

Final Program

International Congress of
Parkinson's Disease and Movement Disorders®

October 5-9, 2018

HONG KONG

www.mdscongress.org



International Parkinson and
Movement Disorder Society

Save the Date



International Parkinson and
Movement Disorder Society

**International Congress of Parkinson's
Disease and Movement Disorders®**

NICE, FRANCE SEPTEMBER 22-26, 2019



Table of Contents

Welcome to Hong Kong.....	2	International Congress Session Definitions	12
About MDS.....	3	International Congress Schedule-at-a-Glance.....	13
Floor Plan.....	5	Scientific Program	14
CME Information	6	Friday, October 5, 2018	14
Abstract Information.....	7	Saturday, October 6, 2018	15
Poster Session Schedule (listed by abstract number)	8	Sunday, October 7, 2018	19
Poster Session Schedule (listed alphabetically by abstract category)	9	Monday, October 8, 2018	23
Guided Poster Tour Schedule	10	Tuesday, October 9, 2018	27
MDS Pavilion.....	11	Corporate Therapeutic Symposia	28
		Acknowledgements	29

Download the Free MDS International Congress App!

<https://crowd.cc/s/1fQCg>



International Parkinson and
Movement Disorder Society

Search for MDS Congress



Leave your paper program behind!
The MDS International Congress app is
your complete resource for:

- Scientific Program
- Abstracts
- Session Evaluations
- Poster Schedules
- Speaker Information

Sponsored by

**Boston
Scientific**



Welcome to Hong Kong

Dear Colleagues,

On behalf of the International Parkinson and Movement Disorder Society (MDS), we are pleased to formally welcome you to the International Congress of Parkinson's Disease and Movement Disorders® from October 5-9, 2018.

Hong Kong has a reputation of being a city of charm with a mix of tradition, cultural diversity and sophistication. It offers spectacular scenery and a skyline that has been regarded as the biggest visual impact of all world cities.

Each year, the International Congress attracts delegates from around the world who come to learn about the latest research and perspectives, to listen to world renowned speakers, and to be exposed to the most up-to-date information in the field of Movement Disorders. Once again, this year's International Congress promises to bring new ideas and unparalleled networking opportunities.

With kind regards,



A handwritten signature in black ink that reads "Christopher Goetz".

Christopher Goetz

President, International Parkinson and Movement Disorder Society, 2017-2019



A handwritten signature in black ink that reads "Buz Jinnah".

Buz Jinnah

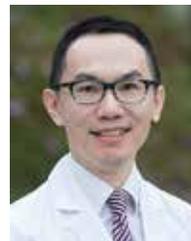
Chair, Congress Scientific Program Committee, 2017-2019



A handwritten signature in black ink that reads "Beomseok Jeon".

Beomseok Jeon

Co-Chair, Congress Scientific Program Committee, 2018



A handwritten signature in black ink that reads "Vincent Mok".

Vincent Mok

Co-Chair, Congress Scientific Program Committee, 2018



About MDS

The International Parkinson and Movement Disorder Society (MDS) is a professional society of clinicians, scientists, and other healthcare professionals who are interested in Parkinson's disease, related neurodegenerative and neurodevelopmental disorders, hyperkinetic movement disorders, and abnormalities in muscle tone and motor control.

PURPOSE, MISSION AND GOALS

Purpose:

The objective and mission of the Society shall be to advance the neurological sciences pertaining to movement disorders; to improve the diagnosis and treatment of patients; to operate exclusively for scientific, scholarly and educational purposes; to encourage research; to provide forums, such as medical journals, scientific symposia and International Congresses, for sharing ideas and for advancing the related clinical and scientific disciplines; to encourage interest and participation in the activities of the Society among healthcare and allied professionals and scientists; and to collaborate with other related professional and lay organizations.

Mission and Goals:

To disseminate knowledge about movement disorders by:

- Providing educational programs for clinicians, scientists and the general public designed to advance scientific and clinical knowledge about movement disorders
- Sponsoring International Congresses and Symposia on movement disorders
- Collaborating with other international organizations and lay groups
- Publishing journals, videotapes and other collateral materials committed to high scientific standards and peer review

To promote research into causes, prevention and treatment of movement disorders by:

- Using the Society's influence and resources to enhance support for research
- Facilitating the dissemination of information about research
- Encouraging the training of basic and clinical scientists in Movement Disorders and related disorders

For the purposes of favorably affecting the care of patients with movement disorders, the Society will provide expertise, advice and guidance to:

- Regulatory agencies to assist them in the approval process of safe and effective therapeutic interventions
- The public (media) and patient support groups by informing them of new research and therapeutic advances
- Governments to assist them in the development of policies that affect support of research and patient care
- Educational efforts to assist in developing standards of training in the specialty

MDS OFFICERS (2017-2019)



President
Christopher Goetz, *USA*



Secretary
Susan Fox, *Canada*



Treasurer
Victor Fung, *Australia*



Past-President
Oscar Gershanik, *Argentina*



President-Elect
Claudia Trenkwalder, *Germany*



Secretary-Elect
Bastiaan Bloem, *Netherlands*



Treasurer-Elect
Louis Tan, *Singapore*

About MDS

MDS INTERNATIONAL EXECUTIVE COMMITTEE

Charles Adler, *USA*
Daniela Berg, *Germany*
Shengdi Chen, *People's Republic of China*
Carlos Cosentino, *Peru*
Joaquim Ferreira, *Portugal*
Jeffrey Kordower, *USA*
Mayela Rodriguez Violante, *Mexico*
D. James Surmeier, *USA*
Pille Taba, *Estonia*
Ryosuke Takahashi, *Japan*

INTERNATIONAL CONGRESS OVERSIGHT COMMITTEE

Chair: Matthew Stern, *USA*
Günther Deuschl, *Germany*
Victor Fung, *Australia*
Oscar Gershanik, *Argentina*
Christopher Goetz, *USA*
Beomseok Jeon, *South Korea*
Hyder Jinnah, *USA*
Vincent Mok, *Hong Kong*
Claudia Trenkwalder, *Germany*

CONGRESS LOCAL ORGANIZING COMMITTEE

Chair: Vincent Mok
Mandy Au-Yeung
Anne Yin Yan Chan
Danny TM Chan
Germaine Hiu Fai Chan
Nelson Yuk-Fai Cheung
Ya Ke
Claire Ka Yee Lau
Michael WY Lee
Margaret KY Mak
Shirley YY Pang
Tak Lap Poon
Kin Lun Tsang
Jonas Yeung
Helen LK Yip
Ken KL Yung
Barong Zhang
Xian Lun Zhu

CONGRESS SCIENTIFIC PROGRAM COMMITTEE

Chair: Hyder Jinnah, *USA*
Co-Chair: Beomseok Jeon, *South Korea*
Co-Chair: Vincent Mok, *Hong Kong*
Roongroj Bhidayasiri, *Thailand*
Vincenzo Bonifaati, *Netherlands*
M. Angela Cenci Nilsson, *Sweden*
Shengdi Chen, *People's Republic of China*
Jean-Christophe Corvol, *France*
Steven Frucht, *USA*
Emilia Gatto, *Argentina*
Christopher Goetz, *USA*
Jennifer Goldman, *USA*
Etienne Hirsch, *France*
Roland Dominic Jamora, *Philippines*
Han-Joon Kim, *South Korea*
Vladimir Kostic, *Serbia*
Shen-Yang Lim, *Malaysia*
Irene Litvan, *USA*
Karen Marder, *USA*
Wassilios Meissner, *France*
Elena Moro, *France*
Alice Nieuwboer, *Belgium*
Maria Stamelou, *Greece*
Matthew Stern, *USA*
Antonio Strafella, *Canada*
Carolyn Sue, *Australia*
Ryosuke Takahashi, *Japan*
Helio Teive, *Brazil*
Claudia Trenkwalder, *Germany*
Marie Vidailhet, *France*

PAST-PRESIDENTS

2015-2017 Oscar Gershanik, *Argentina*
2013-2015 Matthew Stern, *USA*
2011-2013 Günther Deuschl, *Germany*
2009-2011 Philip Thompson, *Australia*
2007-2009 Anthony Lang, *Canada*
2005-2006 Andrew Lees, *United Kingdom*
2003-2004 C. Warren Olanow, *USA*
2001-2002 Werner Poewe, *Austria*
1999-2000 Mark Hallett, *USA*
1997-1998 Eduardo Tolosa, *Spain*
1995-1996 Joseph Jankovic, *USA*
1991-1994 C. David Marsden, *United Kingdom*
1988-1991 Stanley Fahn, *USA*

INTERNATIONAL MEDICAL SOCIETY FOR MOTOR DISTURBANCES PAST-PRESIDENTS

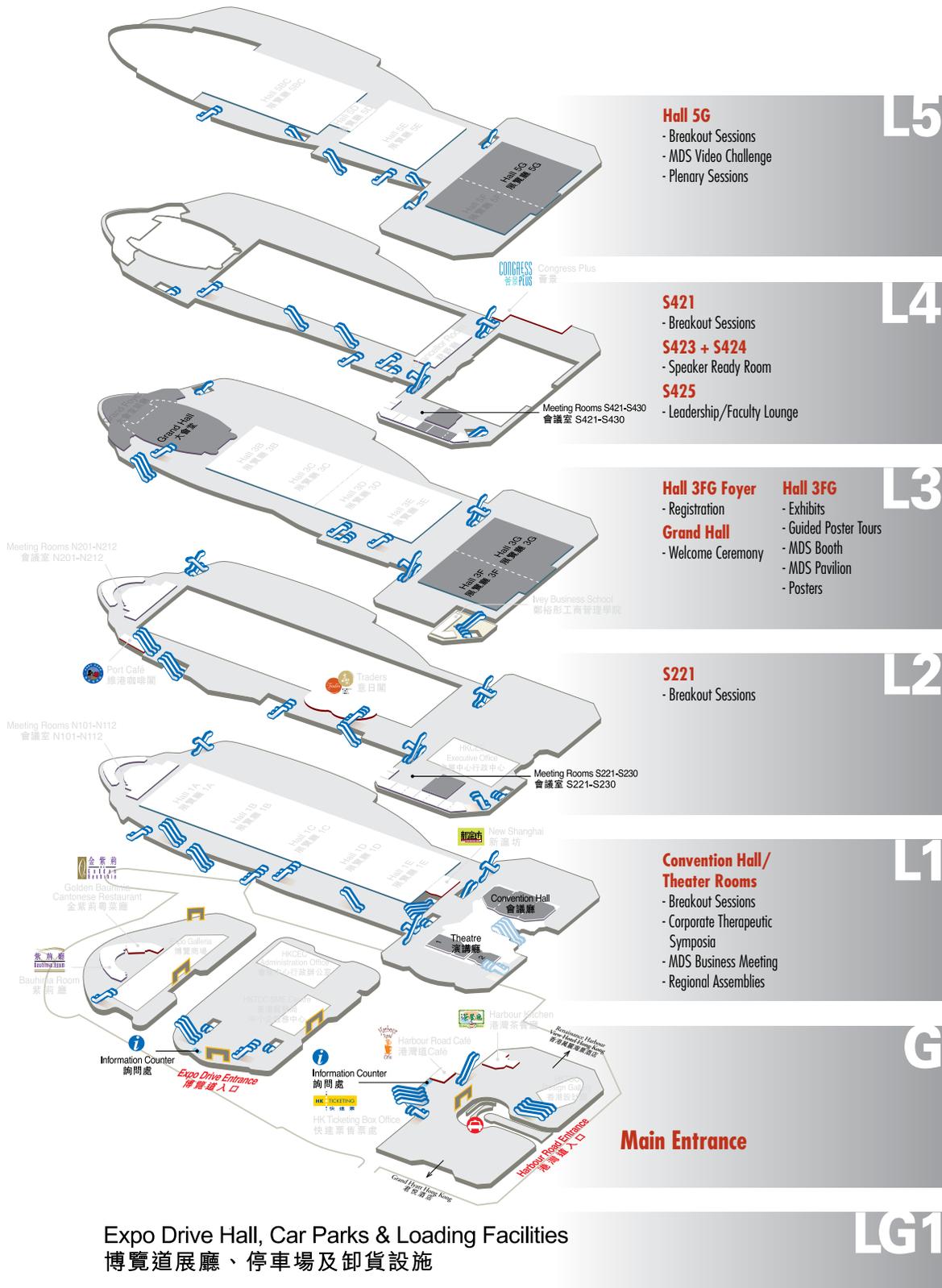
1993-1994 C. Warren Olanow, *USA*
1991-1992 Bastian Conrad, *Germany*
1989-1990 Mark Hallett, *USA*
1987-1988 Mario Manfredi, *Italy*
1985-1986 C. David Marsden, *United Kingdom*

MDS INTERNATIONAL SECRETARIAT

International Parkinson and Movement Disorder Society
555 East Wells Street, Suite 1100
Milwaukee, WI 53202-3823 USA
Tel: +1 414-276-2145
Fax: +1 414-276-3349
E-mail: info@movementdisorders.org
Website: www.movementdisorders.org



Floor Plan



CME Information

Target Audience

Clinicians, researchers, post-doctoral fellows, medical residents, medical students, allied health professionals with an interest in current clinical trends and approaches for diagnosis and treatment of movement disorders.

Objectives

- 1) Evaluate the pharmacological and non-pharmacological management options available for Parkinson's disease and other movement disorders
- 2) Discuss the diagnostic approaches and tools available for Parkinson's disease and other movement disorders
- 3) Describe the pathogenesis and neurobiology of Parkinson's disease and other movement disorders

Satisfactory Completion

Participants must complete an evaluation to receive a certificate of continuing medical education credit. Your chosen sessions must be attended in their entirety. Partial credit of individual sessions is not available.

