

Preliminary 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



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Preliminary Program

Welcome

Dear Colleagues,

On behalf of the International Parkinson and Movement Disorder Society (MDS), we are pleased to formally invite you to attend the International Congress of Parkinson's Disease and Movement Disorders® in Hong Kong 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.

We look forward to welcoming you to Hong Kong and hope you will take advantage of the many exciting, educational opportunities the 2018 International Congress offers.

With kind regards,



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

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



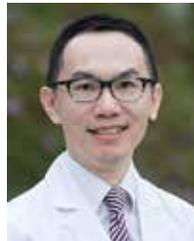
A handwritten signature in black ink that reads "Buz Jinnah".

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

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About MDS

MDS INTERNATIONAL EXECUTIVE COMMITTEE

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

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 CT 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*

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



International Congress Information

Official Language

The official language of the 2018 International Congress is English.

Venue

Hong Kong Convention and Exhibition Centre
1 Expo Drive, Wan Chai
Hong Kong

Exhibition

Manufacturers, distributors and suppliers of products and services for physicians and researchers involved with Movement Disorders are invited to participate in the International Congress exhibition. To receive a copy of the Exhibitor Prospectus, please contact the MDS International Secretariat at congress@movementdisorders.org or visit the International Congress website at www.mdscongress.org/Congress-2018/Sponsor-Exhibit.htm. The exhibition is open to all registered delegates.

Abstract Poster Information

Poster Sessions will be featured Saturday through Monday during the International Congress to ensure delegates are given the opportunity to review as many abstracts as possible. Please visit www.mdscongress.org/Congress-2018/Abstracts.htm for a detailed poster schedule, including information about the Guided Poster Tours.

Fees (in USD):

	On or before August 2, 2018	From August 3 – September 5, 2018	From September 6 – October 9, 2018
MDS Member	\$600	\$650	\$700
Non-Member	\$800	\$850	\$900
Junior Member/ Participant*	\$350	\$375	\$400
Health Professional (Non-Physician)	\$350	\$375	\$400

The International Congress registration fee includes admission to all scientific sessions, Exhibit Hall and Poster Hall, a meeting bag and documentation. The registration fee excludes travel and accommodations.

*Junior Members of MDS, those born after January 1, 1988, residents, fellows and those still in training. Please fax or e-mail a copy of an official document indicating age or a letter from your employer stating training status to be eligible for this discount. Without documentation, the delegate will be charged the non-member rate (Fax: +1 514-289-9844 or e-mail: mdscongress@showcare.com within one week of submitting registration.)

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International Congress Information

Registration Confirmation

Attendees who register online will receive a confirmation message immediately. Please present this confirmation at the International Congress registration desk in Hong Kong to receive your registration materials.

Cancellation/Refund Policy

All cancellations must be requested in writing.

- Up to September 5, 2018 (pre-registration deadline): 100% refund, minus a \$75 administrative charge
- From September 6 – September 20, 2018: 50% refund
- From September 21, 2018 onward: no refund

Group Registration

Groups may be formed of six (6) or more delegates from the same company/travel agency.

Group leaders will be able to continually make changes to the group up until the final pre-registration deadline of September 5, 2018.

Registration Desk

Name badge, scientific session tickets, Final Program, USB with full abstract list, and International Congress bag can be collected at the International Congress Registration Hall 3 FG Foyer during the following hours**:

Friday, October 5	7:00 – 20:00
Saturday, October 6	7:00 – 18:00
Sunday, October 7	8:00 – 18:00
Monday, October 8	8:00 – 18:00
Tuesday, October 9	8:00 – 12:00

**Please note that these hours are subject to change. Please watch for updated schedules at www.mdscongress.org and look for the schedule in the Final Program.

Scientific Sessions

The 2018 Scientific Program will incorporate Therapeutic Plenary Sessions, Plenary and Parallel Sessions, Teaching Courses, Video Sessions, Skills Workshops, Guided Poster Tours and Blue Ribbon Highlights.

Sessions will focus on the latest developments in:

- Technology in the Diagnosis, Monitoring, and Management of Movement Disorders
- Movement Disorder topics, including, but not limited to, ataxia, chorea, dystonia, myoclonus, Parkinson's disease, restless legs syndrome, spasticity, stereotypies, tics and tremors
- Basic Science issues, including, but not limited to, genetics, neuroimaging, neuropharmacology, surgical therapy and transplantation
- Other less common clinical conditions

Special Accessibility Needs

Delegates requiring special arrangements in order to fully participate in the International Congress should provide a written description of such needs on their registration form or send an e-mail to congress@movementdisorders.org. To ensure appropriate accommodations, all special needs should be addressed in advance with the MDS International Secretariat.

Photography Policy

Photography is not permitted in any of the 2018 International Congress scientific and/or educational sessions or in the poster areas.



