego, United States*



### Coffee with the Professor

Foyer Forum

- 15:15 – 15:45 **Coffee with the Professor 5**  
*Michael Schwarzschild, Boston, United States*



## Parallel Tracks

Auditorium Lumière

15:45 – 17:15

### Other Hyperkinetic Disorders

Chair: *Rupam Borgohain, Hyderabad, India*

15:45 – 16:15

### What's Old and New in Myoclonus?

Speaker: *John Caviness, Phoenix, United States*

16:15 – 16:45

### The Evaluation and Treatment of Restless Legs and Periodic Leg Movements of Sleep

Speaker: *William Ondo, Houston, United States*

16:45 – 17:15

### The Approach to Paroxysmal Movement Disorders

Speaker: *Eng-King Tan, Singapore, Singapore*



## Skills Workshop

Forum 1

15:45 – 17:15

### Surgical Therapies for Hyperkinetic Disorders

Chair: *Marie Laure Welter, Paris, France*

15:45 – 16:15

### DBS for Dystonia: Have We Finally Cracked the Code for Outcome Consistency?

Speaker: *Elena Moro, Grenoble, France*

16:15 – 16:45

### DBS for the Treatment Tremors, Tourette's and Chorea

Speaker: *Michele Tagliati, Los Angeles, United States*

16:45 – 17:15

### Ultrasound and Lesioning Therapies in Movement Disorders

Speaker: *Binit Shah, Charlottesville, United States*



## Parallel Tracks

Forum 2

15:45 – 17:15

### Rare and Misdiagnosed Movement Disorders

Chair: *Rukmini Mridula Kandadai, Mumbai, India*

15:45 – 16:15

### Spotting and Successfully Treating Wilson's Disease

Speaker: *Peter Hedera, Nashville, United States*

16:15 – 16:45

### One Only Sees What One Knows: Recognizing Autoimmune Disorders

Speaker: *Thien T. Lim, George Town, Malaysia*

16:45 – 17:15

### The Diverse Spectrum of Metabolic and Infectious Movement Disorders

Speaker: *Yih-Ru Wu, Taoyuan, Taiwan*



## Oral Poster Presentation

Foyer Forum

15:45 – 17:15

OP-05

### Oral Poster Session V – Parkinson Disease

(4 minutes oral presentations followed by 1 minute Q&A)

Moderator: *Alberto Albanese, Milan, Italy*

Moderator: *Hui-Fang Shang, Chengdu, China*

OP-05-01

### Subcortical steps of visual processing are altered in de novo Parkinson's disease patients

Speaker: *Emmanuelle Bellot, Grenoble, France*



- OP-05-02 **Recommendations for the organization of team care in Parkinson's disease: Practice-based evidence from 20 expert centers around the world**  
Speaker: *Danique Radder, Nijmegen, The Netherlands*
- OP-05-03 **Effect of istradefylline on non-motor symptoms of Parkinson's disease: A sub-analysis of a 1-year observational study in Japan (J-FIRST)**  
Speaker: *Yasushi Shimo, Tokyo, Japan*
- OP-05-04 **Pain: A marker of prodromal Parkinson's disease?**  
Speaker: *Mrinal Kumar Acharya, Kolkata, India*
- OP-05-05 **A randomized controlled trial of DA-9701 on gastric motility in patients with Parkinson's disease**  
Speaker: *Cheol Min Shin, Seongnam, Republic of Korea*
- OP-05-06 **Promoter identification and transcriptional regulation of the anti-inflammation gene CD200R1 in Parkinson's disease**  
Speaker: *Lu He, Shanghai, China*
- OP-05-07 **Long-term efficacy and safety of incobotulinumtoxinA treatment for sialorrhoea in Parkinson's disease and other neurologic conditions**  
Speaker: *Fernando Pagan, Washington, United States*
- OP-05-08 **Long-term prognosis and survival of new Parkinson's disease subtypes**  
Speaker: *Eduardo De Pablo-Fernández, London, United Kingdom*
- OP-05-09 **Acute dopaminergic neurotoxicity of alpha-synuclein oligomers is mediated by microglial cells**  
Speaker: *Noëlle Callizot, Gardanne, France*
- OP-05-10 **Nonlinearities in outcome-specific hazard of motor and nonmotor long-term complications of Parkinson's disease**  
Speaker: *Stéphane Prange, Bron, France*
- OP-05-11 **Early serotonergic lesion promotes the emergence and severity of motor symptoms in monkeys**  
Speaker: *Mathilde Millot, Lyon, France*
- OP-05-12 **Safety of sublingual apomorphine film (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease: Results from a phase 3 double-blind, placebo-controlled trial**  
Speaker: *Rajesh Pahwa, Kansas City, United States*
- OP-05-13 **Therapeutic potential of a prolyl hydroxylase Inhibitor FG-4592 for Parkinson's diseases**  
Speaker: *Yuncheng Wu, Shanghai, China*
- OP-05-14 **Sodium oxybate for excessive daytime sleepiness and sleep disturbance in Parkinson's disease: A randomized clinical trial**  
Speaker: *Fabian Buechele, Zurich, Switzerland*

- OP-05-15 **A novel adenosine A2A receptor antagonist KW-6356 in early Parkinson's disease: A randomized controlled trial for efficacy and safety**  
Speaker: *Tetsuya Maeda, Morioka, Japan*
- OP-05-16 **A novel mGlu4 compound displays anti-parkinsonian and anti-dyskinetic activity in primate models of Parkinson's disease**  
Speaker: *Delphine Charvin, Plan-les-Ouates, Switzerland*
- OP-05-17 **Efficacy and safety of incobotulinumtoxinA for upper-limb essential tremor in a randomised, double-blind, placebo-controlled trial using kinematics-guided clinical decision support**  
Speaker: *Mandar Jog, London, Canada*
- OP-05-18 **Comparison of botulinum toxin injections in forearm FLEXor plus EXtensor muscles versus flexor muscles alone for the treatment of Essential hand Tremor (FLEX ET)**  
Speaker: *Shnehal Patel, Cleveland, United States*
- OP-05-19 **Beyond cerebellar involvement: Abnormal subcortical volumes in essential tremor**  
Speaker: *Shweta Prasad, Bangalore, India*



## Parallel Tracks

Forum 1

17:15 – 18:00

**Spotlight Debate: Should we worry that pimavanserin might indeed increase mortality amongst Parkinson patients with psychosis?**

**supported by Acadia® Pharmaceuticals with an unrestricted grant**

Moderator: *Karen Frej, Loma Linda, United States*

**Yes, we should**

Speaker: *Daniel Weintraub, Philadelphia, United States*

**No, we should not**

Speaker: *Zoltan Mari, Cleveland, United States*

**Questions and Answers**



## Grand Parade of Movement Disorders

Auditorium Lumière

18:00 – 20:00

## Grand Parade of Movement Disorders

Chair: *Kailash Bhatia, London, United Kingdom*

Chair: *Alberto Albanese, Milan, Italy*

**Video presenters:**

*Chloé Laurencin, Lyon, France*

*Wael Ibrahim, Cairo, Egypt*

*Soaham Desai, Anand, India*

*Marie Vidailhet, Paris, France*

*Emanuel Flamand-Roze, Paris, France*

*Maria Stamelou, Athens, Greece*

*Rukmini Mridula Kandadai, Mumbai, India*

*Thien Thien Lim, George Town, Malaysia*

*Jirada Sringean, Bangkok, Thailand*

**Time for Questions and Answers will follow presentation of each video case.**

4<sup>TH</sup> INTERNATIONAL CONGRESS ON TREATMENT OF DYSTONIA

 2019 

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# PROGRAM OVERVIEW / WEDNESDAY, 22 AUGUST 2018

WEDNESDAY, 22 August 2018

Room	Auditorium Lumière	Forum 1	Forum 2	Foyer Forum	Exhibition Forum 3
08:00 – 10:00	Diagnostic and Therapeutic Updates – The Most Promising Diagnostic Tools and Therapies in Movement Disorders				
10:00 – 10:30	Coffee Break			Coffee with the Professor 6	
10:30 – 11:30	Controversies in Movement Disorders – Debating Scientific and Practical Issues				
11:30 – 12:30	Parkinsonism and Related Disorders Journal: Special Session and Awards				

	Plenary Session		Skills Workshop		Grand Parade Session		Corporate Sessions (over Lunch)
	Parallel Track		Oral Poster Session		Coffee with the Professor		

	<b>Plenary Session</b>	<b>Auditorium Lumière</b>
08:00 – 10:00	<b>Diagnostic and Therapeutic Updates – The Most Promising Diagnostic Tools and Therapies in Movement Disorders</b> Chair: <i>Stephane Thobois, Lyon, France</i> Chair: <i>Elena Moro, Grenoble, France</i>	
08:00 – 08:30	<b>A Peek into the Next Generation of Diagnostic Tools in Movement Disorders</b> Speaker: <i>Jon Stoessl, Vancouver, Canada</i>	
08:30 – 09:00	<b>Therapeutic Update I: Where Are We in PD Neuroprotection?</b> Speaker: <i>Tanya Simuni, Chicago, United States</i>	
09:00 – 09:30	<b>Therapeutic Update II: The Next Chapter in Symptomatic PD Treatment</b> Speaker: <i>Hubert Fernandez, Cleveland, United States</i>	
09:30 – 10:00	<b>Therapeutic Update III: Where are Surgical Therapies Headed in Movement Disorders?</b> Speaker: <i>Joachim Krauss, Hannover, Germany</i>	