Accreditation Statement

In support of improving patient care, this activity has been planned and implemented by Amedco and the International Parkinson and Movement Disorder Society. Amedco is jointly accredited by the American Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Credit Designation Statement

Amedco designates this live activity for a maximum of 29.50 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Faculty Disclosures

All individuals in control of content for the MDS International Congress are required to disclose all relevant financial relationships. Disclosure information is available online at www.mdscongress.org and via the MDS International Congress app.

Evaluations

Evaluations are considered part of the course. All evaluations need to be completed by October 12, 2018. Evaluations can be done in the MDS International Congress App and online at <https://event.crowdcompass.com/hongkong2018>

Claiming CME

Please visit www.mdscongress.org to claim CME for this activity. When the requested fields are completed, a CME certificate will be provided to you via e-mail. Please be advised: International Congress CME must be claimed by November 15, 2018. Please contact education@movementdisorders.org with any questions.



Abstract Information

Abstract Publication

All regular accepted abstracts are published as a supplement to the *Movement Disorders* journal and are available utilizing a searchable feature on the International Congress website, www.mdscongress.org/Congress-2018/Abstracts.htm, as of October 5, 2018. Please also visit www.movementdisorders.org to download a PDF of accepted abstracts from the *Movement Disorders* journal.

All registered International Congress delegates will receive the published abstracts on a USB, available for pickup in the registration area.

Late-Breaking Abstracts and MDS Study Group Abstracts are published as an online supplement on the 2018 International Congress website, www.mdscongress.org/Congress-2018/Abstracts.htm. These abstracts are available for download as of October 5, 2018.

Guided Poster Tours

Guided Poster Tours give groups of delegates an opportunity to hear discussion on a select group of abstracts in several sub-categories.

Abstracts selected for a Guided Poster Tour presentation are published as an online supplement on the 2018 International Congress website, www.mdscongress.org/Congress-2018/Abstracts.htm. These abstracts are available for download as of October 5, 2018.

Late-Breaking Abstracts

All accepted Late-Breaking Abstract posters are displayed in Hall 3FG, Saturday - Monday of the International Congress. Late-Breaking Abstract poster presentations will take place Monday, October 8, from 13:15 - 14:45 in Hall 3FG.

MDS Study Group Abstracts

All accepted MDS Study Group Abstract posters are displayed in Hall 3FG, Saturday - Monday throughout the duration of the International Congress. MDS Study Group Abstract poster presentations will take place Monday, October 8, from 13:15 - 14:45 in Hall 3FG.

Poster Sessions

Poster sessions give each delegate an opportunity to view their colleagues' posters on the most current research in the field of Movement Disorders. Authors will be present for 1.5 hours each day to explain their work and answer questions. All accepted abstracts are presented as a poster at the 2018 International Congress.

Basic Science abstracts will be flagged within each category.

Poster sessions are held Saturday - Monday. Posters are available for viewing in Hall 3FG from 9:00 - 16:00 Saturday and Sunday, and 9:00 - 15:30 on Monday. Poster session topics and schedules vary by date; please see the complete listing of scheduled poster presentation dates and times starting on page 8.

Advance.
Improve.
Educate.
Collaborate.



International Parkinson and
Movement Disorder Society

Become an Associate Member of MDS

MDS Associate Membership Program

Non-members attending the International Congress have the opportunity to receive membership with MDS absolutely free for a year. Eligible participants will be invited by e-mail in January to apply for free Associate Membership. Interested individuals are encouraged to apply online within 30 days of contact.

Questions? membership@movementdisorders.org

MDS Benefits Include:

Peer Reviewed Journals: *Movement Disorders* and *Movement Disorders Clinical Practice*
Quarterly Newsletter: *Moving Along*
Reduced Course Registration Rates
Online Resources: CME Activities; Streaming Content; Teaching Slides; Training Videos; and a Video Library with over 1,800 searchable videos

Join over 7,000 movement disorders professionals across the globe in working to disseminate knowledge and promote research to advance the field.

www.movementdisorders.org/associate-membership

Poster Session Schedule *(listed by abstract number)*

All poster sessions will take place in Hall 3FG.

Abstract number	Category	Presentation Date	Presentation Time
1 - 45	Clinical Trials and Therapy in Movement Disorders	Saturday, October 6	13:45 - 15:15
46 - 69	Cognitive Disorders	Saturday, October 6	13:45 - 15:15
70 - 97	Drug-Induced Movement Disorders	Saturday, October 6	13:45 - 15:15
98 - 119	Education in Movement Disorders	Saturday, October 6	13:45 - 15:15
120 - 140	Genetics (Non-PD)	Saturday, October 6	13:45 - 15:15
141 - 142	History	Saturday, October 6	13:45 - 15:15
143 - 151	Myoclonus	Saturday, October 6	13:45 - 15:15
152 - 181	Neuroimaging (Non-PD)	Saturday, October 6	13:45 - 15:15
182 - 201	Neuropharmacology	Saturday, October 6	13:45 - 15:15
202 - 212	Neurophysiology (Non-PD)	Saturday, October 6	13:45 - 15:15
213 - 432	Parkinson's Disease: Clinical Trials, Pharmacology and Treatment	Saturday, October 6	13:45 - 15:15
433 - 445	Pathophysiology (Other Movement Disorders)	Saturday, October 6	13:45 - 15:15
446 - 461	Pediatric Movement Disorders	Saturday, October 6	13:45 - 15:15
462 - 488	Rare Genetic and Metabolic Diseases	Saturday, October 6	13:45 - 15:15
489 - 510	Surgical Therapy: Other Movement Disorders	Saturday, October 6	13:45 - 15:15
511 - 587	Surgical Therapy: Parkinson's Disease	Saturday, October 6	13:45 - 15:15
588 - 593	Therapy in Movement Disorders: Gene and Cell-Based Therapies	Saturday, October 6	13:45 - 15:15
594 - 602	Tics/Stereotypies	Saturday, October 6	13:45 - 15:15
603 - 666	Ataxia	Sunday, October 7	13:45 - 15:15
667 - 686	Choreas (Non-Huntington's Disease)	Sunday, October 7	13:45 - 15:15
687 - 776	Dystonia	Sunday, October 7	13:45 - 15:15
778 - 803	Epidemiology	Sunday, October 7	13:45 - 15:15
805 - 838	Huntington's Disease	Sunday, October 7	13:45 - 15:15
839 - 920	Other	Sunday, October 7	13:45 - 15:15
921 - 1008	Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)	Sunday, October 7	13:45 - 15:15
1009 - 1039	Phenomenology and Clinical Assessment of Movement Disorders	Sunday, October 7	13:45 - 15:15
1040 - 1071	Quality Of Life/Caregiver Burden in Movement Disorders	Sunday, October 7	13:45 - 15:15
1072 - 1088	Restless Legs Syndrome and Other Sleep Disorders	Sunday, October 7	13:45 - 15:15
1089 - 1094	Spasticity	Sunday, October 7	13:45 - 15:15
1095 - 1158	Technology	Sunday, October 7	13:45 - 15:15
1159 - 1216	Tremor	Sunday, October 7	13:45 - 15:15
1217 - 1286	Parkinson's Disease: Cognition	Monday, October 8	13:15 - 14:45
1287 - 1373	Parkinson's Disease: Genetics	Monday, October 8	13:15 - 14:45
1374 - 1514	Parkinson's Disease: Neuroimaging And Neurophysiology	Monday, October 8	13:15 - 14:45
1515 - 1563	Parkinson's Disease: Non-Motor Symptoms	Monday, October 8	13:15 - 14:45
1564 - 1757	Parkinson's Disease: Pathophysiology	Monday, October 8	13:15 - 14:45
1758 - 1795	Parkinson's Disease: Psychiatric Manifestations	Monday, October 8	13:15 - 14:45
1796 - 1818	Rating Scales	Monday, October 8	13:15 - 14:45



Poster Session Schedule *(listed alphabetically by abstract category)*

All poster sessions will take place in Hall 3FG.

Category	Abstract number	Presentation Date	Presentation Time
Ataxia	603 - 666	Sunday, October 7	13:45 - 15:15
Choreas (Non-Huntington's Disease)	667 - 686	Sunday, October 7	13:45 - 15:15
Clinical Trials and Therapy in Movement Disorders	1 - 45	Saturday, October 6	13:45 - 15:15
Cognitive Disorders	46 - 69	Saturday, October 6	13:45 - 15:15
Drug-Induced Movement Disorders	70 - 97	Saturday, October 6	13:45 - 15:15
Dystonia	687 - 776	Sunday, October 7	13:45 - 15:15
Education in Movement Disorders	98 - 119	Saturday, October 6	13:45 - 15:15
Epidemiology	778 - 803	Sunday, October 7	13:45 - 15:15
Genetics (Non-PD)	120 - 140	Saturday, October 6	13:45 - 15:15
History	141 - 142	Saturday, October 6	13:45 - 15:15
Huntington's Disease	805 - 838	Sunday, October 7	13:45 - 15:15
Myoclonus	143 - 151	Saturday, October 6	13:45 - 15:15
Neuroimaging (Non-PD)	152 - 181	Saturday, October 6	13:45 - 15:15
Neuropharmacology	182 - 201	Saturday, October 6	13:45 - 15:15
Neurophysiology (Non-PD)	202 - 212	Saturday, October 6	13:45 - 15:15
Other	839 - 920	Sunday, October 7	13:45 - 15:15
Parkinson's Disease: Clinical Trials, Pharmacology and Treatment	213 - 432	Saturday, October 6	13:45 - 15:15
Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)	921 - 1008	Sunday, October 7	13:45 - 15:15
Parkinson's Disease: Cognition	1217 - 1286	Monday, October 8	13:15 - 14:45
Parkinson's Disease: Genetics	1287 - 1373	Monday, October 8	13:15 - 14:45
Parkinson's Disease: Neuroimaging and Neurophysiology	1374 - 1514	Monday, October 8	13:15 - 14:45
Parkinson's Disease: Non-Motor Symptoms	1515 - 1563	Monday, October 8	13:15 - 14:45
Parkinson's Disease: Pathophysiology	1564 - 1757	Monday, October 8	13:15 - 14:45
Parkinson's Disease: Psychiatric Manifestations	1758 - 1795	Monday, October 8	13:15 - 14:45
Pathophysiology (Other Movement Disorders)	433 - 445	Saturday, October 6	13:45 - 15:15
Pediatric Movement Disorders	446 - 461	Saturday, October 6	13:45 - 15:15
Phenomenology and Clinical Assessment of Movement Disorders	1009 - 1039	Sunday, October 7	13:45 - 15:15
Quality Of Life/Caregiver Burden in Movement Disorders	1040 - 1071	Sunday, October 7	13:45 - 15:15
Rare Genetic and Metabolic Diseases	462 - 488	Saturday, October 6	13:45 - 15:15
Rating Scales	1796 - 1818	Monday, October 8	13:15 - 14:45
Restless Legs Syndrome and Other Sleep Disorders	1072 - 1088	Sunday, October 7	13:45 - 15:15
Spasticity	1089 - 1094	Sunday, October 7	13:45 - 15:15
Surgical Therapy: Other Movement Disorders	489 - 510	Saturday, October 6	13:45 - 15:15
Surgical Therapy: Parkinson's Disease	511 - 587	Saturday, October 6	13:45 - 15:15
Technology	1095 - 1158	Sunday, October 7	13:45 - 15:15
Therapy in Movement Disorders: Gene and Cell-Based Therapies	588 - 593	Saturday, October 6	13:45 - 15:15
Tics/Stereotypies	594 - 602	Saturday, October 6	13:45 - 15:15
Tremor	1159 - 1216	Sunday, October 7	13:45 - 15:15

Guided Poster Tour Schedule

*Guided Poster Tours will begin at the poster number listed below. All tours take place in Hall 3FG.

SATURDAY, OCTOBER 6 13:45 - 15:15		
GPT #	Meet at Poster:	Abstract Category
GPT 1	Poster #5	Clinical Trials and Therapy in Movement Disorders
GPT 2	Poster #251	Parkinson's Disease: Clinical Trials, Pharmacology and Treatment
GPT 3	Poster #512	Surgical Therapy: Parkinson's Disease
SUNDAY, OCTOBER 7 13:45 - 15:15		
GPT #	Meet at Poster:	Abstract Category
GPT 4	Poster #618	Ataxia
GPT 5	Poster #691	Dystonia
GPT 6	Poster #681	Choreas (Non-Huntington's Disease) and Huntington's Disease
GPT 7	Poster #927	Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)
GPT 8	Poster #1096	Technology
GPT 9	Poster #1169	Tremor
MONDAY, OCTOBER 8 13:15 - 14:45		
GPT #	Meet at Poster:	Abstract Category
GPT 10	Poster #1299	Parkinson's Disease: Genetics
GPT 11	Poster #1376	Parkinson's Disease: Neuroimaging and Neurophysiology
GPT 12	Poster #1531	Parkinson's Disease: Non-Motor Symptoms
GPT 13	Poster #1663	Parkinson's Disease: Pathophysiology



MDS Pavilion

The MDS Pavilion is MDS' interactive presentation space designed to provide International Congress attendees with a comfortable atmosphere while presenting valuable information regarding the Society. Learn about various MDS initiatives and programs, gain MDS-expert advice, and discover ways to get involved with MDS. These are Non-CME educational opportunities.

The MDS Pavilion will be located in Hall 3FG.

SATURDAY, OCTOBER 6

LIVE Demo: How to Initiate a Movement Disorders Exam 10:00 – 10:30

Presenters: Stanley Fahn, *USA*
Kapil Sethi, *USA*

MDS Experts will provide useful tips and advice to make the most out of your patient exam time.

Neuroscience in the Clinic: Research in a Combination Environment 13:15 – 13:45

Presenters: Cynthia Comella, *USA*
Hyder Jinnah, *USA*

MDS Experts will discuss best practices for integrating research into clinical applications.