International Congress Events

Friday, October 5, 2018

Welcome Ceremony

19:30 – 21:30

All International Congress attendees are warmly invited to attend the International Congress Welcome Ceremony. This event is open to all registered delegates.

Sunday, October 7, 2018

Young Delegates Reception

19:30 - 21:00

At the Renaissance Hong Kong Harbour View Hotel, Oasis Room

Join your colleagues at the Renaissance on Sunday evening for a networking event.

Monday, October 8, 2018

MDS Video Challenge

19:00 – 22:00

Please join Masters of Ceremony Anthony Lang and Kapil Sethi as they host a world-renowned panel of Movement Disorders experts in guiding participants through unique Movement Disorder cases. The cases will be presented by representatives from Movement Disorder Centers around the world and discussed by the Panel of Experts. Awards will be given for the most interesting and challenging cases. Country pride will add an enjoyable spirit of competition to this event. The goal of this session is for attendees to learn from a series of unusual, very interesting patients and see how senior experts approach these types of challenging cases.

The Panel of Experts are:

Bettina Balint, *United Kingdom*

Orlando Barsottini, *Brazil*

Sun Ju Chung, *South Korea*

Mark Edwards, *United Kingdom*

Roberto Erro, *Italy*

This event is open to all registered delegates. For more information about the MDS Video Challenge, please contact Sarah Smith at congress@movementdisorders.org.



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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. If you are seeking continuing education credit for a specialty not listed below, it is your responsibility to contact your licensing/certification board to determine course eligibility for your board requirement.

Accreditation Statement

In support of improving patient care, this activity has been planned and implemented by Amedco and 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.



International Congress Schedule-at-a-Glance

	Friday, October 5	Saturday, October 6	Sunday, October 7	Monday, October 8	Tuesday, October 9
8:00	Therapeutic Plenary Session 8:00 - 10:00	Plenary Session (Presidential Lectures) 8:00 - 10:00	Plenary Session 8:00 - 9:30		Plenary Session 8:00 - 9:30
8:30					
9:00					
9:30	Regional Assemblies 10:00-11:00	Break 10:00 - 10:30	Break 9:30 - 10:30	Break 9:30 - 10:00	Break 9:30 - 10:00
10:00			MDS Business Meeting 9:30 - 10:30	Plenary Session 10:00 - 12:00	
10:30	Therapeutic Plenary Session 11:00 - 13:00	Plenary Session 10:30 - 12:30			Plenary Session (Grand Rounds) 10:30 - 12:30
11:00					
11:30					
12:00	Break 13:00 - 14:30	Corporate Therapeutic Symposia 12:45 - 13:45	Corporate Therapeutic Symposia 12:45 - 13:45	Break 12:00 - 12:15	End
12:30				Corporate Therapeutic Symposium 13:15 - 14:15	Corporate Therapeutic Symposia 12:15 - 13:15
13:00	Therapeutic Plenary Session 14:30 - 16:30	Break/ Guided Poster Tours/ Poster Sessions 13:45 - 15:15	Break/ Guided Poster Tours/ Poster Sessions 13:45 - 15:15	Break/ Guided Poster Tours/ Poster Sessions 13:15 - 14:45	Break 14:45 - 15:00
13:30					
14:00					
14:30	Break 16:30 - 17:00	Parallel Sessions/ Teaching Courses 15:30 - 17:30	Parallel Sessions/ Teaching Courses 15:30 - 17:30	Parallel Sessions/ Teaching Courses 15:00 - 17:00	Break 17:00 - 17:30
15:00					
15:30	Therapeutic Plenary Session 17:00 - 19:00	Break 17:30 - 18:00	Break 17:30 - 18:00	Skills Workshops/ Video Sessions 17:30 - 19:00	Skills Workshops/ Video Sessions 17:30 - 19:00
16:00					
16:30					
17:00	Break 19:00 - 19:30	Skills Workshops/ Video Sessions 18:00 - 19:30	Skills Workshops/ Video Sessions 18:00 - 19:30	MDS Video Challenge 19:00 - 22:00	MDS Video Challenge 19:00 - 22:00
17:30					
18:00	Welcome Ceremony 19:30 - 21:30				
18:30					
19:00					
19:30					
20:00					
20:30					
21:00					

International Congress Session Definitions

Blue Ribbon Session:

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 05, 2018

1101 Therapeutic Plenary Session

Update on Management Strategies for Parkinson's Disease

8:00 – 10:00

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

1102 Therapeutic Plenary Session

Update on Management Strategies for Dystonia and Tremor

11:00 – 13:00

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

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
Ritesh Ramdhani, *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. 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