	<b>Coffee with the Professor</b>	<b>Foyer Forum</b>
10:00 – 10:30	<b>Coffee with the Professor 6</b> <i>Marie Vidailhet, Paris, France</i>	
	<b>Plenary Session</b>	<b>Auditorium Lumière</b>
10:30 – 11:30	<b>Controversies in Movement Disorders – Debating Scientific and Practical Issues</b> Chair: <i>Alessandro Di Rocco, New York, United States</i> Chair: <i>Erik Ch. Wolters, Amsterdam, Netherlands</i>	
10:30 – 11:00	<b>Do Inflammation and Immunity Play an Important Role in PD Pathogenesis?</b> Pro: Yes, inflammation and immunity play an important role in PD pathogenesis <i>Dennis Dickson, Jacksonville, United States</i> Con: No, inflammation and immunity do not play an important role in PD pathogenesis <i>Etienne Hirsch, Paris, France</i>	
11:00 – 11:30	<b>Is Genetic Testing Under Utilized in PD and Other Movement Disorders?</b> Pro: Yes, genetic testing is under-utilized in PD and other movement disorders <i>Vincenzo Bonifati, Rotterdam, The Netherlands</i> Con: No, genetic testing is not under-utilized in PD and other movement disorders <i>Andreas Puschmann, Lund, Sweden</i>	
	<b>Plenary Session</b>	<b>Auditorium Lumière</b>
11:30 – 12:30	<b><i>Parkinsonism and Related Disorders Journal: Special Session and Awards</i></b> Chair: <i>Vincenzo Bonifati, Rotterdam, Netherlands</i> Chair: <i>Hubert Fernandez, Cleveland, United States</i>	
11:30 – 11:40	<b>Update on Parkinsonism and Related Disorders</b> Speaker: <i>Hubert Fernandez, Cleveland, United States</i> Speaker: <i>Vincenzo Bonifati, Rotterdam, Netherlands</i>	
11:40 – 12:00	<b>Best Basic / Translational Science Articles published in PRD</b> Speaker: <i>Andreas Puschmann, Lund, Sweden</i>	
12:00 – 12:20	<b>Best Clinical Science Articles Published in PRD</b> Speaker: <i>Eng-King Tan, Singapore, Singapore</i>	
12:20 – 12:30	<b>Best Poster Awards</b> Speaker: <i>Peter Riederer, Wuerzburg, Germany</i> <b>Closing Words and Announcing Montreal 2019</b>	



# WORLD CONGRESS ON PARKINSON'S DISEASE AND RELATED DISORDERS

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## Topic: Basic Neuroscience

## Forum 3

- P 002 **Lead acute intoxication alters dopaminergic system and locomotor performance in *Meriones shawi***  
*Tamegart L.<sup>1</sup>, Bouyatas M.M.<sup>2</sup>, Abbaoui A.<sup>2</sup>, Gamrani H.<sup>2</sup>*  
<sup>1</sup>Cadi Ayyad University, Biology, Marrakech, Morocco, <sup>2</sup>Cadi Ayyad University, Marrakesh, Morocco
- P 009 **L-theanine recues quinolinic acid induced motor dysfunction and striatal neurotoxicity: Reduction in oxido-nitrosative stress and restoration of striatal neurotransmitters level**  
*Jamwal S.<sup>1</sup>, Kumar P.<sup>2</sup>*  
<sup>1</sup>SPES, Baddi University of Emerging Sciences and Technologies, Pharmacology, Baddi, India, <sup>2</sup>MRS Punjab Technical University, Department of Pharmaceutical Sciences and Technology, Bathinda, India
- P 010 **Intranigral inoculation of Parkinson's disease linked mutation G51D alpha-synuclein fibrils induces Lewy-like pathology in mice**  
*Hayakawa H.<sup>1</sup>, Baba K.<sup>1</sup>, Ikenaka K.<sup>1</sup>, Nakatani R.<sup>1</sup>, Choong C.-J.<sup>1</sup>, Tsuda H.<sup>1</sup>, Nagano S.<sup>1</sup>, Nagai Y.<sup>2</sup>, Ikeuchi T.<sup>3</sup>, Mochizuki H.<sup>1</sup>*  
<sup>1</sup>Osaka University, Department of Neurology, Osaka, Japan, <sup>2</sup>Osaka University, Department of Neurotherapeutics, Osaka, Japan, <sup>3</sup>Niigata University, Department of Molecular Genetics, Niigata, Japan
- P 011 **Role of metformin in diabetic aging female rat brain: A future therapy for neurodegenerative diseases**  
*Kumar P.<sup>1</sup>, Baquer N.<sup>1</sup>*  
<sup>1</sup>Jawaharlal Nehru University, School of Life Sciences, New Delhi, India
- P 012 **Aloe arborescens and Curcuma longa protect against acute copper exposure induced the neurobehavioral characteristics of Parkinson's disease in rats**  
*Abbaoui A.<sup>1</sup>*  
<sup>1</sup>Cadi Ayyad University, Faculty of Sciences Semlalia Marrakech
- P 013 **Impaired dopaminergic and serotonergic innervations in thioacetamide induced acute hepatic encephalopathy may be linked to hypolocomotion**  
*El Khat A.<sup>1</sup>*  
<sup>1</sup>Cadi Ayyad University, Faculty of Sciences semlalia Marrakech
- P 014 **Study on the operation time of deep brain stimulation for Parkinson's disease**  
*Guo Q.<sup>1</sup>*  
<sup>1</sup>The First Affiliated Hospital of Sun Yat-sen University
- P 015 **2014-2016 worldwide bibliometric snapshot of the scientific literature on Parkinson's disease**  
*Cornu J.<sup>1,2</sup>, Robert C.<sup>3,4</sup>, Wilson C.S.<sup>5</sup>, Arreto C.-D.<sup>6,7</sup>*  
<sup>1</sup>Hopital Bretonneau, Paris, France, <sup>2</sup>Hopital Corentin Celton, Issy-les-Moulineaux, France, <sup>3</sup>Université Paris Descartes, Paris, France, <sup>4</sup>Gliaxone, Saint Germain sous Doue, France, <sup>5</sup>School of Information Systems, Technology and Management, University of New South Wales, UNSW, Sydney, Australia, <sup>6</sup>Université Paris Descartes, Faculté de Chirurgie Dentaire, Montrouge, France, <sup>7</sup>Hôpital Bretonneau, HUPNVS, AP-HP, Paris, France
- P 017 **Clinical correlations between Parkinson's disease and vascular parkinsonism: New retrospective review from Uzbekistan**  
*Umarov A.<sup>1</sup>, Rakhimbaeva G.<sup>1</sup>*  
<sup>1</sup>Tashkent Medical Academy, Department of Neurology, Tashkent, Uzbekistan
- P 020 **The role of apoproteins in the development of Parkinson's disease**  
*Azizova D.<sup>1</sup>*  
<sup>1</sup>Tashkent Medical Academy, Medical Biochemistry, Tashkent, Uzbekistan



**P 021 Combined administration of an A2A receptor antagonist and a 5-HT1A/1B receptor agonist reverses neuroinflammation in the 6-OHDA model of Parkinson's disease**

Costa G.<sup>1</sup>, Serra M.<sup>1</sup>, Morelli M.<sup>1,2,3</sup>, Pinna A.<sup>3</sup>

<sup>1</sup>University of Cagliari, Monserrato, Italy, <sup>2</sup>National Institute of Neuroscience, Cagliari, Italy, <sup>3</sup>National Research Council of Italy, Institute of Neuroscience, Cagliari, Italy

**P 022 Prevention of Parkinson's disease using natural biological additives**

Azizova D.<sup>1</sup>, Sobirova R.<sup>2</sup>

<sup>1</sup>Tashkent Medical Academy, Medical Biochemistry, Tashkent, Uzbekistan, <sup>2</sup>Tashkent Medical Academy, Tashkent, Uzbekistan

**Topic: Imaging, Genetics and Biomarkers**

**P 023 Cerebral microbleeds in dementia with Lewy bodies is not characteristic**

Poliakova T.<sup>1</sup>

<sup>1</sup>Russian Medical Academy for PostGraduated Education, Neurology, Belgorod, Russian Federation

**P 026 Evaluation of the 70 kDa heat shock protein (Hsp70) plasma level in Parkinson's disease and GBA-associated Parkinson's disease patients**

Senkevich K.<sup>1,2,3</sup>, Miliukhina I.<sup>1,3</sup>, Gracheva E.<sup>1</sup>, Berkovich O.<sup>3</sup>, Pchelina S.<sup>1,2,3</sup>, Multhoff G.<sup>4</sup>, Shevtsov M.<sup>3,4,5</sup>

<sup>1</sup>Institute of Experimental Medicine, Saint-Petersburg, Russian Federation, <sup>2</sup>Petersburg Nuclear Physics Institute named by B.P. Konstantinov of National Research Centre «Kurchatov Institute», Saint-Petersburg, Russian Federation, <sup>3</sup>First Pavlov State Medical University of St. Petersburg, Saint-Petersburg, Russian Federation, <sup>4</sup>Klinikum rechts der Isar, Technical University of Munich (TUM), Munich, Germany, <sup>5</sup>Institute of Cytology of the Russian Academy of Sciences (RAS), Saint-Petersburg, Russian Federation

**P 027 A rare fatal Familial parkinsonism in elderly with early respiratory failure**

Krishnan P.<sup>1</sup>, Sarma G.R.K.<sup>2</sup>, Murgod U.<sup>1</sup>, Roy A.K.<sup>1</sup>, Srinivas M.<sup>1</sup>

<sup>1</sup>Manipal Hospital, Neurology, Bangalore, India, <sup>2</sup>St Johns Medical College and Research Centre, Neurology, Bangalore, India

**P 029 Application of convolutional neural networks in the diagnosis of Parkinson's disease dementia based on magnetic resonance imaging**

Binczyk F.<sup>1</sup>, Suwalska A.<sup>1</sup>, Kocot S.<sup>1</sup>, Siuda J.<sup>2</sup>, Bobek-Billewicz B.W.<sup>3</sup>, Tarnawski R.<sup>4</sup>, Polanska J.<sup>1</sup>, Rudzinska-Bar M.<sup>2</sup>

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**P 030 DAT scan abnormalities in juvenile Westphal variant of Huntington's disease**

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**P 031 Influence of alpha-synuclein promoter (Rep1) polymorphism on cognition, disability and plasma alpha-synuclein levels in Parkinson's disease**

Ng A.<sup>1</sup>, Tan J.<sup>1</sup>, Zhao Y.<sup>2</sup>, Zhonghao L.<sup>1</sup>, Ng S.<sup>1</sup>, Ng E.<sup>1</sup>, Tan E.K.<sup>1</sup>, Tan L.<sup>1</sup>