Journal Editors Guide: How to Submit a Paper and Get it Accepted in *Movement Disorders* 15:00 – 15:30

Presenters: Kailash Bhatia, *United Kingdom*
Marcello Merello, *Argentina*
José Obeso, *Spain*
A. Jon Stoessl, *Canada*

MDS Journal Editors will provide step-by-step instructions and advice to get a paper published in the MDS Journals.

SUNDAY, OCTOBER 7

Becoming a Movement Disorder Specialist: Steps and Advice for Fellows and Young Researchers 12:30 – 12:45

Presenters: Shilpa Chitnis, *USA*
Michael Okun, *USA*

MDS Experts will provide useful advice and answer questions about next steps for becoming a movement disorder specialist.

Gain Tips and Advice on Advancing Your Career Within the Field of Movement Disorders. The MDS Roadmap: Personalizing Your MDS Experience 13:15 – 13:45

Presenters: Brandon Barton, *USA*
Oscar Gershanik, *Argentina*

Learn how the MDS Roadmap can help personalize your educational experience and drive career goals.

MONDAY, OCTOBER 8

Young Members Group 9:30 – 10:00

Presenter: Miryam Carecchio, *Italy*

Learn about the MDS Young Members Group and MDS young delegate offerings.

Multidisciplinary Care: Patient Wellness 12:00 – 12:30

Presenters: Bastiaan Bloem, *Netherlands*
Hanneke Kalf, *Netherlands*
Victor McConvey, *Australia*

Discuss the importance of patient diet, exercise and self-care practices as essential management tools.

Technology in the Diagnosis, Monitoring, and Management of Movement Disorders: The 2018 International Congress Theme in Action 14:00 – 14:30

Presenters: Alberto Espay, *USA*
Walter Maetzler, *Germany*

Review some of the 2018 International Congress Themed Session key learnings.

The MDS Pavilion is made possible by the financial support of Zambon.

International Congress Session Definitions

Blue Ribbon Highlights

This session provides a critical review of the best poster presentations by a panel of experts, highlighting the relevance, novelty and quality of both clinical and basic research presented by the delegates.

Controversies

This Plenary Session is designed to involve all International Congress attendees. Content is prepared to stimulate interest and debate among a panel of experts. Views from several angles will be addressed as discussion of pre-selected "hot" topics will be open for debate among the panelists.

Parallel Sessions

These concurrent sessions provide an in-depth report of the latest research findings, state-of-the-art treatment options, as well as a discussion of future strategies. Parallel sessions will have evidence-based components and incorporate the "hot" issues in Parkinson's disease and other movement disorders.

Plenary Sessions

These sessions provide a broad overview of the latest clinical and basic science research findings and state-of-the-art information.

Skills Workshops

These clinic-based training sessions provide an educational illustration of clinical techniques and treatment procedures through demonstrations utilizing patient videotapes and proper equipment to further develop practitioners' skills and knowledge within the field of treatment of movement disorders.

Teaching Courses

These educational programs provide up-to-date information focused on a single topic. The sessions highlight both the clinical and basic science of topics of relevance to Movement Disorder specialists. The sessions are unique in providing a syllabus that includes a review of the topic and the presentation slides. In addition, these programs provide ample time for questions and a discussion period at the conclusion of the presentations.

Therapeutic Plenary Sessions

These sessions provide the latest information regarding the scientific and clinical evidence supporting treatment options for Parkinson's disease and other movement disorders.

Video Sessions

Designed to provide a broad overview of related movement disorders, the video sessions will focus on the phenomenology covering the many different kinds of movement disorders affecting the population today.

INTERNATIONAL CONGRESS NON-CME EDUCATIONAL SESSIONS

Corporate Therapeutic Symposia

These company-based informational sessions provide attendees with non-CME educational opportunities to learn the latest in therapeutics.

Guided Poster Tours

Guided Poster Tours give small groups of delegates an opportunity to hear discussion on a select group of abstracts in several sub-categories.

MDS Video Challenge

The goal of this session is for attendees to learn from a series of unusual patients and observe how senior experts approach a challenging case. A world-renowned panel of Movement Disorders experts guide attendees through these unique Movement Disorder cases as they are presented by representatives from Movement Disorder Centers around the world.

Poster Sessions

Poster sessions give each delegate an opportunity to view their colleagues' posters on the most current research in the field of Movement Disorders. Authors are present for 90 minutes each day to explain their work and answer questions.

INTERNATIONAL CONGRESS FACULTY ROLES

Speaker / Presenter: Creates and delivers the presentation materials, and participates in the dialogue of the session.

Chair: Facilitates the learnings of the session, ensures that learning objectives are met during the presentation(s), and engages the learners as needed.

Liaison: Develops the session from the onset and provides guidance to ensure that the overall objectives are met.

2018 INTERNATIONAL CONGRESS THEME

At each annual International Congress, the Congress Scientific Program Committee selects a theme that is highlighted throughout the meeting. This year's theme, *Technology in the Diagnosis, Monitoring, and Management of Movement Disorders*, will be showcased in two Plenary Sessions, six Parallel Sessions, one Skills Workshop, one Teaching Course, and one Video Session. International experts will serve as faculty, and the meeting participants can elect to attend any or all of these sessions. Themed sessions are designated in the program with .

Friday, October 5, 2018

1101 Therapeutic Plenary Session

Update on Management Strategies for Parkinson's Disease
8:00 – 10:00

Location: Hall 5G
 Chairs: Shengdi Chen, *People's Republic of China*
 Alice Nieuwboer, *Belgium*

8:00 Early Pharmacologic Management
 Olivier Rascol, *France*

8:40 Role of Rehabilitation and Exercise
 Colleen Canning, *Australia*

9:20 Later Stage Parkinson's Disease
 Anthony Lang, *Canada*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Discuss management in early Parkinson's disease including potential disease modifying strategies
2. Review current role of rehabilitation and exercise including physical, occupational and speech therapies
3. Describe management strategies for advanced Parkinson's disease, including invasive interventions

CSPC Liaison: Roland Dominic Jamora, *Philippines*

MDS-AOS Regional Assembly

10:00 – 11:00

Location: Convention Hall A
 All delegates from Asia and Oceania are encouraged to attend.

MDS-ES Regional Assembly

10:00 – 11:00

Location: Convention Hall B
 All delegates from Europe are encouraged to attend.

MDS-PAS Regional Assembly

10:00 – 11:00

Location: Convention Hall C
 All delegates from Pan America are encouraged to attend.

1102 Therapeutic Plenary Session

Update on Management Strategies for Dystonia and Tremor
11:00 – 13:00

Location: Hall 5G
 Chairs: Marina De Koning-Tijssen, *Netherlands*
 Jonas Hon Ming Yeung, *Hong Kong*

1102 Therapeutic Plenary Session, cont.

11:00 Pharmacologic Management of Dystonia and Tremor: An Under-Utilized Approach?
 Tiago Mestre, *Canada*

11:40 Botulinum Toxin for Dystonia and Tremor: Old Standards and New Opportunities
 Raymond Rosales, *Philippines*

12:20 Surgical Intervention for Dystonia and Tremor: Past, Present and Future
 Jens Volkmann, *Germany*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Select a management strategy for pharmacologic treatment of dystonia and tremor
2. Recognize and apply botulinum toxin as a treatment for dystonia and tremor
3. Evaluate and select candidates with dystonia and tremor for surgical intervention

CSPC Liaison: Steven Frucht, *USA*

1103 Therapeutic Plenary Session

Update on Management Strategies of Hyperkinetic Movement Disorders: Tics, Myoclonus, and Restless Legs Syndrome
14:30 – 16:30

Location: Hall 5G
 Chairs: Raymond Rosales, *Philippines*
 Claudia Trenkwalder, *Germany*

14:30 Update on the Management Strategy of Tics: Differential Diagnosis and New Therapeutic Approaches
 Andreas Hartmann, *France*

15:10 Update on the Management Strategy of Myoclonus: Common and Rare Causes and New Therapeutic Approaches
 Marina De Koning-Tijssen, *Netherlands*

15:50 Update on Restless Legs Syndrome: Pathophysiological Concepts and Evidenced Based Therapy
 Juliane Winkelmann, *Germany*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Students/Residents/Trainees

1103 Therapeutic Plenary Session, cont.

At the conclusion of this session, participants should be better able to:

1. Describe the differential diagnosis of tic disorders and new treatment approaches
2. Explain common and rare causes of myoclonus and options available for treatment
3. Outline the pathogenesis of restless legs syndrome and its evidenced based therapy

CSPC Liaison: Claudia Trenkwalder, *Germany*

1104 Therapeutic Plenary Session

Update on Neurosurgical Management of Movement Disorders
17:00 – 19:00

Location: Hall 5G
 Chairs: Danny Chan, *Hong Kong*
 Elena Moro, *France*

17:00 Deep Brain Stimulation Surgery for Movement Disorders: Where Do We Stand
 Patricia Limousin, *United Kingdom*

17:40 Current Role of Lesions in the Management of Movement Disorders
 José Obeso, *Spain*

18:20 Current Trends and New Horizons in Neurosurgery for Movement Disorders
 Andres Lozano, *Canada*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Summarize the current state of the art in the treatment of movement disorders with DBS
2. Identify advantages and disadvantages of lesion-based therapies for movement disorders
3. Describe the most recent advances in DBS surgery for movement disorders

CSPC Liaison: Elena Moro, *France*

Welcome Ceremony

19:30 – 21:30

Location: Grand Hall



Saturday, October 6, 2018

2101 Plenary Session

**Presidential Lectures
8:00 – 10:00**

Location: Hall 5G
Chairs: Christopher Goetz, *USA*
Claudia Trenkwalder, *Germany*

8:00 Stanley Fahn Lecture: Dystonia or Dystonias: Hybrid Wonder and Mystery
Marie Vidailhet, *France*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should better be able to:

- Illustrate and conceptualize dystonia as a complex network disorder with clinical diversity and expanding boundaries. Appraise lessons from clinical experience and treatment approaches to gain perspective of new treatment modalities based on insight into pathophysiology.

9:00 Junior Lecture Awards
Stefan Lang, *Canada*
Elie Matar, *Australia*
Seyed-Mohammad Fereshtehnejad, *Canada*

9:30 C. David Marsden Lecture:
3D Human Brain Organoids:
Towards a Better Disease Model
Eng-King Tan, *Singapore*

At the conclusion of this session, participants should be better able to:

- Recognize the limitations of current invitro and invivo models of Parkinson's disease, evaluate the concepts and challenges in the generation of 3D human brain organoids, and review the potential applications of 3D human brain organoids in medical disease including Parkinson's disease

CSPC Liaison: Hyder Jinnah, *USA*

The MDJ Paper of the Year and Honorary Member Awards will also be presented at the beginning of this session.

2102 Themed Plenary Session

**Modulation of Gene Expression and Neurodegenerative Movement Disorders
10:30 – 12:30**

Location: Hall 5G
Chairs: Christine Klein, *Germany*
Baorong Zhang, *People's Republic of China*

10:30 Overview of Epigenetics and Its Impact on Neurodegeneration
Tiago Outeiro, *Germany*

11:10 Overview of Non-Coding Genetic Elements and Their Impact on Neurodegeneration
Menno Creyghton, *Netherlands*

11:50 Therapeutic Implications of Epigenetic and Non-Coding Modulatory Elements
Wim Mandemakers, *Netherlands*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

- Describe the basic principles of epigenetics and their possible implications for neurodegeneration (including pathogenesis, biomarkers, and therapeutic targets)
- Summarize current knowledge on the role of non-coding genetic sequences in the pathogenesis of Parkinson's disease (cis-regulatory DNA elements, genetic enhancers, non-coding RNAs)
- Discuss the therapeutic potential of manipulating epigenetic mechanisms and non-coding genetic elements for neurodegenerative diseases

CSPC Liaison: Vincenzo Bonifati, *Netherlands*

Guided Poster Tours

13:45 – 15:15

Guided Poster Tour 1: Clinical Trials and Therapy in Movement Disorders

Guided Poster Tour 2: Parkinson's Disease: Clinical Trials, Pharmacology and Treatment

Guided Poster Tour 3: Surgical Therapy: Parkinson's Disease

Location: Hall 3FG

Poster Session

13:45 – 15:15

Abstract Numbers: 1 – 602

Location: Hall 3FG

2203 Parallel Session

**Ethical Issues and Novel Technologies for the Practicing Clinician
15:30 – 17:30**

Location: Room S421
Chairs: Beomseok Jeon, *South Korea*
Kapil Sethi, *USA*

15:30 Ethical Issues in Movement Disorders
Wolfgang Oertel, *Germany*

16:10 Ethical Issues with Genetic Testing in the Next Generation Sequencing Era
Christine Klein, *Germany*

16:50 The Role of the Clinician In the Era of Advanced Diagnostic Testing
Beomseok Jeon, *South Korea*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

- Discuss basic ethical issues relevant to the management of patients with movement disorders
- Describe the ethical concerns with genetic testing in the next generation sequencing era
- Describe the ethical concerns for advanced diagnostic testing in the diagnosis and management of movement disorders

CSPC Liaison: Beomseok Jeon, *South Korea*

Saturday, October 6, 2018

2204 Parallel Session

Novel Technology-Based Therapies on the Horizon 15:30 – 17:30

- Location: Hall 5G
Chairs: Olivier Rascol, *France*
Don Cleveland, *USA*
- 15:30 Active and Passive Immunization for Parkinson's Disease and Other Proteinopathies
Werner Poewe, *Austria*
- 16:10 Gene Editing and Gene Silencing for Huntington's Disease and Other Genetic Disorders
Don Cleveland, *USA*
- 16:50 Enhancing Clearance of Pathological Proteins in Parkinson's Disease and Other Proteinopathies
Seung-Jae Lee, *South Korea*