1103 Therapeutic Plenary Session

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

14:30 – 16:30

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

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

1104 Therapeutic Plenary Session

Update on Neurosurgical Management of Movement Disorders

17:00 – 19:00

Chairs: Günther Deuschl, *Germany*
Danny Chan, *Hong Kong*

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

Saturday, October 06, 2018

2101 Plenary Session

Presidential Lectures

8:00 – 10:00

Chairs: Christopher Goetz, *USA*
 Claudia Trenkwalder, *Germany*
 Stanley Fahn Lecture Award Recipient
 Marie Vidailhet, *France*
 C. David Marsden Lecture Award Recipient
 Eng-King Tan, *Singapore*

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

2102 Themed Plenary Session

Modulation of Gene Expression and Neurodegenerative Movement Disorders

10:30 – 12:30

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
 David Standaert, *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 the basic principles of epigenetics and their possible implications for neurodegeneration (including pathogenesis, biomarkers, and therapeutic targets)
2. 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)
3. Discuss the therapeutic potential of manipulating epigenetic mechanisms and non-coding genetic elements for neurodegenerative diseases

2203 Parallel Session

Ethical Issues and Novel Technologies for the Practicing Clinician

15:30 – 17:30

Chairs: Beomseok Jeon, *South Korea*
 Kapil Sethi, *USA*

15:30 Ethical Issues in Movement Disorders
 Karen Rommelfanger, *USA*

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:

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

2204 Parallel Session

Novel Technology-Based Therapies on the Horizon

15:30 – 17:30

Chairs: Olivier Rascol, *France*
 David Standaert, *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

2205 Parallel Session

New Insights in Dystonia: Genetics, Anatomy, and Neurophysiology

15:30 – 17:30

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

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



Saturday, October 06, 2018

2206 Parallel Session

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

- 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

2207 Parallel Session

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

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

2208 Parallel Session

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

- 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

2309 Teaching Course

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

- 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
Bart Van De Warrenburg, *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. 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

2310 Teaching Course

Movement Disorders Meets Psychiatry 15:30 – 17:30

- 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

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

2411 Skills Workshop

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

- Dietrich Haubenberger, *USA*
Fatta Nahab, *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. 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

Saturday, October 06, 2018

2412 Skills Workshop

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

Vincent Mok, *Hong Kong*
 Glenn Stebbins, *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. Apply and interpret the scale in clinical and research settings including available technological advances including aps 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

2413 Skills Workshop

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

Jennifer Goldman, *USA*
 Alice Nieuwboer, *Belgium*

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

2414 Skills Workshop

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

Tomas Bjorklund, *Sweden*
 Alexandra Nelson, *USA*

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

2515 Video Session 

Showcases From Asia
18:00 – 19:30

Cid Czarina Diesta, *Philippines*
 Shen-Yang Lim, *Malaysia*

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

2516 Video Session

Unusual Movement Disorders
18:00 – 19:30

Carlos Cosentino, *Peru*
 Francesca Morgante, *Italy*

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

2517 Video Session

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

Niall Quinn, *United Kingdom*
 Stephen Reich, *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 optimal techniques to elicit a comprehensive history
2. Develop best techniques to elicit an informative examination
3. Develop appropriate reasoning to achieve accurate diagnoses

2518 Video Session

Ataxia
18:00 – 19:30

Orlando Barsottini, *Brazil*
 Kinya Ishikawa, *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. 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



Sunday, October 07, 2018

3101 Plenary Session

Update on Recent Clinical Trials

8:00 – 9:30

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

3102 Plenary Session

Grand Rounds

10:30 – 12:30

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*

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 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

3203 Parallel Session

Advances in Stem Cells and Parkinson's Disease

15:30 – 17:30

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

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

3204 Parallel Session

Technologies to Advance Neuromodulation Therapy for Movement Disorders

15:30 – 17:30

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

3205 Parallel Session

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

15:30 – 17:30

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

Sunday, October 07, 2018

3206 Parallel Session**Prodromal Parkinson's Disease
15:30 – 17:30**

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

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

3207 Parallel Session**Challenges in Clinicogenetic Correlations: One Gene – Many Phenotypes; One Phenotype – Many Genes
15:30 – 17:30**

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

3208 Parallel Session**Understanding and Managing Complex Gait Disorders in Parkinson's Disease
15:30 – 17:30**

Chairs: Nir Giladi, *Israel*
Alice Nieuwboer, *Belgium*

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

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

3309 Teaching Course**Wearable Technology and Machine Learning for Quantitative Evaluation of Parkinson's Disease
15:30 – 17:30**

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

3310 Teaching Course**Update on Huntington's Disease and Other Chorea
15:30 – 17:30**

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



Sunday, October 07, 2018

3411 Skills Workshop

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

Onanong Jitkriksadaku, *Thailand*
Jalesh Panicker, *United Kingdom*

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 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