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- P 032 **The role of 18F-FP-CIT PET in differentiation of progressive supranuclear palsy and frontotemporal dementia in the early stage**  
Lee P.H.<sup>1</sup>, Yoo H.S.<sup>1</sup>, Chung S.J.<sup>1</sup>, Sohn Y.H.<sup>1</sup>  
<sup>1</sup>Yonsei University College of Medicine, Department of Neurology, Seoul, Republic of Korea
- P 034 **Association analysis of DRD2 rs2283265 and DRD1 rs4532 with Parkinson's disease and multiple system atrophy in a large Chinese population**  
Gu X.<sup>1</sup>, Chen Y.<sup>1</sup>, Cao B.<sup>1</sup>, Ou R.<sup>1</sup>, Zhang L.<sup>1</sup>, Hou Y.<sup>1</sup>, Wei Q.<sup>1</sup>, Song W.<sup>1</sup>, Shang H.<sup>1</sup>  
<sup>1</sup>West China Hospital, Sichuan University, Department of Neurology, Chengdu, China
- P 035 **Early brain metabolic changes in patients with Parkinson's disease and its correlation to the risk of falling**  
Brumberg J.<sup>1</sup>, Pozzi N.<sup>2</sup>, Marotta G.<sup>3</sup>, Buck A.<sup>1</sup>, Volkmann J.<sup>2</sup>, Pezzoli G.<sup>4</sup>, Isaias I.<sup>2</sup>  
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- P 036 **Spg 11 gene mutation associated autosomal recessive hereditary spastic paraplegia presenting with partially levodopa responsive parkinsonism, stereotypy and cognitive decline**  
Desai S.<sup>1</sup>, Singh S.<sup>1</sup>, Patel V.<sup>2</sup>, Sheth J.<sup>3</sup>  
<sup>1</sup>Pramukhswami Medical College and Shree Krishna Hospital, Neurology, Anand, India, <sup>2</sup>Pramukhswami Medical College and Shree Krishna Hospital, Radiology, Anand, India, <sup>3</sup>FRIDGE HOUSE, Genetics, Ahmedabad, India
- P 037 **Gene-lifestyle interactions in Parkinson's disease**  
Chen C.Y.T.<sup>1</sup>, Ong Y.L.<sup>1,2</sup>, Deng X.<sup>1</sup>, Li H.H.<sup>3</sup>, Ng E.<sup>1</sup>, Kumar P.M.<sup>1,2</sup>, Au W.L.<sup>1</sup>, Ratnagopal P.<sup>1,2</sup>, Tan L.<sup>1</sup>, Tan E.K.<sup>1,2</sup>  
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## Topic: Deep Brain Stimulation and Functional Neurosurgery

- P 040 **Improvement of apraxia of eyelid opening in a patient with Parkinson's disease following the change of the directional lead for subthalamic nucleus deep brain stimulation**  
*Kadowaki T.<sup>1</sup>, Hamaguchi M.<sup>1</sup>, Shiina T.<sup>1</sup>, Shingo T.<sup>2</sup>, Sakuramoto H.<sup>1</sup>, Suzuki K.<sup>1</sup>, Hirata K.<sup>1</sup>*  
<sup>1</sup>Dokkyo Medical University, Department of Neurology, Mibu, Japan, <sup>2</sup>Dokkyo Medical University, Department of Neurosurgery, Mibu, Japan
- P 041 **Toe dystonia in Parkinson's disease: Impact of subthalamic nucleus deep brain stimulation**  
*Laurencin C.<sup>1,2</sup>, Montaut S.<sup>3</sup>, Danaila T.<sup>1,2</sup>, Mertens P.<sup>1</sup>, Vial C.<sup>1</sup>, Thobois S.<sup>1,2</sup>*  
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- P 042 **Long term outcome of the subthalamic nucleus DBS for advanced Parkinson's disease: An eight years follow-up study in China**  
*Guo Q.<sup>1</sup>*  
<sup>1</sup>The First Affiliated Hospital of Sun Yat-sen University
- P 043 **The long-term development of excessive daytime sleepiness after subthalamic deep brain stimulation in patients with Parkinson's disease**  
*Jung Y.J.<sup>1</sup>, Kim H.-J.<sup>2</sup>, Lee W.-W.<sup>3</sup>, Lee T.J.<sup>1</sup>, Ryu S.Y.<sup>1</sup>, Lee S.B.<sup>1</sup>, Jeon B.<sup>2</sup>*  
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- P 044 **Usefulness of directional deep brain stimulation in patients with movement disorders**  
*Contreras Pinto M.<sup>1</sup>, Saavedra J.S.<sup>1</sup>, Roldan P.<sup>1</sup>, Muñoz E.<sup>1</sup>, Rumia J.<sup>1</sup>, Vallderiola F.<sup>1</sup>*  
<sup>1</sup>Hospital Clinic - Universidad de Barcelona, Barcelona, Spain
- P 045 **Predicting patient discharge disposition subsequent to deep brain stimulation surgery: A pilot study**  
*Farrokhi F.<sup>1</sup>*  
<sup>1</sup>Virginia Mason, Neurosurgery, Seattle, United States
- P 046 **Meta-analysis of mortality following subthalamic and pallidal deep brain stimulation for patients with Parkinson's disease**  
*Negida A.<sup>1</sup>, Shalash A.<sup>2</sup>*  
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## Topic: Parkinson Disease

- P 047 **Evaluation of genetic changes of polymerase chain reaction in patients with PD in early stage**  
*Salohiddinov M.<sup>1</sup>*  
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- P 050 **Influence of the stage in Parkinson's Disease on the level of cognitive impairment in people over 65 years of age**  
Mollinedo Cardalda I.<sup>1</sup>, Resúa B.<sup>2</sup>, Díaz-Pache C.<sup>3</sup>, Millán-Calenti J.<sup>4</sup>, Cancela J.M.<sup>2</sup>  
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- P 056 **Use of safinamide in Parkinson's disease patients over 70 years with dyskinesias and pharmacological psychosis**  
Rodríguez-Sanz A.<sup>1</sup>, Mascías Cadavid J.<sup>1</sup>, Vivancos Matellano F.<sup>1</sup>  
<sup>1</sup>Hospital Universitario La Paz, Madrid, Spain
- P 058 **A non-motor symptom unheard of? Hearing loss in Mexican patients with Parkinson's disease**  
Castillo Torres S.A.<sup>1</sup>, Cerda-Contreras C.<sup>1</sup>, Soto Galindo G.A.<sup>2</sup>, Estrada-Bellmann I.<sup>1</sup>, Treviño-González J.L.<sup>2</sup>  
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- P 059 **Development of anti-Parkinsonism poly herbal sustained release formulation composed of potential traditional plant extracts**  
Jain A.<sup>1</sup>, Jain S.<sup>2</sup>, Bhargav S.<sup>3</sup>  
<sup>1</sup>Bhagyoday Tirth Pharmacy College, Pharmacy, Sagar, India, <sup>2</sup>Bhagyoday Tirth Pharmacy College, Sagar, India, <sup>3</sup>United Institute of Pharmacy, Allahabad, India
- P 060 **Microarray analysis upon a synthetic  $\alpha$ -synuclein induced model reveals some susceptibility genes in Parkinson's disease**  
Tao E.<sup>1</sup>  
<sup>1</sup>The Sun Yat-sen Memorial Hospital of Sun Yat-sen University, Department of Neurology, Guangzhou, China
- P 061 **Postural instability in patients with Parkinson disease and its correction by balance therapy**  
Akbarkhodjaeva Z.<sup>1</sup>, Rakhimbaeva G.<sup>1</sup>, Saidvaliev F.<sup>1</sup>  
<sup>1</sup>Tashkent Medical Academy, Neurology, Tashkent, Uzbekistan
- P 062 **Insomnia due to restlessness restricted to the perianal region in a patient with Parkinson's disease**  
Okamura M.<sup>1</sup>, Suzuki K.<sup>1</sup>, Hirata K.<sup>1</sup>  
<sup>1</sup>Dokkyo Medical University, Neurology, Tochigi, Japan
- P 063 **Worsening of dyskinesia following the change of peptic ulcer treatment in a patient with Parkinson's disease under the levodopa-carbidopa intestinal gel infusion therapy**  
Sakuramoto H.<sup>1</sup>, Kadowaki T.<sup>1</sup>, Tomohiko S.<sup>1</sup>, Fujita H.<sup>1</sup>, Suzuki K.<sup>1</sup>, Hirata K.<sup>1</sup>  
<sup>1</sup>Dokkyo Medical University, Kitakobayashi, Mibu, Tochigi, Japan
- P 064 **Investigation of sleep duration, sedentary behavior, and physical activity in idiopathic Parkinson disease**  
Aktar B.<sup>1</sup>, Donmez Colakoglu B.<sup>2</sup>, Balci B.<sup>1</sup>  
<sup>1</sup>Dokuz Eylül University School of Physical Therapy and Rehabilitation, Izmir, Turkey, <sup>2</sup>Dokuz Eylül University, Department of Neurology, Izmir, Turkey