Recommended Audience: Basic scientists, Clinical academicians, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe the rationale and current status of immune therapy for Parkinson's disease and other neurodegenerative disorders that involve abnormal protein accumulation
2. Describe the rationale and current status of novel genetic technologies for treatment of inherited neurological disorders
3. Describe the rationale and potential for modulating protein clearance mechanism such as autophagy for treatment of Parkinson's disease and related disorders involving abnormal protein accumulation

CSPC Liaison: Hyder Jinnah, *USA*

2205 Parallel Session

New Insights in Dystonia: Genetics, Anatomy, and Neurophysiology 15:30 – 17:30

- Location: Theatre 2
Chairs: Mark Hallett, *USA*
Hyder Jinnah, *USA*
- 15:30 Genetics
Katja Lohmann, *Germany*
- 16:10 Neuroanatomical Perspective
Ellen Hess, *USA*
- 16:50 Neurophysiology
Angelo Quartarone, *Italy*

Recommended Audience: Basic scientists, Clinical academicians

2205 Parallel Session , cont.

At the conclusion of this session, participants should be better able to:

1. Summarize different genes that are relevant in dystonia
2. Describe anatomical and pathological findings associated with dystonia
3. Identify physiological and network changes in the CNS associated with dystonia

CSPC Liaison: Vladimir Kostic, *Serbia*

2206 Parallel Session

What's New in Genetics of Movement Disorders 15:30 – 17:30

- Location: Theatre 1
Chairs: Nobutaka Hattori, *Japan*
Baorong Zhang, *People's Republic of China*
- 15:30 Parkinson's Disease and Parkinsonism
Vincenzo Bonifati, *Netherlands*
- 16:10 Hyperkinetic Movement Disorders
Carolyn Sue, *Australia*
- 16:50 Genetic Testing in the Next-Generation Sequencing Era
Martha Nance, *USA*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Summarize recently identified genes related to Parkinson's disease and Parkinsonism
2. Summarize recently identified genes related to dystonia, tremor paroxysmal movement disorders, and others
3. Discuss current genetic testing methods for the diagnosis of movement disorders

CSPC Liaison: Vincenzo Bonifati, *Netherlands*

2207 Parallel Session

Evolution of Movement Disorders in the Pediatric Population 15:30 – 17:30

- Location: Room S221
Chairs: Roland Dominic Jamora, *Philippines*
Yoshiko Nomura, *Japan*
- 15:30 A Practical Approach to the Diagnosis of Movement Disorders in Children
Yoshiko Nomura, *Japan*

2207 Parallel Session , cont.

- 16:10 The Spectrum of Childhood Movement Disorders and Their Evolution to Adulthood
Jennifer Friedman, *USA*
- 16:50 Crossing Barriers: Transitioning From Pediatric Care to Adult Care
Eavan McGovern, *France*
Emmanuel Roze, *France*

Recommended Audience: Basic scientists, Clinical academicians, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe a practical approach to the diagnosis of movement disorders in children
2. Recognize the spectrum of pediatric movement disorders and their evolution to adulthood
3. Describe the problems associated with transitioning from pediatric to adult neurology care

CSPC Liaison: Roland Dominic Jamora, *Philippines*

2208 Parallel Session

Late Breaking News in Movement Disorders 15:30 – 17:30

- Location: Convention Hall B
Chairs: Michael Okun, *USA*
Ryosuke Takahashi, *Japan*
- 15:30 IPS Cells: An Old and New Approach for Understanding and Treating Movement Disorders?
Ryosuke Takahashi, *Japan*
- 16:10 GBA Mutations: A Basis for Individualized Therapy in Parkinson's Disease?
Nir Giladi, *Israel*
- 16:50 Can Understanding LRRK2 Lead to New Therapies?
Chin-Hsien Lin, *Taiwan*

Recommended Audience: Basic scientists, Clinical academicians, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Explain the potential role of IPS cells for understanding and treating Parkinson's disease
2. Identify recent progress in linking GBA mutations to disease mechanisms and their implication for treatment trials
3. Describe approaches for disease modifying therapy in PD with LRRK2 as target for therapeutic trials

CSPC Liaison: Claudia Trenkwalder, *Germany*



Saturday, October 6, 2018

2309 Teaching Course

Gait Abnormalities in Movement Disorders 15:30 – 17:30

Location: Convention Hall A
Chairs: Bastiaan Bloem, *Netherlands*
Barry Snow, *New Zealand*

15:30 How to Examine Gait and
Balance
John Nutt, *USA*

16:10 Gait Problems in Parkinsonism
and Frontal Lobe Gait Disorders
Simon Lewis, *Australia*

16:50 Gait Problems in Hyperkinetic
Movement Disorders
Alfonso Fasano, *Canada*

Recommended Audience: Clinical academicians, Non-physician
Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be
better able to:

1. Review the clinical features of normal gait and to
recognize key abnormalities according to the level of
neurological system affected ('higher, middle, lower
order gait disorders')
2. Describe gait disorders seen in Parkinsonian disorders
and frontal lobe gait disorders
3. Describe gait disorders seen in other movement
disorders such as ataxia, chorea, and dystonia

CSPC Liaison: Alice Nieuwboer, *Belgium*

2310 Teaching Course

Movement Disorders Meets Psychiatry 15:30 – 17:30

Location: Convention Hall C
Chairs: Mark Edwards, *United Kingdom*
Jon Stone, *United Kingdom*

15:30 Psychiatric Features in
Movement Disorders
Victor Fung, *Australia*

16:10 Functional Movement Disorders
Mark Edwards, *United Kingdom*

16:50 Movement Disorders in
Psychiatric Patients
Peter Kempster, *Australia*

Recommended Audience: Clinical academicians, Non-physician
Health Professionals, Practitioners, Students/Residents/Trainees

This course will be videotaped and developed into an online
MDS education module that will be available in January free to
members.

2310 Teaching Course , cont.

At the conclusion of this session, participants should be
better able to:

1. Recognize the main psychiatric disturbances in
patients with different movement disorders
2. Discuss the clinical features and psychiatric
background of functional movement disorders
3. Describe movement disorders in psychiatric disorders
including side effects of drugs

CSPC Liaison: Helio Teive, *Brazil*

2411 Skills Workshop

Traditional Methods vs. Novel Technologies for Assessing Tremor 18:00 – 19:30

Location: Convention Hall C
Dietrich Haubenberger, *USA*
Fatta Nahab, *USA*

*This interactive session will provide evidences about
the useful, validity and reliability of new wearable
assessment tools that could potentially be used in the home
environment as an objective method to monitor essential
tremor and PD tremor and facilitate optimizing therapeutic
interventions. In this session the presenters will discuss the
objective limitations and strengths of clinical assessment of
tremor with respect the new remote and portable devices to
measure tremor.*

Recommended Audience: Basic scientists, Clinical academicians,
Non-physician Health Professionals, Practitioners, Students/
Residents/Trainees

At the conclusion of this session, participants should be
better able to:

1. Identify new motion sensor systems for analysis,
diagnosis, and assessment of tremor
2. Describe the advantages and disadvantages of
technology-based assessments, and estimate its
accuracy and test-re-test reliability
3. Integrate the classical criteria and new instruments for
tremor characterization and assessment

CSPC Liaison: Emilia Gatto, *Argentina*

2412 Skills Workshop

Practical Use of the MDS- UPDRS: A Global Effort 18:00 – 19:30

Location: Room S221
Vincent Mok, *Hong Kong*
Glenn Stebbins, *USA*

*This interactive session will allow registrants to understand
the core construct elements of the MDS-UPDRS, practice
application of the scale in a series of test cases with
interactive discussion by the faculty, and appreciate the
process of establishing official non-English versions of
the scale with special emphasis on the numerous Asian
languages completed and in process.*

Recommended Audience: Basic scientists, Clinical academicians,
Non-physician Health Professionals, Practitioners, Students/
Residents/Trainees

At the conclusion of this session, participants should be
better able to:

1. Apply and interpret the scale in clinical and research
settings including available technological advances
including apps and on-line training program
2. Practice using the MDS-UPDRS through interactive
exercises and test cases during the session
3. Recognize the process utilized to develop non-English
official versions of the MDS-UPDRS with special
emphasis on available Asian language editions

CSPC Liaison: Christopher Goetz, *USA*

2413 Skills Workshop

Integrative Medicine and Multidisciplinary Care 18:00 – 19:30

Location: Room S421
Jennifer Goldman, *USA*
Alice Nieuwboer, *Belgium*

*This interactive session will demonstrate the unique and
complementary role of each discipline in a multidisciplinary
care team for patients with Movement disorders and
identify strategies for building inter-professional networks
and community partnerships.*

Recommended Audience: Clinical academicians, Non-physician
Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be
better able to:

1. Identify the value and efficacy of integrated care
management for different stages of Parkinson's
disease and other common movement disorders
2. Appraise the scientific basis of non-pharmacological
interventions of Parkinson's disease and other
common movement disorders
3. Optimize strategies and logistics to implement
patient-centered care in movement disorder clinics

CSPC Liaison: Maria Stamelou, *Greece*

Saturday, October 6, 2018

2414 Skills Workshop Room

Novel Scientific Tools For Advancing the Understanding of Movement Disorders 18:00 – 19:30

Location: Convention Hall B
Tomas Bjorklund, Sweden
Alexandra Nelson, USA

In this interactive session, the presenters will discuss novel emerging technologies that can be utilized for both basic and therapeutic research on movement disorders. Two types of technologies will be in focus, on one hand, circuit manipulation via optogenetics and chemogenetics and, on the other hand, editing of genomic DNA via CRISPR/Cas9 methodology.

Recommended Audience: Basic scientists, Clinical academicians, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe possible applications of optogenetics and chemogenetics to study the pathophysiology of movement disorders
2. Define the basic principles of CRISPR/Cas9 methodology for editing genomic DNA
3. Describe the technical and biological requirements that need to be fulfilled for a fruitful application of the above technologies

CSPC Liaison: M. Angela Cenci Nilsson, Sweden

2515 Video Session

Showcases From Asia 18:00 – 19:30

Location: Theatre 2
Cid Czarina Diesta, Philippines
Shen-Yang Lim, Malaysia

In this interactive session, the presenters will present and discuss movement disorders that are more common in the Asian population

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize hereditary movement disorders which are more common in Asians
2. Recognize acquired movement disorders which are related with environment or culture in Asians
3. Discuss how geographical origin or ethnic background can influence differential diagnosis

CSPC Liaison: Beomseok Jeon, South Korea

2516 Video Session

Unusual Movement Disorders 18:00 – 19:30

Location: Hall 5G
Carlos Cosentino, Peru
Francesca Morgante, Italy

In this interactive session, the faculty will present videos of less common inherited and acquired movement disorders and provide an approach of how to generate a reasonable differential diagnosis. Appropriate investigations and treatment will be discussed.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize less common inherited movement disorders
2. Recognize less common acquired or idiopathic movement disorders
3. Describe an approach to the differential diagnosis of unusual movement disorders

CSPC Liaison: Shen-Yang Lim, Malaysia

2517 Video Session

How to Examine: A Clinician's Perspective of Bedside Examination 18:00 – 19:30

Location: Theatre 1
Niall Quinn, United Kingdom
Stephen Reich, USA

This interactive session will demonstrate how to identify valuable clues during various portions of an examination, and how to prompt responses without preconception.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe optimal techniques to elicit a comprehensive history
2. Develop best techniques to elicit an informative examination
3. Develop appropriate reasoning to achieve accurate diagnoses

CSPC Liaison: Irene Litvan, USA

2518 Video Session

Ataxia 18:00 – 19:30

Location: Convention Hall A
Orlando Barsottini, Brazil
Kinya Ishikawa, Japan

In this interactive session using video and case examples, participants will gain knowledge of the clinical features and differential diagnoses of various ataxia syndromes along with ways to diagnosis and manage these ataxias.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Identify clinical features in the differential diagnosis of acquired, sporadic, and hereditary ataxias
2. Review the systematic work up of the ataxias
3. Discuss examination strategies to elicit and facilitate the diagnosis of ataxia signs and symptoms

CSPC Liaison: Jennifer Goldman, USA



Sunday, October 7, 2018

3101 Plenary Session

Update on Recent Clinical Trials 8:00 – 9:30

Location: Hall 5G
Chairs: Carolyn Sue, *Australia*
Louis Tan, *Singapore*

8:00 Update on Clinical Trials in Parkinson's Disease: Motor
Thomas Foltynie, *United Kingdom*

8:30 Update on Clinical Trials in Parkinson's Disease: Non-Motor
Karen Marder, *USA*

9:00 Update on Clinical Trials in Atypical Parkinsonian Disorders
Wassilios Meissner, *France*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Discuss recent clinical trials in Parkinson's disease
2. Review recent clinical trials for non-motor features of Parkinson's disease
3. Discuss recent clinical trials for atypical parkinsonian disorders

CSPC Liaison: Jennifer Goldman, *USA*

MDS Business Meeting

9:30 – 10:30

Location: Theatre 2
All delegates are encouraged to attend.

3102 Plenary Session

Grand Rounds 10:30 – 12:30

Location: Hall 5G
Chairs: Mandy Au-Yeung, *Hong Kong*
Yuk-Fai Nelson Cheung, *Hong Kong*
Vincent Mok, *Hong Kong*

MDS Experts: Kailash Bhatia, *United Kingdom*
Susan Fox, *Canada*
Yoshikuni Mizuno, *Japan*
Mayela Rodriguez Violante, *Mexico*

Registrars Presenting Cases:

Lisa Au, *Hong Kong*
Anne Chan, *Hong Kong*
Karen Ma, *Hong Kong*
Margaret Ma, *Hong Kong*

In this interactive session, MDS experts will examine interesting common and complex patients. The audience will learn how they formulate diagnoses and manage these interesting and challenging patients.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3102 Plenary Session, cont.