3412 Skills Workshop

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

Han-Joon Kim, *South Korea*
Maria Stamelou, *Greece*

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

3413 Skills Workshop

Botulinum Toxins 18:00 – 19:30

Ryuji Kaji, *Japan*
Erle Chuen-Hian Lim, *Singapore*

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

3414 Skills Workshop

Lessons from My Patients 18:00 – 19:30

Cynthia Comella, *USA*
Oscar Gershanik, *Argentina*
Philip Thompson, *Australia*

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

3415 Skills Workshop

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

Bettina Balint, *United Kingdom*
Mohit Bhatt, *India*

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

3416 Skills Workshop

Tremor Update 18:00 – 19:30

Günther Deuschl, *Germany*
Rodger Elble, *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 the history and evolution of the term "essential tremor"
2. Describe the recently proposed changes in the definitions and classifications of all tremors

3417 Skills Workshop

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

Njideka Okubadejo, *Nigeria*
Louis Tan, *Singapore*

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

3518 Video Session

Eye Movements 18:00 – 19:30

Ji-Soo Kim, *South Korea*
Aasef Shaikh, *USA*

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

Preliminary Program

Monday, October 08, 2018

4101 Plenary Session

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

- 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

4102 Plenary Session

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

- 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*
- 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

4203 Parallel Session

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

- 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

4204 Parallel Session

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

- 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

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

4205 Parallel Session

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

- Chairs: Benzi Kluger, *USA*
Vincent Mok, *Hong Kong*
- 15:00 Eastern Perspective
Sujith Ovallath, *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



Monday, October 08, 2018

4206 Parallel Session

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

Chairs: Cynthia Comella, *USA*
Vladimir Kostic, *Serbia*

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

4207 Parallel Session

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

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

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

4208 Parallel Session

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

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

4309 Teaching Course

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

Chairs: Ryuji Kaji, *Japan*
Yih-Ru Wu, *Taiwan*

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

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

4310 Teaching Course

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

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 Katsenschlager, *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

Monday, October 08, 2018

4411 Skills Workshop

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

Barry Snow, *New Zealand*
Pille Taba, *Estonia*

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

4412 Skills Workshop

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

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

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

4413 Skills Workshop

Speech Analysis and Therapy
17:30 – 19:00

Hanneke Kalf, *Netherlands*
Serge Pinto, *France*

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

4414 Skills Workshop

Spasticity Update
17:30 – 19:00

David Simpson, *USA*
Giovanni Stevanin, *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. 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

4415 Video Session

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

Madeleine Hackney, *USA*
Margaret Mak, *Hong Kong*

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

4416 Video Session

Movement Disorder Emergencies
17:30 – 19:00

Mandy Au-Yeung, *Hong Kong*
Steven Frucht, *USA*

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

4517 Video Session

Psychogenic Movement Disorders
17:30 – 19:00

Kathrin LaFaver, *USA*
Jon Stone, *United Kingdom*

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

4518 Video Session

Challenging Cases in DBS
17:30 – 19:00

Anna Castrioto, *France*
Riaan Van Coller, *South Africa*

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



Tuesday, October 09, 2018

5101 Plenary Session

Biomarkers for Parkinson's Disease **8:00 – 9:30**

- Chairs: Oscar Gershanik, *Argentina*
Shu-Leong Ho, *Hong Kong*
- 8:00 What Makes a Good Biomarker?
Brit Mollenhauer, *Germany*
- 8:30 Body Fluid and Tissue Biomarkers: Current and Future
Douglas Galasko, *USA*
- 9:00 Imaging Biomarkers: Current and Future
Antonio Strafella, *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. 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

5102 Plenary Session

Controversies in Movement Disorders **10:00 – 11:00**

- Chairs: Anthony Lang, *Canada*
Philip Thompson, *Australia*
- 10:00 Is DBS Superior to Lesioning in Movement Disorders Therapy? (YES)
Elena Moro, *France*
- 10:15 Is DBS Superior to Lesioning in Movement Disorders Therapy? (NO)
Takaomi Taira, *Japan*
- 10:30 Does Parkinson's Disease Start in the Gut? (YES)
Kathleen Shannon, *USA*
- 10:45 Does Parkinson's Disease Start in the Gut? (NO)
Roberto Cilia, *Italy*

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 advantages and disadvantages of different surgical therapies for movement disorders
2. Explain "gut-brain axis" proposed by Braak and the evidence supporting or refuting

5103 Plenary Session

Blue Ribbon Highlights **11:00 – 12:00**

Angela Cenci, *Sweden*
Un Kang, *USA*

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

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.

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

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

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2018 Important Dates

August 2, 2018

Early Registration Deadline

September 5, 2018

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October 5-9, 2018

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