- P 069 **Measurement of Parkinson's disease patients functional ability before and after physiotherapy: A case series**  
Cousins J.<sup>1</sup>, Lindahl A.<sup>2</sup>, Leighton N.<sup>2</sup>  
<sup>1</sup>Warwick Medical School, Coventry, United Kingdom, <sup>2</sup>University Hospital Coventry and Warwickshire, Coventry, United Kingdom
- P 070 **Rotenone induced Parkinson's disease model: Analysis of PARK2 and PINK1 genes expression**  
Abdul Razzak Z.<sup>1,2</sup>, Abbas G.<sup>1</sup>, Rafi K.<sup>1,2</sup>, Usman Simjee S.<sup>1,2</sup>  
<sup>1</sup>International Center for Chemical and Biological Sciences (ICCBS), H.E.J. Research Institute of Chemistry, Karachi, Pakistan, <sup>2</sup>International Center for Chemical and Biological Sciences (ICCBS), Dr. Panjwani Center for Molecular Medicine and Drug Research, Karachi, Pakistan
- P 071 **The late effects of traumatic brain injury – leading to Parkinson disease – a prospective study**  
Fatima A.<sup>1</sup>, Zaidi S.S.A.<sup>2</sup>  
<sup>1</sup>Singapore General Hospital, Lahore, Pakistan, <sup>2</sup>Wecare Medical Centre, Lahore, Pakistan
- P 072 **Is restless legs syndrome (RLS), a prodromal feature of Parkinson's disease (PD), associated to small fiber pathology?**  
Calzetti S.<sup>1</sup>, Bellanova M.F.<sup>2</sup>, Saccani E.<sup>2</sup>, Negrotti A.<sup>1</sup>, Capozzi A.<sup>2</sup>, Pietrini V.<sup>2</sup>  
<sup>1</sup>Neurology Unit Azienda Ospedaliero-Universitaria of Parma, Parma, Italy, <sup>2</sup>Neuropathology Lab Azienda Ospedaliero-Universitaria of Parma, Parma, Italy
- P 073 **Does the side of onset of motor symptoms in parkinsonian patients have an impact on the global clinical phenotype?**  
Lazzeri G.<sup>1</sup>, Franco G.<sup>1</sup>, Trezzi I.<sup>1</sup>, Borellini L.<sup>2</sup>, Monfrini E.<sup>1</sup>, Frattini E.<sup>1</sup>, Ardolino G.<sup>2</sup>, Cogiamanian F.<sup>2</sup>, Di Fonzo A.<sup>1</sup>  
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- P 074 **Instrumental evaluation of autonomic nervous system dysfunction in idiopathic Parkinson's disease**  
Doręgowska M.<sup>1</sup>, Toś M.<sup>2</sup>, Malkiewicz J.<sup>2</sup>, Kaczmarczyk A.<sup>1</sup>, Siuda J.<sup>1</sup>, Rudzińska-Bar M.<sup>1</sup>  
<sup>1</sup>Medical University of Silesia, Department of Neurology, Katowice, Poland, <sup>2</sup>Medical University of Silesia, Students Scientific Association, Katowice, Poland
- P 075 **Effective rehabilitation program for Parkinson's disease – from National Hospital Organization Japan**  
Hasegawa K.<sup>1</sup>, NHO TSPD Study Group  
<sup>1</sup>National Hospital Organization, Sagamihara National Hospital, Neurology, Sagamihara, Japan
- P 076 **Interrelation between chronic pain syndrome and cognitive and affective disturbances in patients with Parkinson's disease**  
Stepanchenko K.<sup>1</sup>  
<sup>1</sup>Kharkiv Medical Academy of Postgraduate Education, Department of Neurology, Kharkiv, Ukraine
- P 078 **Effect of ventricle size on development of freezing of gait in Parkinson's disease**  
Lee J.<sup>1</sup>  
<sup>1</sup>Inje University, Neurology, Goyang-si, Republic of Korea
- P 079 **Non-motor symptoms of Parkinson's disease: Evaluation of urinary disorders**  
Karbozova K.<sup>1</sup>  
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- P 082 **The impact of levodopa induced dyskinesia on the quality of life in Parkinson's disease patients**  
Prakash K.M.<sup>1</sup>, Lim E.-C.<sup>1</sup>, Nadkarni N.<sup>2</sup>, Lye W.-K.<sup>2</sup>, Tan E.-K.<sup>1</sup>  
<sup>1</sup>National Neuroscience Institute, Singapore, Singapore, <sup>2</sup>Duke NUS Medical School, Centre of Quantitative Medicine, Singapore, Singapore
- P 083 **Prevalence and associations for depression in patients with Parkinson's disease: A Sri Lankan experience**  
Herath T.<sup>1</sup>  
<sup>1</sup>National Hospital of Sri Lanka, Kandy, Sri Lanka
- P 085 **Metabolic and functional changes in the eye as a manifestation of the systemic neurodegeneration at parkinsonism**  
Kim A.<sup>1</sup>, Pavlenko T.<sup>2</sup>, Pavlova E.<sup>1</sup>, Chesnokova N.<sup>2</sup>, Ugrumov M.<sup>1,3</sup>  
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- P 086 **Acute lethargic state after abrupt apomorphine withdrawal in Parkinson's disease**  
Cavallieri F.<sup>1,2</sup>, Fraix V.<sup>2,3,4</sup>, Meoni S.<sup>2,3,4</sup>, Krack P.<sup>5</sup>, Moro E.<sup>2,3,4</sup>, Castrioto A.<sup>2,3,4</sup>  
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- P 089 **Evaluations of additive effect of two indigenous medicinal plants Cedrus Deodara and Mucuna pruriens towards the treatment of Parkinson's disease**  
Jain S.<sup>1</sup>, Jain A.<sup>1</sup>, Bhargav S.<sup>2</sup>  
<sup>1</sup>Bhagyoday Tirth Pharmacy College, Pharmacy, Sagar, India, <sup>2</sup>United Institute of Pharmacy, Pharmacy, Allahabad, India
- P 090 **ON is not always ON: When non-motor fluctuations do not match motor fluctuation conditions**  
Del Prete E.<sup>1,2</sup>, Schmitt E.<sup>1</sup>, Meoni S.<sup>1</sup>, Fraix V.<sup>1</sup>, Castrioto A.<sup>1</sup>, Pelissier P.<sup>1</sup>, Ceravolo R.<sup>2</sup>, Moro E.<sup>1</sup>  
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- P 091 **Trunk exercise program for Parkinson's disease**  
Cheon S.-M.<sup>1</sup>, Kim J.W.<sup>1</sup>  
<sup>1</sup>Dong-A University School of Medicine, Neurology, Busan, Republic of Korea
- P 092 **The neuropsychiatric fluctuations scale for Parkinson's disease: A pilot study**  
Schmitt E.<sup>1</sup>  
<sup>1</sup>C.H.U de Grenoble, Neurology, Movements Disorders, Grenoble Cedex, France
- P 093 **The impact of impulsivity on quality of life in drug-naïve Parkinson's disease**  
Ryu D.-W.<sup>1</sup>, Kim J.-S.<sup>1</sup>  
<sup>1</sup>Catholic University, Neurology, Seoul, Republic of Korea
- P 094 **The cost-effectiveness of specialized nursing interventions for people with Parkinson's disease: protocol of a randomized controlled trial**  
Radder D.<sup>1,2</sup>, de Vries N.<sup>1,2</sup>, Lennaerts H.<sup>3</sup>, Munneke M.<sup>1,2</sup>, Bastiaan B.<sup>1,2</sup>  
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- P 095 **Clinical features of Parkinson's disease with and without rapid eye movement sleep behavior disorder**  
*Liu Y.<sup>1</sup>, Zhu X.<sup>1</sup>, Zhang X.<sup>1</sup>, Feng Y.<sup>1</sup>, Kuo S.-H.<sup>2</sup>, Ondo W.G.<sup>3</sup>, Wu Y.<sup>1</sup>*  
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- P 096 **Investigation to expand application sites of rotigotine transdermal patch**  
*Kujirai H.<sup>1</sup>, Aoyama N.<sup>1</sup>, Abe K.<sup>1</sup>, Takahashi M.<sup>1</sup>, Inaba A.<sup>1</sup>, Orimo S.<sup>1</sup>*  
<sup>1</sup>Kanto Central Hospital, Neurology, Setagaya-ku, Japan
- P 097 **The polymorphism of SREBF1 Gene rs11868035 G/A is associated with susceptibility to Parkinson's disease in a Chinese population**  
*Lou F.<sup>1</sup>, Li M.<sup>2</sup>*  
<sup>1</sup>First Affiliated Hospital of China Medical University, Shenyang, China, <sup>2</sup>The Fourth Affiliated Hospital of China Medical University, Shenyang, China
- P 098 **Quantitative keyboard measurement correlates with changes in subthalamic nucleus LFPs of Parkinson's disease patients treated with dopaminergic medication better than UPDRS subscores**  
*Ozturk M.<sup>1</sup>, Abosch A.<sup>2</sup>, Francis D.<sup>1</sup>, Wu J.<sup>3</sup>, Jimenez-Shahed J.<sup>4</sup>, Ince N.F.<sup>1</sup>*  
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- P 100 **Brain-derived neutrophilic factor and lipid profile in Parkinson's disease**  
*Alomari M.<sup>1</sup>, Khalil H.<sup>2</sup>, Khabour O.<sup>3</sup>*  
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- P 101 **Fatigue in Parkinson's disease: Correlates and its effects on ability of daily living**  
*Chen Y.-K.<sup>1</sup>, Xiao W.-M.<sup>1</sup>, Liu Y.-L.<sup>1</sup>, Lu Z.-H.<sup>2</sup>, Li W.<sup>1</sup>, Fu X.-L.<sup>1</sup>*  
<sup>1</sup>Dongguan People's Hospital, Dongguan, China, <sup>2</sup>Guangdong Medical University, Dongguan, China
- P 103 **Thai bamboo dance: Improvements in gait, balance and foot clearance for Parkinson's disease**  
*Khongprasert S.<sup>1</sup>, Wangyapongsataporn K.<sup>1</sup>, Bhidayasiri R.<sup>2</sup>*  
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- P 104 **Effectiveness and safety of continuous infusion of levodopa-carbidopa intestinal therapy for patients with advanced Parkinson's disease: A single center experience**  
*Vuletic V.<sup>1</sup>*  
<sup>1</sup>University Hospital Centre Rijeka, Medical Faculty Rijeka, Department of Neurology, Rijeka, Croatia
- P 106 **Russian validation study of the Berg balance scale**  
*Zimin A.<sup>1</sup>, Yusupova D.<sup>1</sup>*  
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- P 107 **Assessing Tele-Health Outcomes in Multiyear Extensions of Parkinson's Disease trials (AT-HOME PD): Design of a long-term observational study**  
*Simuni T.<sup>1</sup>, Schneider R.<sup>2</sup>, Anthwal S.<sup>2</sup>, Kayson E.<sup>2</sup>, Omberg L.<sup>3</sup>, Tarolli C.G.<sup>2</sup>, Bataille L.<sup>4</sup>, Macklin E.<sup>5</sup>, Dorsey E.R.<sup>2</sup>, Mangravite L.<sup>3</sup>, Schwarzschild M.A.<sup>5</sup>*  
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- P 108 **Neuroprotective effect of Naringin loaded solid lipid nanoparticles via induction of GDNF in MPP+ induced Parkinson's disease in animal model**  
*Rahman M.<sup>1,2</sup>, Kumar V.<sup>2</sup>*  
<sup>1</sup>Shalom Institute of Health and Sciences, SHIATS, Pharmaceutical Sciences, Allahabad, India, <sup>2</sup>Sam Higginbottom University of Agriculture, Technology & Sciences (SHUATS), Pharmaceutical Sciences, Allahabad, India
- P 109 **Decreased striatal dopamine and neuropsychiatric symptoms in patients with Parkinson's disease**  
*Lim E.<sup>1</sup>, Oh Y.<sup>1</sup>, Kim J.<sup>1</sup>*  
<sup>1</sup>Department of Neurology, College of Medicine, The Catholic University of Korea, Neurology, Seoul, Republic of South Korea
- P 110 **Patterns of movement disorders among HIV/AIDS patients: A cross sectional study**  
*Belay L.<sup>1</sup>*  
<sup>1</sup>Ethiopian Federal Police Commission Referral Hospital, Neurology, Addis Ababa, Ethiopia
- P 111 **Unraveling gut microbiota in Parkinson's disease and atypical parkinsonism**  
*Cereda E.<sup>1</sup>, Barichella M.<sup>2</sup>, Cilia R.<sup>2</sup>, Severgnini M.<sup>3</sup>, Cassani E.<sup>2</sup>, Bolliri C.<sup>2</sup>, Caronni S.<sup>2</sup>, Ferri V.<sup>2</sup>, Canello R.<sup>4</sup>, Faierman S.<sup>2</sup>, Pinelli G.<sup>2,5</sup>, Ceccarini C.<sup>3</sup>, De Bellis G.<sup>3</sup>, Zecca L.<sup>3</sup>, Consolandi C.<sup>3</sup>, Pezzoli G.<sup>2</sup>*  
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- P 112 **A phase 2A study of nilotinib in patients with advanced and early Parkinson's disease study design**  
*Simuni T.<sup>1</sup>, Fiske B.<sup>2</sup>, Merchant K.<sup>3</sup>, Coffey C.S.<sup>4</sup>, Matthews H.<sup>5</sup>, Wyse R.K.<sup>5</sup>, Brundin P.<sup>6</sup>, Simon D.K.<sup>7</sup>, Schwarzschild M.<sup>8</sup>, Weiner D.<sup>9</sup>, Adams J.<sup>10</sup>, Venuto C.<sup>10</sup>, Trusso L.<sup>10</sup>, Baker L.<sup>10</sup>, Kostrzebski M.<sup>10</sup>, Ward T.<sup>1</sup>, Rafaloff G.<sup>11</sup>*  
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- P 113 **The comparison of gut biogeography of the gut bacterial microbiota in Parkinson's disease**  
*Hirayama M.<sup>1</sup>, Ito M.<sup>2</sup>, Minato T.<sup>1</sup>, Maeda T.<sup>3</sup>, Ohno K.<sup>2</sup>*  
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- P 114 **Clinical correlation of serum insulin-like growth factor-1 levels in patients with Parkinson's disease and related disorders**  
*Suzuki K.<sup>1</sup>, Kadowaki T.<sup>1</sup>, Fujita H.<sup>1</sup>, Watanabe Y.<sup>1</sup>, Matsubara T.<sup>1</sup>, Suzuki S.<sup>1</sup>, Ishii Y.<sup>1</sup>, Okamura M.<sup>1</sup>, Shiina T.<sup>1</sup>, Sakuramoto H.<sup>1</sup>, Hamaguchi M.<sup>1</sup>, Matsubara M.<sup>1</sup>, Hirata K.<sup>1</sup>*  
<sup>1</sup>Dokkyo Medical University, Department of Neurology, Tochigi, Japan
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*Baik J.S.<sup>1</sup>, Ma H.I.<sup>2</sup>, Han S.W.<sup>1</sup>*  
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- P 116 **Home mobility system for monitoring patients with Parkinson's disease: Validation with actigraphy**  
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<sup>1</sup>Kyung Hee University Hospital, Seoul, Korea, Republic of South Korea
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*Negida A.<sup>1</sup>, Shalash A.<sup>2</sup>*  
<sup>1</sup>School of Medicine, Zagazig University, Zagazig, Egypt, <sup>2</sup>Ain Shams University, Parkinson's Disease and Movement Disorders Unit, Cairo, Egypt
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<sup>1</sup>Himalayan University, Kanpur, India, <sup>2</sup>GTB Hospital, Kanpur, India
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- P 121 **Neuropsychiatric and behavior changes in Parkinson's disease patients with impulse control disorder after switching-off dopamine agonist by levodopa/carbidopa slow-release formulations**  
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- P 122 **Microstructural changes in white and grey matter related to apathy, depression and anxiety in de novo Parkinson's disease patients**  
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- P 123 **Gait patterns in Parkinson's disease with or without cognitive impairment**  
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<sup>1</sup>Veterans Health Service Medical Center, Seoul, Republic of Korea
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- P 128 **Effective diagnostic and treatment methods in vascular parkinsonism and Parkinson's disease: Temporhythmical correction**  
Akramova D.<sup>1</sup>, Rakhimbaeva G.<sup>1</sup>, Kuranbaeva S.<sup>2</sup>  
<sup>1</sup>Tashkent Medical Academy, Neurology, Tashkent, Uzbekistan, <sup>2</sup>Tashkent Medical Academy, Tashkent, Uzbekistan
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<sup>1</sup>Tashkent Medical Academy, Neurology, Tashkent, Uzbekistan
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<sup>1</sup>Impel NeuroPharma, Clinical Development, Seattle, United States, <sup>2</sup>Mater Hospital, Brisbane, Australia, <sup>3</sup>Impel NeuroPharma, Life Sciences, Seattle, United States
- P 135 **Spectral fingerprints of impulse control disorders in Parkinson's disease**  
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<sup>1</sup>Department of Neurology & Psychiatry, Parkinson and Disorders of Movement Center, University of Santo Tomas Hospital, Manila, Philippines
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<sup>1</sup>Ajou University Hospital, Department of Neurology, Suwon, Republic of Korea