At the conclusion of this session, participants should be better able to:

1. Identify how experts use the clinical history and exam to formulate their diagnosis in movement disorders cases
2. Identify how experts use diagnostic testing in the differential diagnosis of movement disorders
3. Identify how experts plan therapies for movement disorder patients

CSPC Liaison: Hyder Jinnah, *USA*

Guided Poster Tours

13:45 – 15:15

Guided Poster Tour 4: Ataxia
Guided Poster Tour 5: Dystonia
Guided Poster Tour 6: Chorea (Non-Huntington's Disease) and Huntington's Disease
Guided Poster Tour 7: Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)
Guided Poster Tour 8: Technology
Guided Poster Tour 9: Tremor

Location: Hall 3FG

Poster Session

13:45 – 15:15

Abstract Numbers: 603-1216

Location: Hall 3FG

3203 Parallel Session TICKET

Advances in Stem Cells and Parkinson's Disease 15:30 – 17:30

Location: Theatre 2
Chairs: Dimitri Krainc, *USA*
Ken Yung, *Hong Kong*

15:30 Human Stem Cells: Options Available
Jeffrey Kordower, *USA*

16:10 Modeling Pathogenesis of Parkinson's Disease
Dimitri Krainc, *USA*

16:50 Stem Cells for Therapeutics: Fantasy or Reality?
Anne Rosser, *United Kingdom*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3203 Parallel Session TICKET, cont.

At the conclusion of this session, participants should be better able to:

1. Describe the history and technological advances in stem cell biology
2. Explain how stem cells can be used to study the pathogenesis of Parkinson's disease
3. Discuss the current status of stem cell therapy including challenges and pitfalls

CSPC Liaison: Karen Marder, *USA*

3204 Parallel Session TICKET

Technologies to Advance Neuromodulation Therapy for Movement Disorders 15:30 – 17:30

Location: Theatre 1
Chairs: Volker Coenen, *Germany*
Takaomi Taira, *Japan*

15:30 New Engineering Technologies
Alberto Priori, *Italy*

16:10 New Surgical Strategies
Volker Coenen, *Germany*

16:50 New Technologies for Patient Selection
Maria Contarino, *Netherlands*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe the most recent advances in neuromodulation technologies including closed loop and adaptive stimulation and steerable electrodes
2. Compare emerging trends in surgical strategies including intraoperative imaging, local field potentials, or networks
3. Define the new developments to improve patient selection for neuromodulation therapies including imaging, biomarkers and genetics

CSPC Liaison: Elena Moro, *France*

Sunday, October 7, 2018

3205 Parallel Session

Visual Hallucinations in Parkinson's Disease and Lewy Body Dementias: From Mechanism to Management 15:30 – 17:30

Location: Room S421
Chairs: Jennifer Goldman, *USA*
Daniel Weintraub, *USA*

15:30 Current Theories on Visual Hallucinations
John-Paul Taylor, *United Kingdom*

16:10 Neuroimaging and Visual Hallucinations: A Window Into Their Mechanism
Javier Pagonabarraga, *Spain*

16:50 Management Strategies for Visual Hallucinations
Daniel Weintraub, *USA*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Discuss current theories of visual hallucinations in Parkinson's disease and Lewy body dementias
2. Describe neuroimaging findings associated with visual hallucinations in Parkinson's disease and Lewy body dementias
3. Review management strategies for visual hallucinations in Parkinson's disease and Lewy body dementias

CSPC Liaison: Jennifer Goldman, *USA*

3206 Parallel Session

Prodromal Parkinson's Disease 15:30 – 17:30

Location: Convention Hall B
Chairs: Daniela Berg, *Germany*
Etienne Hirsch, *France*

15:30 Clinical, Genetic, and Imaging Features
Daniela Berg, *Germany*

16:10 Understanding the Biological Basis of Prodromal Parkinson's Disease
Etienne Hirsch, *France*

16:50 The Future: How to Modify the Course of Parkinson's Disease
Jean-Christophe Corvol, *France*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3206 Parallel Session , cont.

At the conclusion of this session, participants should be better able to:

1. Identify clinical genetic and imaging features for prodromal Parkinson's disease
2. Explain the pathophysiological basis for prodromal Parkinson's disease
3. Discuss future clinical trial design and strategies for disease modification

CSPC Liaison: Jennifer Goldman, *USA*

3207 Parallel Session

Challenges in Clinicogenetic Correlations: One Gene – Many Phenotypes; One Phenotype – Many Genes 15:30 – 17:30

Location: Room S221
Chairs: Vincenzo Bonifati, *Netherlands*
Hyder Jinnah, *USA*

15:30 One Gene – Many Phenotypes
Roberto Erro, *Italy*

16:10 One Phenotype – Many Genes
Marialuisa Quadri, *Netherlands*

16:50 Clinical Implications – Diagnosis and Management Strategies
Eng King Tan, *Singapore*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize the sometimes different and complex phenotypes of monogenic mutations
2. Recognize similar clinical phenotypes resulting from different genetic mutations
3. Discuss the evolving role of genetics in the diagnosis and management of movement disorders

CSPC Liaison: Vincenzo Bonifati, *Netherlands*

3208 Parallel Session

Understanding and Managing Complex Gait Disorders in Parkinson's Disease 15:30 – 17:30

Location: Hall 5G
Chairs: Nir Giladi, *Israel*
Alice Nieuwboer, *Belgium*

15:30 The Interplay Between Walking Ability and Cognitive Function
Lynn Rochester, *United Kingdom*

3208 Parallel Session , cont.

16:10 Complex Gait and Postural Instability: A Balancing Act?
Colum MacKinnon, *USA*

16:50 Assessment and Therapeutic Options for Complex Gait Disorders: A Contemporary View
Bastiaan Bloem, *Netherlands*

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize how prefrontal dysfunction impacts on complex walking ability
2. Identify the locomotor-brainstem network abnormalities underlying gait disorders
3. Discuss management strategies which target the complexity of gait deficits

CSPC Liaison: Alice Nieuwboer, *Belgium*

3309 Teaching Course

Wearable Technology and Machine Learning for Quantitative Evaluation of Parkinson's Disease 15:30 – 17:30

Location: Convention Hall A
Chairs: Roongroj Bhidayasiri, *Thailand*
Alberto Espay, *USA*

15:30 Wearable Sensors and Smart Phones: Can They Be Diagnostic Tools?
Alberto Espay, *USA*

16:10 Machine Learning and Large-Scale Sensor-Based Analysis for Parkinson's Disease
Bjoern Eskofier, *Germany*

16:50 Wearable Technology for Monitoring Patients at Home
Roongroj Bhidayasiri, *Thailand*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe novel technologies that may be applied to diagnosis of movement disorders
2. Discuss the future use of wearable technology and web-based applications
3. Explain machine learning approaches for large data analyses

CSPC Liaison: Antonio Strafella, *Canada*



Sunday, October 7, 2018

3310 Teaching Course **TICKET**

Update on Huntington's Disease and Other Chorea 15:30 – 17:30

Location: Convention Hall C
Chairs: Emilia Gatto, *Argentina*
Hui Fang Shang, *People's Republic of China*

15:30 Huntington's Disease Clinical Recognition and Differential Diagnosis of Chorea
Hui Fang Shang, *People's Republic of China*

16:10 Current Concepts of Huntington's Disease Pathogenesis
Alexandra Durr, *France*

16:50 Symptomatic and Disease Modifying Treatments for Chorea and Huntington's Disease
Hitoshi Okazawa, *Japan*

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize the clinical features of Huntington's disease subtypes and generate a classification-oriented differential diagnosis
2. Discuss disease mechanisms and genetic modifiers for Huntington's disease
3. Describe symptomatic therapies for chorea and emerging strategies to address Huntington's disease progression

CSPC Liaison: Jean-Christophe Corvol, *France*

3411 Skills Workshop **TICKET**

Urogenital Dysfunction in Parkinson's Disease 18:00 – 19:30

Location: Theatre 2
Onanong Jitkriksadaku, *Thailand*
Jalesh Panicker, *United Kingdom*

In this interactive session, participants will learn how to investigate and treat bladder and sexual dysfunction in patients with Parkinson's disease.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3411 Skills Workshop **TICKET**, cont.

At the conclusion of this session, participants should be better able to:

1. Identify the basis of bladder and sexual dysfunction in Parkinson's disease
2. Recognize the impact of bladder and sexual dysfunction on quality of life for patient and partner
3. Determine evidence-based and state-of-the-art management strategies for bladder and sexual dysfunction in Parkinson's disease

CSPC Liaison: Shen-Yang Lim, *Malaysia*

3412 Skills Workshop **TICKET**

Atypical Parkinson Disorders: Multiple System Atrophy and Corticobasal Degeneration / Progressive Supranuclear Palsy 18:00 – 19:30

Location: Hall 5G
Han-Joon Kim, *South Korea*
Maria Stamelou, *Greece*

In this interactive session, attendees will learn how to diagnose and treat the different atypical parkinsonian disorders.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Distinguish atypical Parkinsonian disorders based on clinical features
2. Discuss ancillary investigations for the diagnosis of atypical Parkinsonian disorders
3. Describe therapeutic options for atypical Parkinsonian disorders

CSPC Liaison: Wassilios Meissner, *France*

3413 Skills Workshop **TICKET**

Botulinum Toxins 18:00 – 19:30

Location: Convention Hall A
Ryuji Kaji, *Japan*
Erle Chuen-Hian Lim, *Singapore*

In this interactive session participants will discuss strategies for the use of Botulinum toxins in various movement disorders.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Summarize the importance of accurate diagnosis and clinical examination of muscle patterns involved for optimal BoNT treatment of movement disorders
2. Apply state-of-the-art BoNT procedures for focal dystonias, spasticity and other disorders
3. Recognize more challenging cases and how to deal with them

CSPC Liaison: Hyder Jinnah, *USA*

3414 Skills Workshop **TICKET**

Lessons from My Patients 18:00 – 19:30

Location: Convention Hall C
Cynthia Comella, *USA*
Oscar Gershanik, *Argentina*

In this interactive session, the presenters will analyze important clinical history and exam management approaches, recognize key features to determine appropriate strategies, and explore common pitfalls of the evaluation process that they have learned from experience.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Critique pertinent clinical history and examinations when diagnosis and management are in doubt
2. Interpret key features and construct appropriate diagnostic and management strategies
3. Identify common pitfalls in the evaluation of movement disorders

CSPC Liaison: Roongroj Bhidayasiri, *Thailand*

Sunday, October 7, 2018

3415 Skills Workshop **TICKET**

Rare Autoimmune and Infectious Movement Disorders Not to Miss 18:00 – 19:30

Location: Convention Hall B
Bettina Balint, *United Kingdom*
Mohit Bhatt, *India*

In this interactive session, the presenters will discuss the diagnosis of movement disorder presentations of antibody-related disease providing red flags and syndromic approaches to facilitate a rapid recognition and diagnosis of an autoimmune disorder taking into account that early therapeutic intervention improves long-term prognosis and may be life-saving. On the other hand, presenters will provide the clinical tips to recognize movement disorders associated with infections, a very debilitating disorder in several areas around the world.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize autoimmune and infectious rare movement disorders
2. Discuss diagnostic tests for autoimmune and infectious rare movement disorders
3. Describe therapeutic options for autoimmune and infectious rare movement disorders

CSPC Liaison: Emilia Gatto, *Argentina*

3416 Skills Workshop **TICKET**

Tremor Update 18:00 – 19:30

Location: Room S221
Günther Deuschl, *Germany*
Rodger Elble, *USA*

In this interactive session, participants will learn the history and evolution, as well as a more updated view of the definition and classification of all types of tremors.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Summarize the history and evolution of the term "essential tremor"
2. Describe the recently proposed changes in the definitions and classifications of all tremors
3. Outline areas of ongoing uncertainty in the differential diagnosis of various tremors

CSPC Liaison: Steven Frucht, *USA*

3417 Skills Workshop **TICKET**

Challenges in Movement Disorders Education: A Comparison of Africa and Asia 18:00 – 19:30

Location: Room S421
Njideka Okubadejo, *Nigeria*
Louis Tan, *Singapore*

A core mission of the International Parkinson and Movement Disorder Society is to educate its members and the community throughout the world. In this interactive session, the participants will learn approaches to movement disorder education and training in Asia and Sub-Saharan Africa. The Asian and Oceanic section of MDS has grown and evolved considerably in recent years serving as a foundation for education and training, while new initiatives in Sub-Saharan Africa are evolving.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe the current and past movement disorder educational activities taking place in Sub-Saharan Africa
2. Describe the current and past movement disorder educational activities taking place in Asia
3. Identify the potential strategies for enhancing movement disorder training in different parts of the world

CSPC Liaison: Matthew Stern, *USA*

3518 Video Session **TICKET**

Eye Movements 18:00 – 19:30

Location: Theatre 1
Ji-Soo Kim, *South Korea*
Aasef Shaikh, *USA*

In this interactive session, attendees will learn how to examine eye movements, to recognize characteristic eye movement abnormalities and to interpret these findings in relation to clinical phenotype.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Apply bedside examination of eye movements for the differential diagnosis of movement disorders
2. Identify typical eye movement abnormalities of fixation, saccades, pursuit, vergence and vestibular function
3. Recognize characteristic eye movement abnormalities in movement disorders

CSPC Liaison: Wassilios Meissner, *France*



Monday, October 8, 2018

4101 Plenary Session

Advances in Huntington's Disease 8:00 – 9:30

Location: Hall 5G
Chairs: Karen Marder, *USA*
Hitoshi Okazawa, *Japan*

8:00 Novel Diagnostic Criteria for Huntington's Disease
Christopher Ross, *USA*

8:30 Clinical, Brain Imaging, and Wet Biomarkers for Monitoring of Huntington's Disease Progression
Emilia Gatto, *Argentina*

9:00 From Bench to Bedside: New Therapeutic Approaches for Huntington's Disease
Beverly Davidson, *USA*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe novel diagnostic criteria for Huntington's disease
2. Identify clinical, brain imaging, and biomarkers for the diagnosis of Huntington's disease and to monitor disease progression
3. Discuss new therapeutic approaches in Huntington's disease

CSPC Liaison: Jean-Christophe Corvol, *France*

4102 Plenary Session

Technology Based Assessments in Movement Disorders: Assessing Health and Treatment Response 10:00 – 12:00

Location: Hall 5G
Chairs: Rodger Elble, *USA*
Alberto Espay, *USA*

10:00 Biometric Monitoring Devices: Assessing Health, Disease Progression and Treatment Response
Walter Maetzler, *Germany*

10:40 Technology Based Assessment of Disability and Treatment Response in Premanifest and Manifest Huntington's Disease
Ralf Reilmann, *Germany*

4102 Plenary Session, cont.

11:20 Technology Based Assessments to Enhance Remote Monitoring in Parkinson's Disease
Anat Mirelman, *Israel*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Evaluate the rationale and context for use of biometric monitoring devices in clinical research
2. Describe the opportunities, challenges, and limitations of implementation of novel objective technology based measures in observational studies and clinical trials in Huntington's disease
3. Evaluate the potential for technology based assessments to facilitate remote monitoring in Parkinson's disease

CSPC Liaison: Karen Marder, *USA*

Healthcare Professionals Networking Opportunity (Open to all attendees)

12:30-13:30

Location: Room S421

Join the Health Professionals (Non-Physician) Special Interest Group (SIG) as they discuss exciting updates going on around the world, meet the SIGs Leadership, and discuss current trends in the field.