- P 138**      **Efficacy of incobotulinumtoxinA in patients with sialorrhoea, as assessed using the modified Radboud Oral Motor Inventory for Parkinson's disease (mROMP)**  
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- P 140**      **Efficacy of sublingual apomorphine film (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease: Results from the phase 3 double-blind, placebo-controlled trial**  
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<sup>1</sup>Neuroaxis-Neurology Clinic, Neurology, Bucharest, Romania

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Malik T.<sup>1</sup>, Haleem D.J.<sup>2,3</sup>  
<sup>1</sup>National University of Health Sciences, Basic Sciences, Physiology, Lombard, United States, <sup>2</sup>The University of Karachi, Neurochemistry & Biochemical Neuropharmacology Research Laboratory, Department of Biochemistry, Karachi, Pakistan, <sup>3</sup>Panjwani Center of Molecular Medicine, ICCBS, Karachi, Pakistan
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Norboboev A.<sup>1</sup>  
<sup>1</sup>Tashkent Medical Academy, Neurology, Tashkent, Uzbekistan
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Amodeo K.<sup>1</sup>, Hegeman Richard I.<sup>1</sup>  
<sup>1</sup>University of Rochester, Neurology, Rochester, United States
- P 148 **Levosulpride induced persistent movement disorders: Case series**  
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<sup>1</sup>PGIMER, Neurology, Chandigarh, India
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<sup>1</sup>Medical University of Warsaw, Neurology, Warsaw, Poland, <sup>2</sup>Medical University of Warsaw, Nuclear Medicine, Warsaw, Poland
- P 150 **Movement disorders in bilateral striatopallidodentate calcinosis (Fahr's syndrome): An analysis of 9 patients**  
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<sup>1</sup>RUDN University, Moscow, Russian Federation
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- P 154 **Characterization of constipation in multiple system atrophy using Rome III diagnostic criteria**  
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<sup>1</sup>Fukuoka University, Neurology, Fukuoka, Japan
- P 156 **Risk of Parkinson disease associated with prokinetics from Korean National Health Insurance service claims data**  
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Basante Avendaño R.A.<sup>1</sup>, Sosa Ortiz A.L.<sup>2</sup>, Acosta Castillo I.<sup>2</sup>  
<sup>1</sup>National Institute of Neurology and Neurosurgery, Psychiatry, Mexico, Mexico, <sup>2</sup>National Institute of Neurology and Neurosurgery, Cognitive Aging and Dementias, Mexico, Mexico
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<sup>1</sup>Jawaharlal Nehru University, School of Life Sciences, New Delhi, India
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Maxamatjanova N.<sup>1,2</sup>  
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Fatima A.<sup>1</sup>, Zaidi S.S.A.<sup>2</sup>  
<sup>1</sup>Sir Ganga Ram Hospital, Lahore, Pakistan, <sup>2</sup>WeCare Medical Centre, Lahore, Pakistan
- P 165      **Features of cognitive functions in parkinsonism**  
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<sup>1</sup>Veterans Health Service Medical Center, Department of Neurology, Seoul, Republic of South Korea
- P 170      **Assessment of cognitive disorders in Parkinson's disease (PD)**  
Tolibov D.<sup>1</sup>, Rakhimbaeva G.<sup>1</sup>  
<sup>1</sup>Tashkent Medical Academy, Tashkent, Uzbekistan
- P 171      **New assessments of cognitive disorders in patients with parkinsonism in Uzbekistan**  
Umarov A.<sup>1</sup>, Rakhimbaeva G.<sup>1</sup>, Rakhimova S.<sup>1</sup>  
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Nosirjonov M.<sup>1</sup>  
<sup>1</sup>Tashkent Medical Academy, Tashkent, Uzbekistan
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<sup>1</sup>Medical University of Silesia, Department of Neurology, Katowice, Poland, <sup>2</sup>Medical University of Silesia, Department of Biophysics, Katowice, Poland
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Kim H.S.<sup>1</sup>  
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Frei K.<sup>1</sup>, Kamen C.<sup>1</sup>  
<sup>1</sup>Loma Linda University, Loma Linda, United States
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Kumar A.<sup>1</sup>, Farhat B.<sup>1</sup>  
<sup>1</sup>Jamia Millia Islamia (A central University), Department of Biosciences, New Delhi, India
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The poster and oral poster exhibition of the XXIII World Congress on Parkinson's Disease and Related Disorders is located in the Forum Hall 3 close to the industry exhibition. Posters will be sorted by topics and numbers. The poster exhibition is open to all participants according to the opening times of the industry exhibition.

The poster size is 120cm high and 90cm wide, DIN A0 (portrait format).

### Set-up times for posters / oral posters

Sunday, 19 August 2018      10:00 – 15:00

### Dismantling

Tuesday, 21 August 2018      17:00 – 18:00

Posters that have not been removed within the indicated time schedule will be removed and disposed.

### Oral Poster Presentation

Please note that the time allocated for your presentation is a short 4-minute oral presentation followed by 2 minutes Q&A. Given that there are additional abstracts presenting in the same session, we urge you not to exceed the time limit in order to give the other speakers time for their talks.

The Oral Poster Presentation will take place as a poster walk chaired by renowned specialists. Interested delegates can meet the authors during the time of the Oral Poster Presentation. The presentation will be directly at your poster.

Meet the poster authors during the lunch break at their posters:

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**Uneven poster numbers:**      Tuesday, August 21, 2018 from 12:15 – 13:15

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The speakers centre is located on 2nd floor / Salon Lumière. Speakers are asked to hand in their CD ROM or USB stick, containing the PowerPoint Format 97-2007, 2010 or 2013 in ppt or pptx format, or Adobe Acrobat Reader (pdf) to guarantee slides will open successfully on an on-site PC. Prepare your presentation in 16:9 format (screens are in 16:9 format).

Speakers are asked to contact the speaker's centre preferably one day before their presentation, or, at the latest, 90 minutes prior to the presentation.

Several PC work stations are provided in the speaker's centre where speakers can also work on their charts. Technical staff will be glad to assist.

The presentation will be transferred to the central congress server and will be available afterwards on a special congress notebook in the hall of presentation. Use of own technical equipment (laptop, MAC) is not allowed.

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Sunday, 19 August 2018	11:30 – 17:30
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The Speakers Centre and technical requirements of the congress are gratefully supported by



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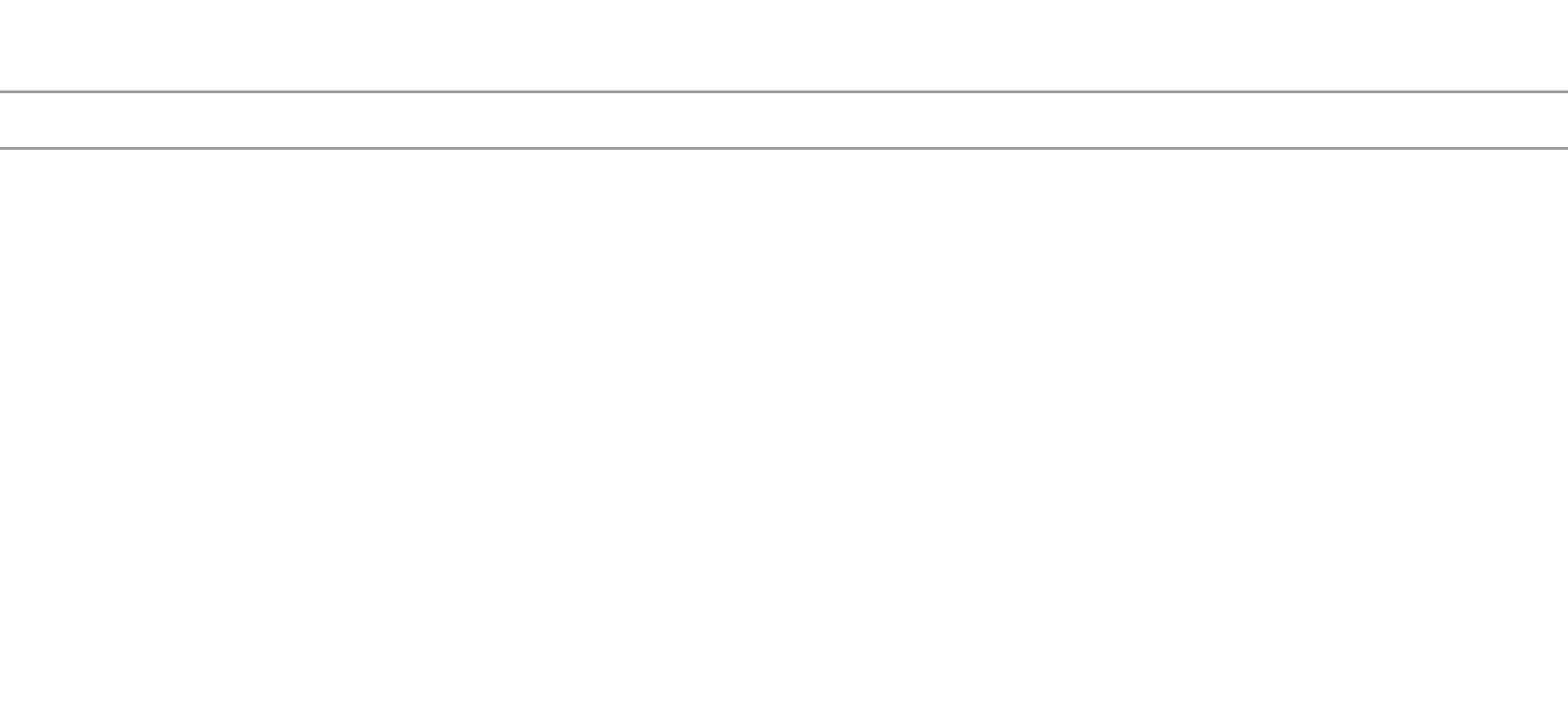
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- Welcome Reception on Sunday, 19 August 2018

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## Name Badge

All participants are requested to wear their name badges at all times during the congress.

Executive Board = Purple      Exhibitor = Green      Delegate = White  
Faculty = Blue                  Staff = Red

## Certification

The European Accreditation Committee in CNS (EACIC) has granted 24.5 CME credits to this event. To obtain your CME credits, please fill in the online event evaluation form at [www.eacic.eu](http://www.eacic.eu).  
Deadline: 22 October 2018

Please follow the below steps to receive your CME credits:

- Go to the EACIC website [www.eacic.eu](http://www.eacic.eu)
- Click on the CME logo (in the blue bar on the right hand side of the webpage)
- Choose the option "I am already registered" or "I am not registered"
- Log on or register
- Choose point 1 or 2
- Choose the event for which you would like to receive credits
- Complete the evaluation form
- Press "save"

Your CME certificate will be automatically emailed to the address provided



## Certificate of Attendance

Please contact the registration counter to obtain a certificate of attendance.

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## TRAVEL GRANTS

This year's Congress Travel Awards are gratefully supported by the International Association of Parkinsonism and Related Disorders, the Parkinson's and Movement Disorder Foundation and individual supporters.

The awards are aimed at promoting participation in the Congress by young researchers world wide. Applicants must be under the age of 35 at the opening date of the Congress, 19 August 2018. The deadline for Travel Grant applications was 23 April 2018.

Further information is available on the Congress website.



## CONGRESS VENUE

Lyon Convention Centre  
50, quai Charles de Gaulle  
69463 Lyon, France

### How to get there:

The Convention Centre is within walking distance to major hotels, 10 minutes to the Lyon Part Dieu high-speed train station and 30 minutes from the Lyon Saint-Exupéry International Airport.

**Arriving by plane:** Lyon Saint Exupéry airport is one of the biggest airports in France and is located 30 minutes away from the city center. All major airlines serve Lyon from more than 100 destinations and hubs worldwide. The Rhône express tram runs up to every 15 minutes between airport and city center, travel duration 30 minutes.

**Arriving by Train:** Lyon is part of the French TGV high-speed network. Long distance trains arrive at Lyon Part Dieu station.

**Arriving by car:** The Lyon Convention Centre is situated close to the Lyon Périphérique Nord (Northern Ring Road). Parking space is available next to the Convention Centre. Parking fees are not included in the registration fee.

**Public Transportation:** The Lyon Convention Centre is connected by 3 bus and trolley lines to the Lyon Public transportation system.





### Abstract E-Book

The abstract book contains all accepted abstracts that have been submitted by authors from around the globe on topics related to Parkinson disease and other movement disorders. All abstracts have been reviewed by a panel of reviewers and the book is now provided as a download.



### Charging station mobile devices

You are welcome to recharge your mobile devices at the Sunovion Pharmaceuticals, Inc. charging lounge in the exhibition area.

### Climate

Expect a moderate climate in August with sunny days and temperature up to 28°C.

### Cloakroom

A cloakroom is available next to the registration counter. You can also store your luggage there.

### Coffee breaks

Coffee and tea are provided during the breaks in the exhibition area and are gratefully supported by Sunovion Pharmaceuticals, Inc.

### Currency

The official French currency is the Euro. Exchange of foreign currency is available at the airport, train station, at most hotels, banks and exchange offices.

### Disclaimer

The Organizers cannot accept liability for injuries or losses of whatever nature incurred by participants, nor for loss of or damage to their luggage and/or personal belongings.

### Language

The official language of the International Association Parkinsonism and Related Disorders is English. However, all participants are encouraged to join discussions regardless of their fluency in English, as the exchange of ideas and critical evaluation of presentation is the main purpose of the entire Congress.

### Mobile phones

Participants are kindly requested to keep their mobile phones turned off while attending the scientific sessions.

### Personal Insurance

We recommend that all participants take out personal travel and health insurance for their trip.

## Press

Journalists should bring their press ID and register at the congress registration counter.

## Program Changes

The Organizers cannot assume liability for any changes in the program due to external unforeseen circumstances.

## Recording

Cameras, video cameras or audio recording devices are not permitted in the session rooms. Any recording/documentation of sessions is strictly forbidden.

## Safety

As in all major cities and congress venues, people should take care of their personal belongings. It is not advised to wear your congress badge outside the XXIII IAPRD Congress activities.

Please have your handbag, bag, backpack etc. ready for inspection by security officers while entering the congress venue.

## Smoking Policy

Smoking is not allowed at the venue; the meeting is a non-smoking event.