Guided Poster Tours

13:15 – 14:45

Guided Poster Tour 10:
Parkinson's Disease: Genetics

Guided Poster Tour 11:
Parkinson's Disease:
Neuroimaging and
Neurophysiology

Guided Poster Tour 12:
Parkinson's Disease: Non-Motor
Symptoms

Guided Poster Tour 13:
Parkinson's Disease:
Pathophysiology

Location: Hall 3FG

Poster Session

13:15-14:45

Abstract Numbers: 1217-1818

Location: Hall 3FG

Late-Breaking and Study Group
Abstract Poster Sessions

Location: Hall 3FG

4203 Parallel Session

New Imaging Frontiers in Movement Disorders 15:00 – 17:00

Location: Theatre 1
Chairs: Stephane Lehericy, *France*
Antonio Strafella, *Canada*

15:00 MRI, Ultra-High Field and Iron Imaging
Stephane Lehericy, *France*

15:40 Imaging Neurotransmitter Receptors
Maria Cecilia Peralta, *Argentina*

16:20 New Frontiers in Molecular Imaging
Makoto Higuchi, *Japan*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Explain existing and emerging MRI-based methods in the diagnosis or monitoring of patients with movement disorders
2. Describe the role of neurotransmitter-based imaging methods in the diagnosis or monitoring of movement disorders
3. Summarize novel imaging-based methods in the diagnosis or monitoring of movement disorders

CSPC Liaison: Antonio Strafella, *Canada*

4204 Parallel Session

Special Topics in Movement Disorders 15:00 – 17:00

Location: Convention Hall A
Chairs: Steven Frucht, *USA*
Rachel Saunders-Pullman, *USA*

15:00 Gender Differences
Rachel Saunders-Pullman, *USA*

15:40 Regional, Racial and Ethnic Differences
Roland Dominic Jamora, *Philippines*

16:20 In-Hospital Consultations
Tim Anderson, *New Zealand*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

Monday, October 8, 2018

4204 Parallel Session cont.

At the conclusion of this session, participants should be better able to:

1. Describe the epidemiology and risk factors for movement disorders in men and women
2. Relate genetic and environmental risk factors to differences in prevalence and incidence of movement disorders
3. Define the diagnosis and treatment of emergency room and intensive care movement disorder consultations

CSPC Liaison: Karen Marder, *USA*

4205 Parallel Session

Complementary and Alternative Medicine in Parkinson's Disease 15:00 – 17:00

Location: Theatre 2

Chairs: Benzi Kluger, *USA*
Vincent Mok, *Hong Kong*

15:00 Eastern Perspective
Sujith Ovalath, *India*

15:40 Western Perspective
Benzi Kluger, *USA*

16:20 Why Are Patients with Parkinson's Disease Attracted to CAM?

Sun Ju Chung, *South Korea*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Summarize the epidemiology and scientific evidence of CAM in Parkinson's disease including acupuncture, Chinese Herbs, Ayurvedic Medicine
2. Describe evidence both for and against Western CAM in Parkinson's disease including marijuana and mucuna supplements
3. Summarize the human factors, mass media effects, and our recommendation for complementary alternative medicine to patients with Parkinson's disease

CSPC Liaison: Beomseok Jeon, *South Korea*

4206 Parallel Session

Tardive Syndromes: A Re-Emerging Crisis? 15:00 – 17:00

Location: Convention Hall C
Chairs: Vladimir Kostic, *Serbia*
Louis Tan, *Singapore*

15:00 Tardive Syndromes: Causes, Incidence and Prevalence of a Re-emerging Crisis
Caroline Tanner, *USA*

15:40 The Broad Phenotype of Tardive Syndromes: Challenges for Recognition
Vladimir Kostic, *Serbia*

16:20 Management Challenges in Tardive Syndromes: New Opportunities?
Pierre Blanchet, *Canada*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize the causes, incidence and prevalence of tardive syndromes
2. Recognize usual and unusual tardive syndromes, and differentiate them from their mimics
3. Formulate a treatment paradigm for patients with tardive syndromes

CSPC Liaison: Steven Frucht, *USA*

4207 Parallel Session

The Microbiome-Gut-Brain Axis and Parkinson's Disease 15:00 – 17:00

Location: Convention Hall B
Chairs: Yuk Fai Cheung, *Hong Kong*
Shen-Yang Lim, *Malaysia*

15:00 Basic Concepts of the Microbiome and Its Impact on Human Health and Disease
Filip Scheperjans, *Finland*

15:40 The Microbiome in Parkinson's Disease and Multiple System Atrophy: Clinical Studies
Ai Huey Tan, *Malaysia*

16:20 The Microbiome and Parkinson's Disease: Basic Studies
Ali Keshavarzian, *USA*

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

4207 Parallel Session cont.

At the conclusion of this session, participants should be better able to:

1. Explain the basic concepts of microbiome research and appreciate the role of the microbiome in human health and disease
2. Appraise the potential role of the microbiome in Parkinson's disease and related disorders, based on clinical studies
3. Discuss the gut-brain axis in Parkinson's disease pathogenesis, based on studies from animals

CSPC Liaison: Shen-Yang Lim, *Malaysia*

4208 Parallel Session

Fatal Attraction Between Tau and Alpha Synuclein in Parkinson's Disease Pathology 15:00 – 17:00

Location: Room S421

Chairs: Glenda Halliday, *Australia*
Günter Höglinger, *Germany*

15:00 Neuropathological Findings
Glenda Halliday, *Australia*

15:40 What Can We Learn from Animal Models?
Günter Höglinger, *Germany*

16:20 Biochemical and Molecular Mechanisms
Ronald Melki, *France*

Recommended Audience: Basic scientists, Clinical academicians, Students/Residents/Trainees Description

At the conclusion of this session, participants should be better able to:

1. Describe non-dopaminergic lesions in Parkinson disease and their related symptoms
2. Summarize what has been learned from animal models of Lewy and tau pathology
3. Describe the role of a-synuclein and tau in pathology spreading

CSPC Liaison: Etienne Hirsch, *France*

4309 Teaching Course

Treatable Movement Disorders Not to Miss 15:00 – 17:00

Location: Hall 5G

Chairs: Emilia Gatto, *Argentina*
Yih-Ru Wu, *Taiwan*

15:00 Treatable Early-Onset Disorders with Chorea and Dystonia
Ruth Walker, *USA*



Monday, October 8, 2018

4309 Teaching Course **TICKET**, cont.

- 15:40 Treatable Early-Onset Disorders with Ataxia and Spasticity
Helio Teive, *Brazil*
- 16:20 Treatable Early-Onset Disorders with Parkinsonism
Yih-Ru Wu, *Taiwan*

Recommended Audience: Basic scientists, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Description

At the conclusion of this session, participants should be better able to:

1. Recognize, diagnose and treat juvenile chorea and dystonia
2. Describe and differentiate juvenile ataxia and spasticity, including management options
3. Discuss the diagnosis and management of Parkinsonism in young patients

CSPC Liaison: Emilia Gatto, *Argentina*

This course will be videotaped and developed into an online MDS education module that will be available in January free to members.

4310 Teaching Course **TICKET**

Management of Parkinson's Disease: Advanced and Invasive Therapies 15:00 – 17:00

Location: Room S221
Chairs: Stephen Reich, *USA*
Lars Timmermann, *Germany*

- 15:00 Advanced Medical Therapies and When to Consider Patients for Invasive Therapies
Maria Rodriguez-Oroz, *Spain*
- 15:40 Deep Brain Stimulation and Other Surgical Interventions
Lars Timmermann, *Germany*
- 16:20 Infusion Therapies
Regina Katzenschlager, *Austria*

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize when more invasive therapies for the management of advanced Parkinson's disease should be considered
2. Explain the risks and benefits of Deep Brain Stimulation and other surgical interventions
3. Describe the risks and benefits of continuous subcutaneous apomorphine and levodopa intestinal gel

CSPC Liaison: Maria Stamelou, *Greece*

4411 Skills Workshop **TICKET**

Atypical Presentations of Common Movement Disorders 17:30 – 19:00

Location: Convention Hall B
Barry Snow, *New Zealand*
Pille Taba, *Estonia*

In this interactive session, the presenters will discuss the various clinical presentations of Parkinson's disease and other parkinsonian syndromes, identify unusual features of ataxic disorders including well-known genetic ataxias, and discuss atypical presentations of well-known genetic disorders.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Describe the various clinical presentations of Parkinson's disease and other parkinsonian syndromes
2. Describe the sometimes unusual presentations of other movement disorders
3. Describe atypical presentations of well-known genetic disorders

CSPC Liaison: Han-Joon Kim, *South Korea*

4412 Skills Workshop

How to Become a Successful Movement Disorder Specialist 17:30 – 19:00

Location: Room S421
Shengdi Chen, *People's Republic of China*
Esther Cubo, *Spain*
Stanley Fahn, *USA*

This workshop will provide the participant the opportunity to meet and discuss how to successfully approach becoming a movement disorder specialist. The goals will include an interactive review of steps to take to pursue a career in movement disorders as well as how to become an effective leader.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize the best approaches to become an excellent movement disorder specialist
2. Describe the best approaches to succeed in academia and practice
3. Identify essential aspects of becoming an effective leader

CSPC Liaison: Irene Litvan, *USA*

4413 Skills Workshop **TICKET**

Speech Analysis and Therapy 17:30 – 19:00

Location: Convention Hall A
Hanneke Kalf, *Netherlands*
Serge Pinto, *France*

In this interactive session, the presenters will examine speech and voice related symptoms, identify and test forms of dysarthria, and describe new forms of technology for speech/swallowing evaluation.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Examine speech and voice related symptoms of movement disorders
2. Describe current and emerging technologies for speech/swallowing evaluation
3. Summarize treatment strategies that may be applied for different speech disorders

CSPC Liaison: Antonio Strafella, *Canada*

4414 Skills Workshop Room **TICKET**

Spasticity Update 17:30 – 19:00

Location: Theatre 2
David Simpson, *USA*
Giovanni Stevanin, *France*

In this interactive session, participants will discuss new developments in the diagnosis and treatment of different types of spasticity.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize the varied clinical manifestations of different spasticity disorders, hereditary and acquired
2. Describe the biological mechanisms that may cause spasticity
3. Summarize current and emerging treatments for different types of spasticity

CSPC Liaison: Hyder Jinnah, *USA*

Monday, October 8, 2018

4515 Video Session **TICKET**

Practical Strategies for Tai Chi and Other Exercise Therapies for Parkinson's Disease
17:30 – 19:00

Location: Convention Hall C
Madeleine Hackney, USA
Margaret Mak, Hong Kong

In this interactive session, the presenters will discuss the exercise and Tai Chi options in managing people with Parkinson's disease, and appraise the evidence on efficacy and dosing of exercise and Tai Chi. Participants will also be shown video cases of various forms of exercise and Tai Chi for people with Parkinson's disease.

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize the breadth of exercise and Tai Chi options in managing Parkinson's disease
2. Appraise the evidence on the efficacy and dosing of exercise and Tai Chi for Parkinson's disease
3. Formulate strategies for integrating exercise and Tai Chi into the comprehensive management of people with Parkinson's disease

CSPC Liaison: Vincent Mok, Hong Kong

4516 Video Session **TICKET**

Movement Disorder Emergencies
17:30 – 19:00

Location: Room S221
Mandy Au-Yeung, Hong Kong
Steven Frucht, USA

In this interactive session, the presenters will discuss common occurrences and signs in movement disorder emergency conditions, and demonstrate management strategies for Parkinsonian as and non-Parkinsonian emergencies.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize clinical settings and signs in movement disorder emergencies
2. Outline management strategies of Parkinson-related emergencies
3. Outline management strategies of common non-Parkinsonian emergencies

CSPC Liaison: Roongroj Bhidayasiri, Thailand

4517 Video Session **TICKET**

Psychogenic Movement Disorders
17:30 – 19:00

Location: Hall 5G
Kathrin LaFaver, USA
Jon Stone, United Kingdom

In this interactive session, participants will review clinical information and video demonstrations in an interactive format to aid in the recognition of psychogenic movement disorders of all types.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize in a patterned approach the clinical profiles of hyperkinetic psychogenic movement disorders
2. Describe the clinical characteristics of psychogenic Parkinsonism and other hypokinetic psychogenic movement disorders
3. Identify the common social, psychological, medical, and legal circumstances associated with psychogenic movement disorders

CSPC Liaison: Vladimir Kostic, Serbia

4518 Video Session **TICKET**

Challenging Cases in DBS
17:30 – 19:00

Location: Theatre 1
Anna Castrioto, France
Riaan Van Collier, South Africa

In this interactive session, the presenters will discuss how to recognize and manage issues in movement disorders patients with DBS. These challenging cases will span from the indication for DBS to dealing with post-operative problems directly or indirectly related to DBS. Parkinson, dystonia and tremor DBS patients will be presented and discussed between faculty and audience.

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

At the conclusion of this session, participants should be better able to:

1. Recognize common and uncommon challenges in managing DBS patients with movement disorders
2. Identify diagnostic clues and treatment options in difficult DBS cases
3. Apply available strategies in managing challenging DBS cases

CSPC Liaison: Elena Moro, France

MDS Video Challenge Pre-Event Gathering

19:00 – 20:00

Location: Hall 5F

MDS Video Challenge

20:00 – 22:00

Location: Hall 5G

See International Congress Mobile App for more information.



Tuesday, October 9, 2018

<p>5101 Plenary Session </p> <p>Biomarkers for Parkinson's Disease 8:00 – 9:30</p> <p>Location: Hall 5G Chairs: Oscar Gershanik, <i>Argentina</i> Shu-Leong Ho, <i>Hong Kong</i></p> <p>8:00 What Makes a Good Biomarker? Brit Mollenhauer, <i>Germany</i></p> <p>8:30 Body Fluid and Tissue Biomarkers: Current and Future Douglas Galasko, <i>USA</i></p> <p>9:00 Imaging Biomarkers: Current and Future Antonio Strafella, <i>Canada</i></p> <p>Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees</p> <p>At the conclusion of this session, participants should be better able to:</p> <ol style="list-style-type: none"> 1. Define the characteristics of a good biomarker for Parkinson's disease 2. Describe proposed body fluid and tissue biomarkers for predicting or monitoring clinical features of Parkinson's disease 3. Summarize the role of neuroimaging for predicting or monitoring clinical features of Parkinson's disease <p>CSPC Liaison: Emilia Gatto, <i>Argentina</i></p>	<p>5102 Plenary Session</p> <p>Controversies in Movement Disorders 10:00 – 11:00</p> <p>Location: Hall 5G Chairs: Anthony Lang, <i>Canada</i> Victor Fung, <i>Australia</i></p> <p>10:00 Is DBS Superior to Lesioning in Movement Disorders Therapy? (YES) Elena Moro, <i>France</i></p> <p>10:15 Is DBS Superior to Lesioning in Movement Disorders Therapy? (NO) Takaomi Taira, <i>Japan</i></p> <p>10:30 Does Parkinson's Disease Start in the Gut? (YES) Kathleen Shannon, <i>USA</i></p> <p>10:45 Does Parkinson's Disease Start in the Gut? (NO) Roberto Cilia, <i>Italy</i></p> <p>Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees</p> <p>At the conclusion of this session, participants should be better able to:</p> <ol style="list-style-type: none"> 1. Describe the advantages and disadvantages of different surgical therapies for movement disorders 2. Explain "gut-brain axis" proposed by Braak and the evidence supporting or refuting <p>CSPC Liaison: Ryosuke Takahashi, <i>Thailand</i></p>	<p>5103 Plenary Session</p> <p>Blue Ribbon Highlights 11:00 – 12:00</p> <p>Location: Hall 5G M. Angela Cenci Nilsson, <i>Sweden</i> Un Kang, <i>USA</i></p> <p>Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees</p> <p>This session will provide a critical review of the best poster presentations by a panel of experts, highlighting the relevance, novelty, and quality of both clinical and basic research presented by delegates.</p> <p>At the conclusion of this session, participants should be better able to:</p> <ol style="list-style-type: none"> 1. Review recent developments in the basic sciences of Movement Disorders 2. Review recent developments in clinical diagnosis or monitoring of Movement Disorders 3. Explain how recent developments may impact our treatment of Movement Disorders <p>CSPC Liaison: Hyder Jinnah, <i>USA</i></p>
---	--	--

See International Congress mobile app for full faculty listing.

Corporate Therapeutic Symposia

These company-based informational sessions will provide attendees with non-CME educational opportunities to learn the latest in therapeutics.

FRIDAY, OCTOBER 5, 2018

Sunovion

Pathophysiology of OFF: Implications for Increasing Recognition of Motor Fluctuations
13:15-14:15

Location: Convention Hall C

SATURDAY, OCTOBER 6, 2018

Bial

Targeting COMT as the Levodopa Add-On Treatment for Parkinson's Disease
12:45-13:45

Location: Convention Hall C

Britannia Pharmaceuticals, LTD

Right Patient, Right Therapy, Right Time? Does the Treatment Paradigm for Parkinson's Patients Reflect the Evidence?
12:45-13:45

Location: Convention Hall A

SUNDAY, OCTOBER 7, 2018

AbbVie

When Oral Parkinsonian Medications Aren't Enough: Early Identification of Advanced PD and Selection of Advanced Treatment Options
12:45-13:45

Location: Convention Hall B

Biogen

PSP | Disease and Diagnosis
12:45-13:45

Location: Convention Hall A

GE Healthcare

Clinical experience with loflupane (123I) SPECT imaging in Parkinson's disease and latest PPMI research update
12:45-13:45

Location: Convention Hall C

Young Delegates Reception - Sunday, October 7

19:30 - 21:00 • Oasis+Concord III Room

at the Renaissance Harbour View Hotel Hong Kong

Sponsored by Acorda Therapeutics

MDS invites all Young Delegates at the International Congress to attend the Young Delegates Reception. Join your colleagues at the Renaissance Harbour View Hotel for a networking event.





Acknowledgements

The International Congress of Parkinson's Disease and Movement Disorders® wishes to acknowledge the following commercial supporters:

Platinum Plus Level

Bial

Keeping life
in mind.

Platinum Level

abbvie

ACORDA®
THERAPEUTICS

Biogen.

Boston
Scientific

BRITANNIA
PHARMACEUTICALS LTD



Medtronic

sunovion

Gold Level

Abbott

Zambon

Silver Level

ADAMAS™

ucb

Bronze Level

Ipsen Innovation

Roche

Supporting Organization

 **mehk** | Meetings &
Exhibitions
Hong Kong
A division of Hong Kong Tourism Board

The International Congress of Parkinson's Disease and Movement Disorders® Scientific Program is supported through unrestricted medical education grants from Abbott, Ipsen Innovation and Roche

STOP BY BOOTH L12



TO LEARN MORE ABOUT OUR WORK IN TIME-DEPENDENT BIOLOGY

ean
congress

5th Congress of the
European Academy
of Neurology

Oslo
2019

June 29 – July 2

Vi
sees
i Oslo

JOIN

AND ENJOY
THE CONGRESS
BENEFITS

ean.org/join

Neuroinflammation

Science. Synergies. Solutions.

 **ean**
european academy of neurology

www.ean.org/oslo2019
#ean2019   

A NEW STIMULUS

Abbott is leading change in
the field of neuromodulation.

St. Jude Medical Infinity™ DBS system



Segmented
directional lead



Upgradable,
recharge-free IPG



Intuitive programming with
touch screen iOS[®] interface

Abbott
One St. Jude Medical Dr., St. Paul, MN 55117 USA, Tel: 1 651 756 2000
SJM.com
St. Jude Medical is now Abbott.

Rx Only
Visit the Abbott booth for Important Safety Information. Prior to using these devices, please review the clinician's manual for a complete listing of indications, contraindications, warnings, precautions, potential adverse events, and directions for use. The system is intended to be used with leads and associated extensions that are compatible with the system.

™ Indicates a trademark of the Abbott group of companies.

‡ Indicates a third party trademark, which is property of its respective owner.

© 2018 Abbott. All Rights Reserved.

28429-SJM-INF-0618-0234 | Item approved for global use.



Pathophysiology of OFF:

Implications for Increasing Recognition of Motor Fluctuations

Friday, October 5, 2018

13:15-14:15

Lunch to be provided - optional

Hong Kong Convention and Exhibition Centre
Convention Hall C

Program:

- Welcome & Introductions - Stuart Isaacson, MD
- Non-motor Complications of PD - Nobutaka Hattori, MD, PhD
- Gastrointestinal Dysfunction and Motor Fluctuations - Stuart Isaacson, MD
- Panel Discussion

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



SUNOVION and  are registered trademarks of Sumitomo Dainippon Pharma Co., Ltd. Sunovion Pharmaceuticals Inc. is a U.S. subsidiary of Sumitomo Dainippon Pharma Co., Ltd. Sunovion Pharmaceuticals Inc., 84 Waterford Drive, Marlborough, MA 01752

©2018 Sunovion Pharmaceuticals Inc. All rights reserved.

www.acorda.com

LIFE. SCIENCE.™

ACORDA
T H E R A P E U T I C S

Acorda Therapeutics is committed to improving the lives of people with Parkinson's. We are proud to be a platinum sponsor at the 22nd International Congress of Parkinson's Disease and Movement Disorders.





PSP | Disease and Diagnosis

Join us for an engaging panel discussion
about **Progressive Supranuclear Palsy**

Convention Hall A, Level 1
Sunday, Oct. 7th, 12:45pm-1:45pm



For Patients with Parkinson's Disease

藤本製薬グループ

エフピー

FP Pharmaceutical Corp. is pleased to be a supporter of the International Congress of Parkinson's Disease and Movement Disorders.

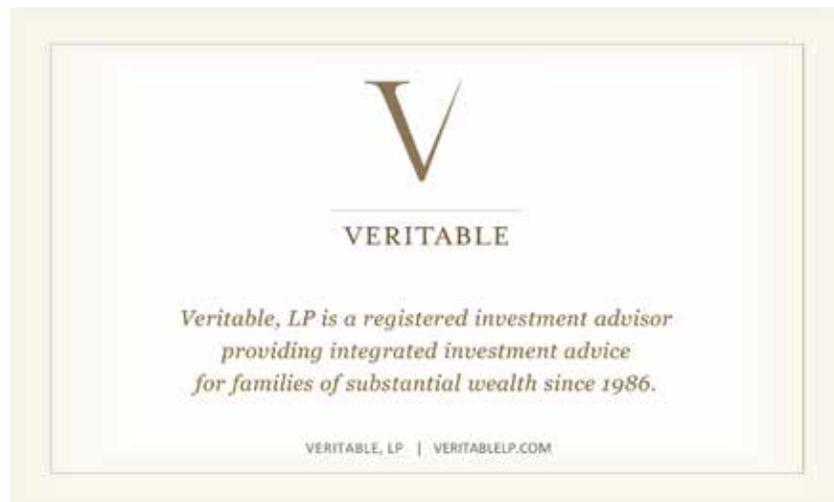
Hong Kong
October 5 - 9, 2018

We dedicate ourselves to distribution of Selegiline in Japan.

 Fujimoto Pharmaceutical Group

FP Pharmaceutical Corp.
1-3-40 Nishiotsuka, Matsubara, Osaka,
580-0011 JAPAN

The International Parkinson and Movement Disorder Society acknowledges Veritable LP for their assistance in managing its investment portfolio.





**A VIEW INTO
PARKINSON'S**

**VISIT THE
SUNOVION
BOOTH**

Join us for an immersive
and interactive exhibit
that illustrates life with
Parkinson's disease and the
types of OFF episodes that
patients experience.

LEARN MORE about the struggles of Maggie*,
a patient with moderate-to-advanced Parkinson's disease,
and the Little Big Things™ that may improve her daily life.

**Fictional patient for illustration only.*

SUNOVION and  are registered trademarks of Sumitomo Dainippon Pharma Co., Ltd.
LITTLE BIG THINGS is a trademark of Sunovion Pharmaceuticals Inc.
Sunovion Pharmaceuticals Inc. is a U.S. subsidiary of Sumitomo Dainippon Pharma Co., Ltd.
Sunovion Pharmaceuticals Inc., 84 Waterford Drive, Marlborough, MA 01752
©2018 Sunovion Pharmaceuticals Inc. All rights reserved. 05/18 NPC-APL142-18

 **sunovion**

For every stages of idiopathic Parkinson's disease¹

Days and nights go smooth with 24-hour, Continuous-delivery Neupro[®] 2,3

09:00
Morning walk
with the dog

14:00
Garden club
meeting

19:30
Evening walk
with the dog

*Neupro[®] is indicated for the treatment of the signs and symptoms of early-stage idiopathic Parkinson's disease as monotherapy or in combination with levodopa, over the course of the disease through to late stages when the effect of levodopa wears off or becomes inconsistent and fluctuations of the therapeutic effect occur (end of dose or on-off fluctuations)

References: 1. Neupro[®] [summary of product characteristics], Shannon, County Clare, Ireland: UCB Pharma Ltd; 2012. 2. Trenkwalder C, Kies B, Rudzinska M, et al. Rotigotine effects on early morning motor function and sleep in Parkinson's disease: a double-blind, randomized, placebo-controlled study (RECOVER). *Mov Disord.* 2011;26(1):90-9. 3. Steiger M. Constant dopaminergic stimulation by transdermal delivery of dopaminergic drugs: a new treatment paradigm in Parkinson's disease. *Eur J Neurol.* 2008;15:6-15.