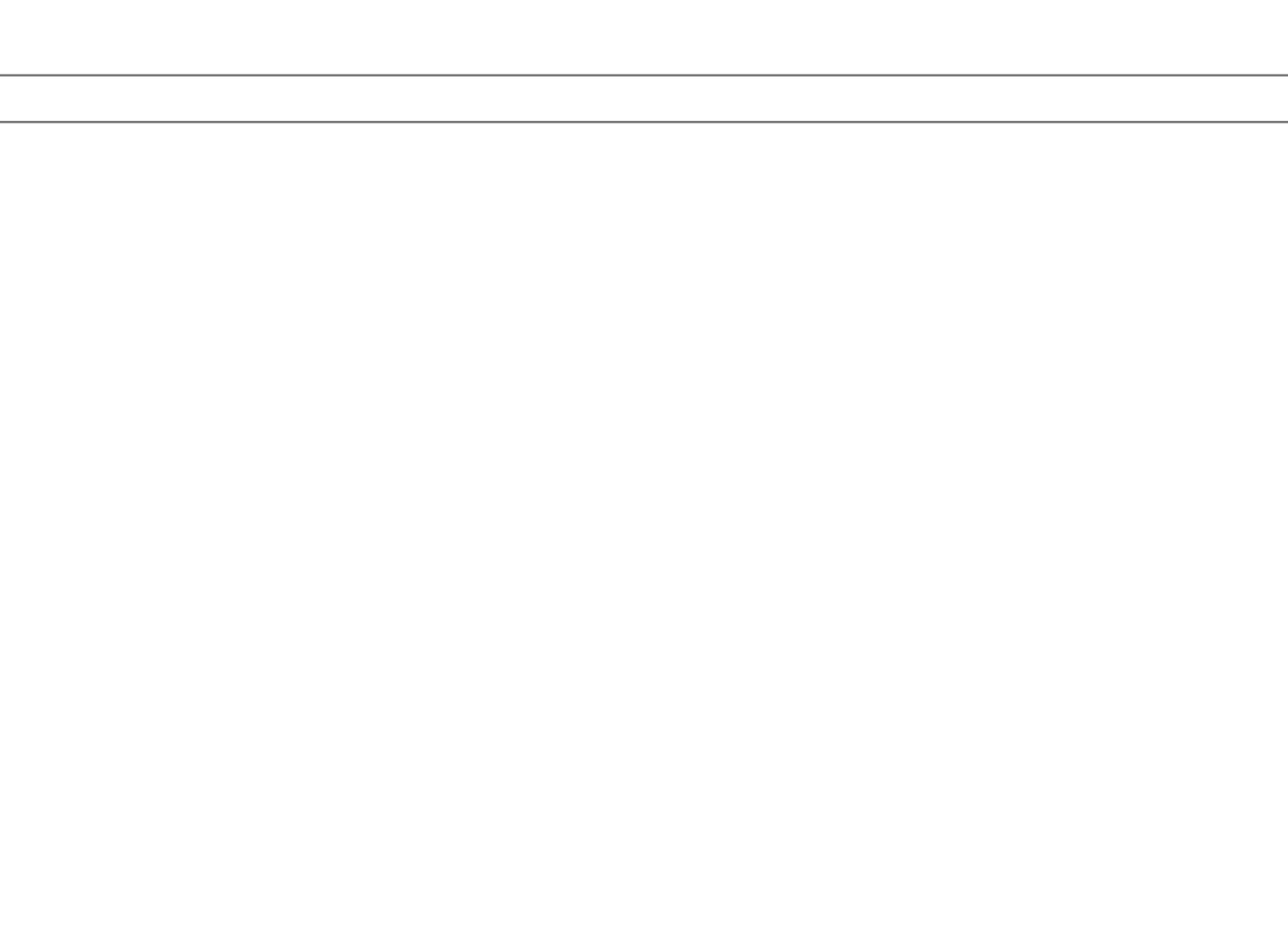
## Visa

France is part of the European Schengen area. The entry formalities for France vary accordingly to the country of origin. A letter of invitation can be issued by the congress and registration office.

## WLAN/Wi-Fi

Complimentary Wi-Fi access is available in the Lyon Convention Centre and is gratefully supported by Sunovion Pharmaceuticals, Inc.





IAPRD

## About the International Association of Parkinsonism and Related Disorders

More than fifty years ago, the International Association of Parkinsonism and Related Disorders was established by the World Federation of Neurology to promote and monitor research developments, as well as to foster communication among neuroscientists in the field. Today, IAPRD is an international, professional association of clinicians, scientists and other healthcare professionals who are interested in neurodegenerative disorders like Parkinson's disease, secondary parkinsonisms, hyperkinetic and hypokinetic movement disorders, and more generally any disorder affecting muscle tone and motor control. The most common clinical disorders and/or symptoms of interest to us are:

- Genetic and idiopathic Parkinson's disease and other parkinsonism
- Genetic and idiopathic disorders with dystonia
- Huntington's disease and other disorders with chorea
- Cerebellar disorders
- Tremor, myoclonus, tics, ballism
- Huntington's disease, chorea and Gilles de la Tourette's syndrome
- Psychogenic and psychiatric movement disorders
- Movement disorders-related non-motor disorders, such as disorders of the autonomic nervous system, mood disorders, sleep disorders (including: excess daytime sleepiness, REM sleep behaviour disorders, restless legs syndrome, and periodic limb movements), and psychiatric disorders (including: impulse control disorders, executive dysfunction, dementia, delusions and hallucinations)

The IAPRD has associate members, full members, and honorary members.

Reasons to become a member:

- Free subscription to our journal
- Access to hot scientific items
- Discounts to our publications

Further information is available at [www.iaprd.org](http://www.iaprd.org)





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Vercise DBS Lead-only system (before Stimulator is implanted) is MR conditional. An MRI examination can be conducted safely when all instructions in the supplemental manual ImageReady™ MRI Guidelines for Boston Scientific DBS Systems are followed.

The Vercise™ PC Deep Brain Stimulation (DBS) System is indicated for use in unilateral or bilateral stimulation of the subthalamic nucleus (STN) or internal globus pallidus (GPi) for treatment of levodopa-responsive Parkinson's disease which is not adequately controlled with medication and also for treatment of intractable primary and secondary dystonia, for persons 7 years of age and older.

Thalamic stimulation using the Boston Scientific Vercise™ PC DBS System is indicated for the suppression of tremor not adequately controlled by medications in patients diagnosed with Essential Tremor or Parkinson's disease.

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Not for distribution in France.

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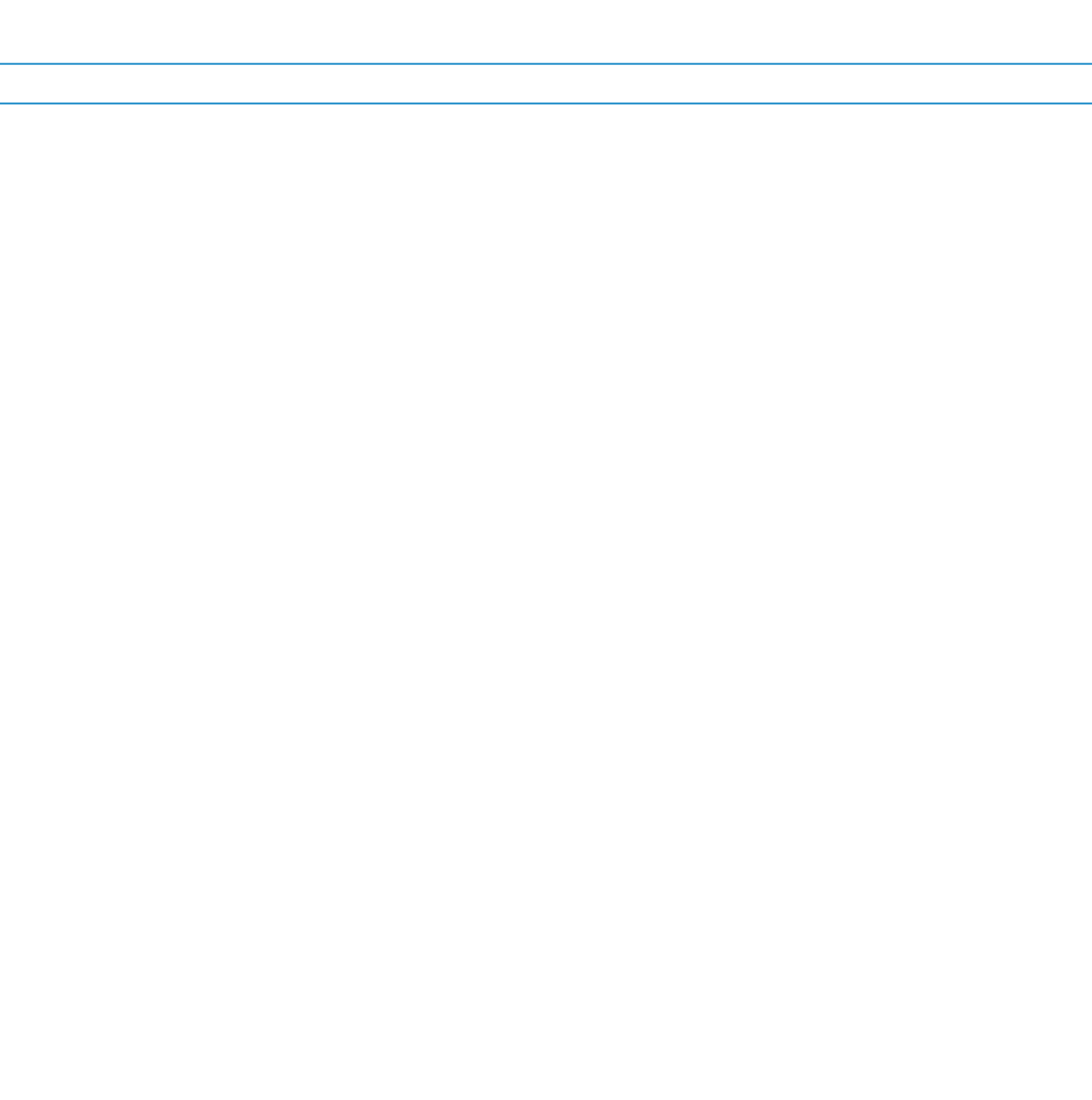
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# INDUSTRY

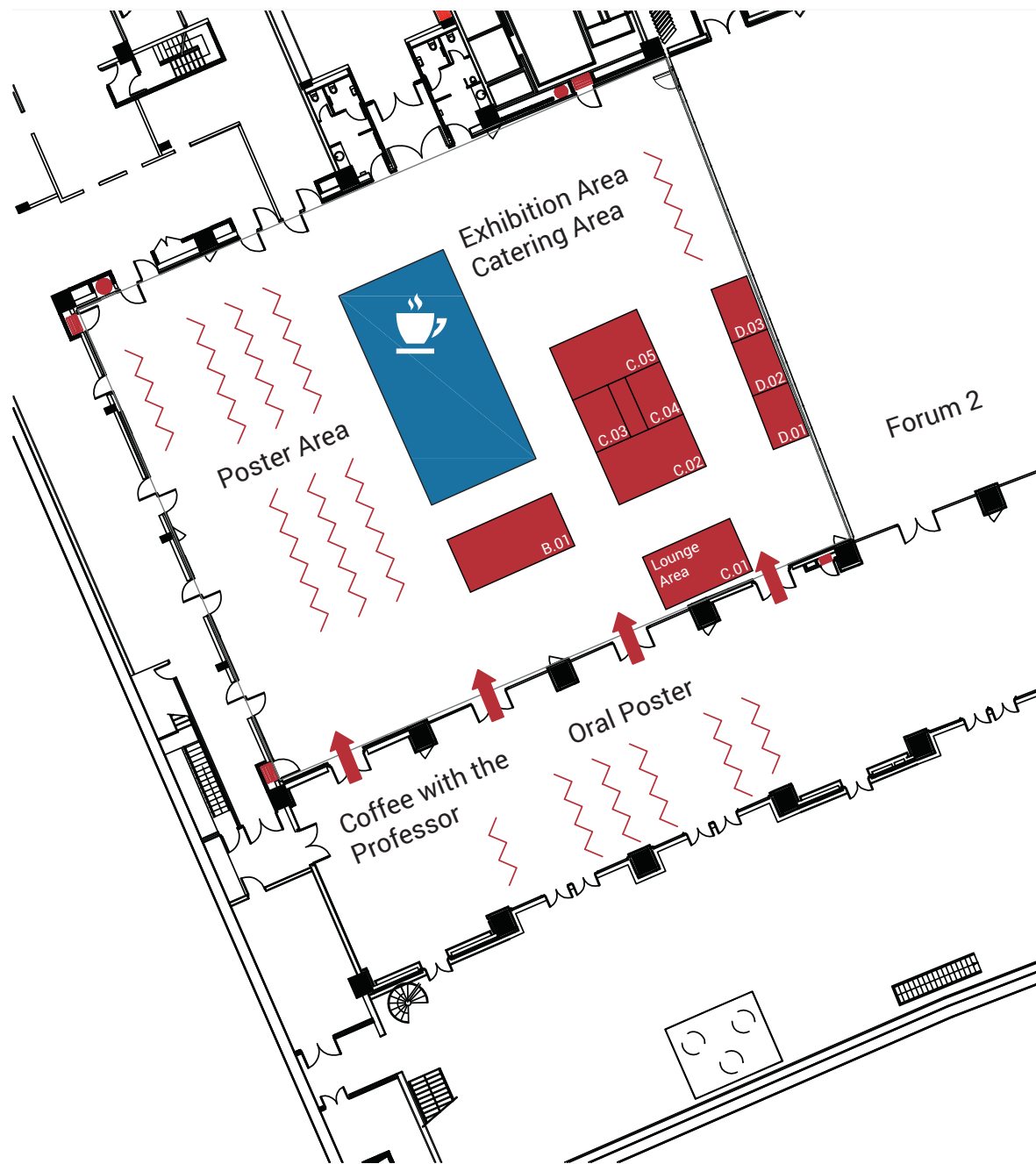
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This section contains information that is promotional in nature, distinct from the scientific/educational elements of the main CME/CPD event.

# EXHIBITION FLOOR PLAN

## Code of Transparency

Interplan publishes the conditions and the scope of the support provided by EFPIA member companies to the IAPRD Congress on a voluntary basis. The publication will be carried out before and during the execution of the Congress. For the industry partners mentioned, we are herewith providing information about their overall support within the framework of the IAPRD Congress 2018.



# EXHIBITORS

## Company

ABBOTT

AbbVie, Inc.

BOSTON SCIENTIFIC

CNS – CAMPUS NEUROLÓGICO

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## Booth No.

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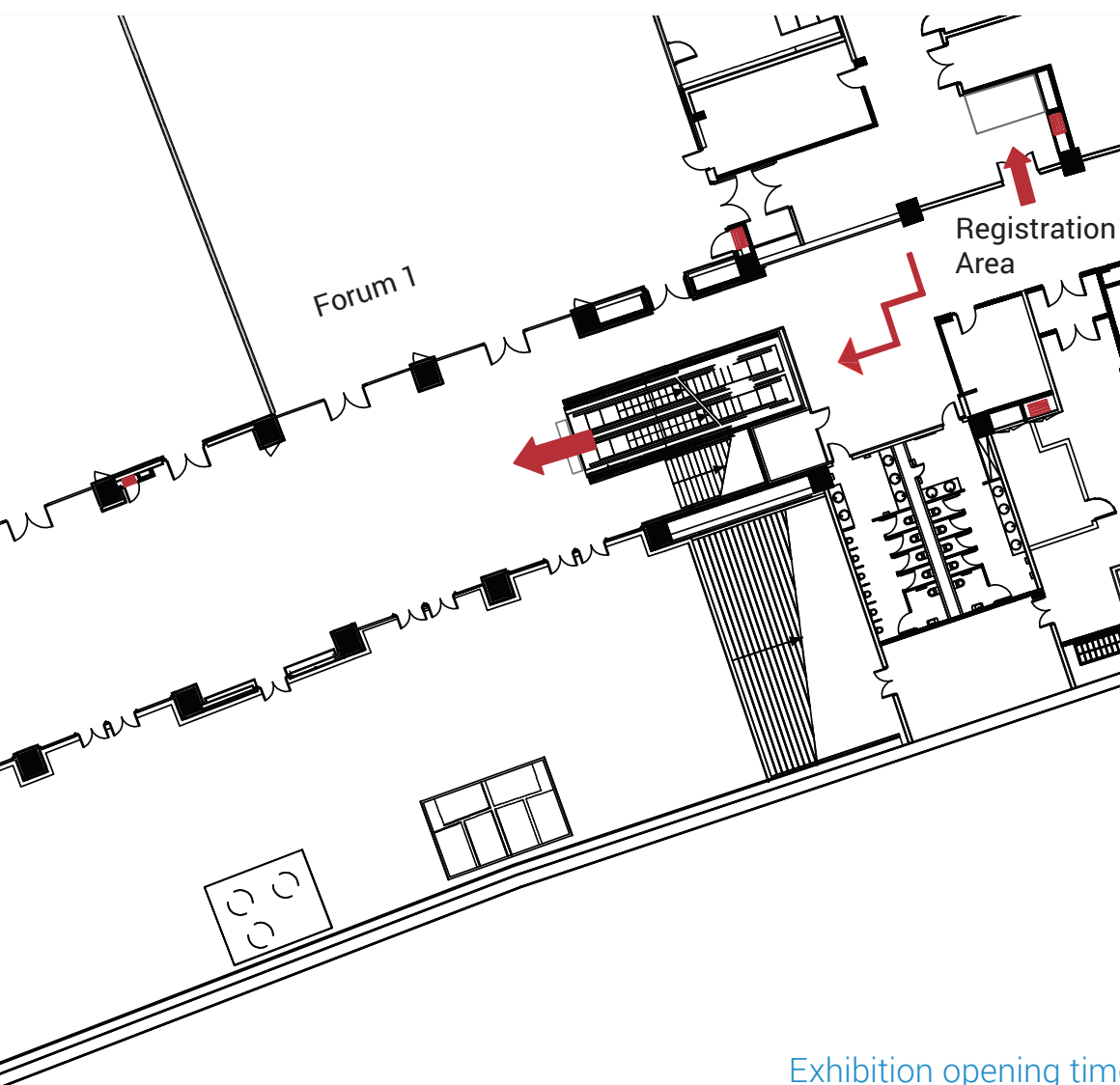
C 04

C 05

D 01

C 03

B 01



## Exhibition opening times

Sunday, 19 August 2018	14:00 - 20:30
Monday, 20 August 2018	09:00 - 18:00
Tuesday, 21 August 2018	09:00 - 17:30

## SPONSORS / SUPPORTERS

We kindly thank all our sponsors for their support!  
Sponsor names are in alphabetical order.



We are pleased to inform you that the IAPRD Congress 2018 is COMPLIANT in accordance with the principles and standards set out in the MedTech Europe Code of Ethical Business Practice.  
This decision is posted on [www.ethicalmedtech.eu](http://www.ethicalmedtech.eu)

This event is supported, in part, by funding from industry. All support will be managed in strict accordance with CME/CPD accreditation criteria and standards for commercial support.



## Monday, 20 August 2018



## Corporate Session

Forum 1

12:15 – 13:45

**Debating OFF Phenomenon in Parkinson Disease: Lessons Learned after 40 Years**Chair: *Hubert Fernandez, Cleveland, United States*

12:15 – 12:35

**Why debating OFF phenomenon remains relevant today as it was 40 years ago**Speaker: *Hubert Fernandez, Cleveland, United States*

12:35 – 12:55

**Position 1: We have made great strides in addressing OFF phenomenon in PD; it is time to move on**Speaker: *Tanya Simuni, Chicago, United States*

12:55 – 13:15

**Position 2: We have a long way to go in understanding and treating OFF phenomenon in PD**Speaker: *Alberto Espay, Cincinnati, United States*

13:15 – 13:45

**Panel Discussion**

Supported by an unrestricted grant from Sunovion Pharmaceuticals



## Corporate Session

Forum 2

12:15 – 13:15

**New Trends and Horizons in Deep Brain Stimulation (DBS)**Chair: *Elena Moro, Grenoble, France*Chair: *Stephane Thobois, Lyon, France*

12:15 – 12:35

**Is there potential to expand the capabilities of DBS with directionality? Surgical perspective**Speaker: *Stephan Chabardes, Grenoble, France*

12:35 – 12:55

**Short pulse width: Pathway selectivity and therapeutic window outcomes**Speaker: *Vish Dayal, London, United Kingdom*

12:55 – 13:15

**Directionality – Programming guidelines & workflow perspective: Role of visualization**Speaker: *Jens Volkmann, Wuerzburg, Germany*

Supported by an unrestricted grant from Boston Scientific

## Tuesday, 21 August 2018



## Corporate Session

Forum 1

12:15 – 13:45

**Answering the Most Relevant Questions on Motor Fluctuations in Parkinsons Disease**

12:15 – 12:35

**Why do we keep developing drugs for motor fluctuations in Parkinsons disease?**Speaker: *Karen Frei, Loma Linda, USA*

12:35 – 12:55

**Are the newest treatment options available for motor fluctuations worth their hype?**Speaker: *Thomas Mueller, Berlin, Germany*

12:55 – 13:15

**Are the next generations of drugs under development for motor fluctuations more promising than our current armamentarium?**Speaker: *Stuart Isaacson, Boca Raton, United States*

13:15 – 13:45

**Panel Discussion**

Supported by an unrestricted grant from Neurocrine Biosciences and Bial

## IMPRINT

Organizer of the scientific conference

### IAPRD

The International Association of Parkinsonism and  
Related Disorders  
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Congress and Exhibition Office

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# WORLD CONGRESS ON PARKINSON'S DISEASE AND RELATED DISORDERS

MONTREAL / CANADA

**SAVE THE DATE**

# 2019

16 – 19 June

[www.iaprd-world-congress.com](http://www.iaprd-world-congress.com)

Photo credit: Sebastien Lemyre



# Debating OFF Phenomenon in Parkinson's Disease: Lessons Learned after 40 Years

Monday, 20 August 2018

12:15 – 13:45

Lunch to be provided - optional

Lyon Convention Centre


Forum 1

## Program:

- Why debating OFF phenomenon remains relevant today as it was 40 years ago.  
(Hubert Fernandez, MD)
- Position 1: We have made great strides in addressing OFF phenomenon in PD; it is time to move on.  
(Tatyana Simuni, MD)
- Position 2: We have a long way to go in understanding and treating OFF phenomenon in PD.  
(Alberto Espay, MD)
- Panel Discussion

This is a non-CME program sponsored by Sunovion Pharmaceuticals Inc. and the speakers are consultants of Sunovion.



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