Abbreviated prescribing information: Presentation: Neupro[®] is a thin, matrix-type square transdermal patch. Neupro[®] 2 mg/24 h transdermal patch releases 2 mg of rotigotine over 24 hours; 10 cm² patch contains 4.5 mg of rotigotine. Neupro[®] 4 mg/24 h transdermal patch releases 4 mg of rotigotine over 24 hours; 20 cm² contains 9 mg of rotigotine. Neupro[®] 6 mg/24 h transdermal patch releases 6 mg of rotigotine over 24 hours; 30 cm² patch contains 13.5 mg of rotigotine. Neupro[®] 8 mg/24 h transdermal patch releases 8 mg over 24 hours; 40 cm² patch contains 18 mg of rotigotine. **Therapeutic Indication:** To treat the signs and symptoms of idiopathic Parkinson's disease, either with or without concomitant levodopa therapy. **Dosage:** Neupro[®] is applied to the skin once a day. The patch remains on the skin for 24 hours and will then be replaced by a new one at a different application site. In the early stage of Parkinson's disease to use as monotherapy, treatment is initiated with a single daily dose of 2 mg/24 h. Dose will be increased by weekly increments of 2 mg/24 h, up to a maximum of 8 mg/24 h. In the advanced stage of Parkinson's disease and use in combination with levodopa, treatment initiation is at 4 mg/24 h. Dose will be increased by weekly increments of 2 mg/24 h, up to a maximum dose of 16 mg/24 h. **Method of administration:** The patch should be applied to clean, dry, intact healthy skin. Reapplication to the same site within 14 days should be avoided. Neupro[®] should not be placed on skin that is red, irritated or damaged. The patch should be pressed down firmly with the palm of the hand for about 20 to 30 seconds, so that it sticks well. In the event that a patch should fall off, a new patch should be applied for the remainder of the 24 hour dosing interval. You should change your patch at around the same time every day. The patch should not be cut into pieces. **Contraindications:** Hypersensitivity to rotigotine or to any of the excipients. Neupro[®] should be removed prior to any Magnetic Resonance Imaging or cardioversion to avoid burns. **Precautions:** Dopamine agonists are known to cause hypotension, and monitoring of blood pressure is recommended. Where somnolence or sudden sleep onset occurs, or where there is persistent, spreading or serious skin rash at the application site, consider dose reduction or termination of therapy. Rotate the site of patch application to minimize the risk of skin reactions. In case of generalized skin reactions associated with the use of Neupro[®], discontinue treatment. Avoid exposure to direct sunlight until the skin is healed. If treatment is to be withdrawn, it should be gradually reduced to avoid symptoms of neuroleptic malignant syndrome. **Impulse control disorders** (including pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating & compulsive eating), and abnormal thinking and behaviour have been reported in patients treated with Neupro[®]. Caution is advised when treating patients with severe hepatic impairment. Eye examinations are recommended if vision abnormalities occur. **Interactions:** Neuroleptics (e.g. phenothiazines, butyrophenones, thioxanthenes) or metoclopramide, may diminish the effectiveness of Neupro[®], and coadministration should be avoided. Caution should be advised when patients are taking sedating medicinal products or other central nervous system depressants (e.g. benzodiazepines, antipsychotics, antidepressants) or alcohol in combination with rotigotine. Neupro[®] may potentiate the dopaminergic adverse reaction of levodopa and may cause and/or exacerbate pre-existing dyskinesia, as described with other dopamine agonists. The incidence of some dopaminergic adverse effects, such as hallucinations, dyskinesia, and peripheral oedema generally is higher when given in combination with levodopa. **Undesirable effects:** Very common side effects include nausea, vomiting, somnolence, dizziness, headache and application site reactions. Common side effects include perception disturbances, insomnia, sleep disorder, nightmare, abnormal dreams, impulse-control disorders, disturbances of consciousness, dyskinesia, dizziness postural, lethargy, vertigo, palpitations, orthostatic hypotension, hypertension, hiccups, constipation, dry mouth, dyspepsia, hyperhidrosis, erythema, pruritus, asthenic conditions, peripheral oedema, falling, weight decreased, CPK increased in Japanese patients. **Storage conditions:** Do not store above 30°C, store in the original package.

 **Neupro[®]**
rotigotine transdermal patch



Inspired by patients.
Driven by science.

UCB PHARMA (HONG KONG) LTD

香港九龍觀塘觀塘道388號創紀之城一期一座37樓3713-18室

Unit 3713-18, 37/F, Tower 1, Millennium City 1, 388 Kwun Tong Road

Tel: (852) 2854 9333 Fax: (852) 2854 9111 www.ucb.com

Neupro®

rotigotine transdermal patch

- Once daily dose for full 24 hours¹
- Improves early morning motor function²
- 2X More likely to wake up ON vs placebo³
- 3X Greater improvement in sleep quality vs placebo²
- 3X Reduced in depressive symptoms²
- 9X Reduced in Pain²



*Neupro® is indicated for the treatment of the signs and symptoms of early-stage idiopathic Parkinson's disease as monotherapy or in combination with levodopa, over the course of the disease through to late stages when the effect of levodopa wears off or becomes inconsistent and fluctuations of the therapeutic effect occur (end of dose or on-off fluctuations)

References: 1. Steiger M. Constant dopaminergic stimulation by transdermal delivery of dopaminergic drugs: a new treatment paradigm in Parkinson's disease. *Eur J Neurol*. 2008;15:6-15. 2. Trenkwalder C, Kies B, Rudzinska M, et al. Rotigotine effects on early morning motor function and sleep in Parkinson's disease: a double-blind, randomized, placebo-controlled study (RECOVER). *Mov Disord*. 2011;26(11):90-9. 3. Lewitt PA, Lyons KE, Pahwa R. Advanced Parkinson disease treated with rotigotine transdermal system PREFER study. *Neurology*. 2007;68:1262-1267.

Abbreviated prescribing information: Presentation: Neupro® is a thin, matrix-type square transdermal patch. Neupro® 2 mg/24 h transdermal patch releases 2 mg of rotigotine over 24 hours; 10 cm² patch contains 4.5 mg of rotigotine. Neupro® 4 mg/24 h transdermal patch releases 4 mg of rotigotine over 24 hours; 20 cm² contains 9 mg of rotigotine. Neupro® 6 mg/24 h transdermal patch releases 6 mg of rotigotine over 24 hours; 30 cm² patch contains 13.5 mg of rotigotine. Neupro® 8 mg/24 h transdermal patch releases 8 mg over 24 hours; 40 cm² patch contains 18 mg of rotigotine. **Therapeutic Indication:** To treat the signs and symptoms of idiopathic Parkinson's disease, either with or without concomitant levodopa therapy. **Dosage:** Neupro® is applied to the skin once a day. The patch remains on the skin for 24 hours and will then be replaced by a new one at a different application site. In the early stage of Parkinson's disease to use as monotherapy, treatment is initiated with a single daily dose of 2 mg/24 h. Dose will be increased by weekly increments of 2 mg/24 h, up to a maximum of 8 mg/24 h. In the advanced stage of Parkinson's disease and use in combination with levodopa, treatment initiation is at 4 mg/24 h. Dose will be increased by weekly increments of 2 mg/24 h, up to a maximum dose of 16 mg/24 h. **Method of administration:** The patch should be applied to clean, dry, intact healthy skin. Reapplication to the same site within 14 days should be avoided. Neupro® should not be placed on skin that is red, irritated or damaged. The patch should be pressed down firmly with the palm of the hand for about 20 to 30 seconds, so that it sticks well. In the event that a patch should fall off, a new patch should be applied for the remainder of the 24 hour dosing interval. You should change your patch at around the same time every day. The patch should not be cut into pieces. **Contraindications:** Hypersensitivity to rotigotine or to any of the excipients. Neupro® should be removed prior to any Magnetic Resonance Imaging or cardioversion to avoid burns. **Precautions:** Dopamine agonists are known to cause hypotension, and monitoring of blood pressure is recommended. Where somnolence or sudden sleep onset occurs, or where there is persistent, spreading or serious skin rash at the application site, consider dose reduction or termination of therapy. Rotate the site of patch application to minimize the risk of skin reactions. In case of generalized skin reactions associated with the use of Neupro®, discontinue treatment. Avoid exposure to direct sunlight until the skin is healed. If treatment is to be withdrawn, it should be gradually reduced to avoid symptoms of neuroleptic malignant syndrome. **Impulse control disorders** (including pathological gambling, increased libido, hypersexuality, compulsive spending or buying, binge eating & compulsive eating), and abnormal thinking and behaviour have been reported in patients treated with Neupro®. Caution is advised when treating patients with severe hepatic impairment. Eye examinations are recommended if vision abnormalities occur. **Interactions:** Neuroleptics (e.g. phenothiazines, butyrophenones, thioxanthenes) or metoclopramide, may diminish the effectiveness of Neupro®, and coadministration should be avoided. Caution should be advised when patients are taking sedating medicinal products or other central nervous system depressants (e.g. benzodiazepines, antipsychotics, antidepressants) or alcohol in combination with rotigotine. Neupro® may potentiate the dopaminergic adverse reaction of levodopa and may cause and/or exacerbate pre-existing dyskinesia, as described with other dopamine agonists. The incidence of some dopaminergic adverse effects, such as hallucinations, dyskinesia, and peripheral oedema generally is higher when given in combination with levodopa. **Undesirable effects:** Very common side effects include nausea, vomiting, somnolence, dizziness, headache and application site reactions. Common side effects include perception disturbances, insomnia, sleep disorder, nightmare, abnormal dreams, impulse-control disorders, disturbances of consciousness, dyskinesia, dizziness postural, lethargy, vertigo, palpitations, orthostatic hypotension, hypertension, hiccups, constipation, dry mouth, dyspepsia, hyperhidrosis, erythema, pruritus, asthenic conditions, peripheral oedema, falling, weight decreased, CPK increased in Japanese patients. **Storage conditions:** Do not store above 30°C, store in the original package.

 Inspired by patients.
Driven by science.

UCB PHARMA (HONG KONG) LTD
香港九龍觀塘觀塘道388號創紀之城一期一座37樓3713-18室
Unit 3713-18, 37/F, Tower 1, Millennium City 1, 388 Kwun Tong Road
Tel: (852) 2854 9333 Fax: (852) 2854 9111 www.ucb.com

KYOTO INTERNATIONAL CONFERENCE CENTER



ATTENDEES WILL INCLUDE

- Movement disorder doctors
- Neurologists
- Neuroscientists
- Geriatricians & Physicians
- Nurses & Social Workers
- Rehabilitation specialists
- People with Parkinson's
- Care Partners

IMPORTANT DATES

NOV. 23, 2018 ■ Abstract Deadline

DEC. 7, 2018 ■ Travel Grants
Deadline

JAN. 7, 2019 ■ Video competition
deadline

FEB. 27, 2019 ■ Early bird registration
deadline



5th WORLD PARKINSON CONGRESS Kyoto, Japan

June 4-7, 2019

The 5th World Parkinson Congress offers a unique, international, interdisciplinary forum for all who are researching, treating, or living with Parkinson's disease.

www.WPC2019.org

Bial

Keeping life
in mind.

ON/JUN18/5/023

INTERNATIONAL PARKINSON
AND MOVEMENT DISORDER SOCIETY,
HONG KONG 2018

**TARGETING COMT
AS THE LEVODOPA ADD-ON
TREATMENT FOR
PARKINSON'S DISEASE**

**SATURDAY 6th
OCTOBER 2018
12H45 - 13H45**

PROFESSOR
WERNER POEWE
INNSBRUCK, AUSTRIA

CHAIRMAN'S
INTRODUCTION

PROFESSOR
MATTHEW STERN
PHILADELPHIA, UNITED STATES

LEVODOPA - CAN WE IMPROVE
THE GOLD STANDARD?

PROFESSOR
OLIVIER RASCOL
TOULOUSE, FRANCE

OPICAPONE - EXPLOITING
THE POTENTIAL OF COMT
INHIBITION

PROFESSOR
DANIELA BERG
KIEL, GERMANY

OPTIMISING DOPAMINERGIC
THERAPY - A CASE-BASED
PERSPECTIVE

ROUND TABLE DISCUSSION

TAKE YOUR PATIENTS ON A SMARTER DBS JOURNEY.

Unleash your DBS programming potential with the intuitive, insightful, secure **Clinician Programmer.**



Our clinician programmer makes a smarter journey possible with next-generation programming technology designed to build trust and confidence. With an intuitive interface, secure wireless connection, and streamlined access to patient data—you'll have all the support you need along the way.

Visit our booth to learn more about the new DBS Clinician Programmer.

[medtronic.com/dbstherapy](https://www.medtronic.com/dbstherapy)

A prescription is required. Not everyone who receives DBS Therapy will receive the same results. DBS Therapy requires brain surgery which can have serious and sometimes fatal complications. Once implanted, DBS complications may require additional surgery. Medtronic DBS Therapy may cause new or worsening neurological or psychiatric symptoms. Patients should always discuss the potential risks and benefits of the therapy with a physician.

©2018 Medtronic UC201901991 EN

Medtronic
Further, Together

VERCISE™

Deep Brain Stimulation Systems

SIMPLY ADVANCED

STIMVIEW™
Technology
makes directional
programming
intuitive and
simple.*



*One click buttons make directional programming intuitive and simple.

Product available in the European Economic Area (EEA) only. Please check availability with your local sales representative or customer service.

Boston Scientific is a Global Company. Vercise Gevia is not currently licensed in accordance with Canadian Law.

LITCA 350 0217



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.

All cited trademarks are the property of their respective owners. CAUTION: The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings and instructions for use can be found in the product labeling supplied with each device. Information for the use only in countries with applicable health authority product registrations.

Not for distribution in France.

NM-393421-AB_JUN2017 © 2017 Boston Scientific Corporation or its affiliates. All rights reserved.