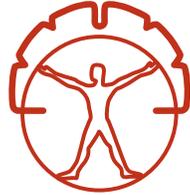


# PRELIMINARY PROGRAM



International Parkinson and  
Movement Disorder Society

## MDS *Virtual* *Congress* 2020

SEPTEMBER 12–SEPTEMBER 16  
[www.mdscongress.org](http://www.mdscongress.org)



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## 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 (2019-2021)



**President**  
Claudia Trenkwalder  
*Germany*



**President-Elect**  
Francisco Cardoso  
*Brazil*



**Secretary**  
Bastiaan Bloem  
*Netherlands*



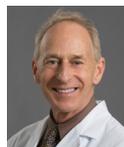
**Secretary-Elect**  
Charles Adler  
*USA*



**Treasurer**  
Louis CS Tan  
*Singapore*



**Treasurer-Elect**  
Irene Litvan  
*USA*



**Past-President**  
Christopher Goetz  
*USA*

## ABOUT MDS

### MDS INTERNATIONAL EXECUTIVE COMMITTEE

Shengdi Chen  
Mark Edwards  
Cristian Falup-Pecurariu  
Joaquim Ferreira  
Marina de Koning-Tijssen  
Alice Nieuwboer  
D. James Surmeier  
Pille Taba  
Mayela Rodriguez-Violante  
Ruey-Meei Wu

### MDS VIRTUAL CONGRESS 2020 TASK FORCE

Chairs: Vincenzo Bonifati, *Netherlands*  
Chairs: Oscar Gershanik, *Argentina*  
Chairs: Claudia Trenkwalder, *Germany*  
Francisco Cardoso, *Brazil*  
Margherita Fabbri, *Italy*  
Hyder Jinnah, *USA*  
Andrew Siderowf, *USA*  
Matthew Stern, *USA*  
Louis Tan, *Singapore*

### CONGRESS SCIENTIFIC PROGRAM COMMITTEE

Chair: Vincenzo Bonifati, *Netherlands*  
Co-Chair: Andrew Siderowf, *USA*  
Orlando Barsottini, *Brazil*  
Roongroj Bhidayasiri, *Thailand*  
Per Borghammer, *Denmark*  
Francisco Cardoso, *Brazil*  
Pietro Cortelli, *Italy*  
Alberto Espay, *USA*  
Jennifer Friedman, *USA*  
Jennifer Goldman, *USA*  
Etienne Hirsch, *France*  
Beomseok Jeon, *South Korea*  
Andrea Kühn, *Germany*  
Shen-Yang Lim, *Malaysia*  
Karen Marder, *USA*  
Wassilios Meissner, *France*  
Tiago Outeiro, *Germany*  
Maria Stamelou, *Greece*  
Carolyn Sue, *Australia*  
Ryosuke Takahashi, *Japan*  
Claudia Trenkwalder, *Germany*  
Ad-Hoc Member: Terry Ellis, *USA*  
Ad-Hoc Member: Oscar Gershanik, *Argentina*  
Ad-Hoc Member: Hyder Jinnah, *USA*  
Ad-Hoc Member: Ron Postuma, *Canada*  
Ad-Hoc Member: Veronica Santini, *USA*

### CONGRESS LOCAL ORGANIZING COMMITTEE

Chair: Matthew Stern, *USA*  
Co-Chair: Andrew Siderowf, *USA*  
Nabila Dahodwala, *USA*  
Andres Deik, *USA*  
Jill Farmer, *USA*  
Pedro Gonzalez-Alegre, *USA*  
Dan Kremens, *USA*  
Tsao-Wei Liang, *USA*  
Meredith Spindler, *USA*  
Dan Weintraub, *USA*  
Allison Willis, *USA*

### PAST-PRESIDENTS

2017-2019 Christopher Goetz, *USA*  
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  
Email: [info@movementdisorders.org](mailto:info@movementdisorders.org)  
Website: [www.movementdisorders.org](http://www.movementdisorders.org)

## VIRTUAL CONGRESS INFORMATION

### ABSTRACT POSTER INFORMATION

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Beginning on September 11, 2020, Virtual Congress participants can view e-posters in the Virtual Poster Hall. Additionally, all abstracts will be published in the Movement Disorders journal e-supplement.

The MDS Virtual Congress 2020 will also feature sixteen virtual Guided Poster Tours which will be open to all participants.

### EXHIBITION

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Participants will have the opportunity to visit the Virtual Exhibit Hall beginning on September 12, 2020.

### OFFICIAL LANGUAGE

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The official language of the 2020 Virtual Congress is English.

### REGISTRATION

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Registration will open on July 27, 2020 and will be offered to participants at no charge. The MDS Virtual Congress 2020 scientific sessions, sponsored symposia, virtual exhibits, and the virtual poster hall will be available on-demand for free until October 1, 2020 for those participants who have registered by September 16, 2020. After October 1, 2020 the Virtual Congress will continue to be available on demand for MDS Members for a limited time.

## VIRTUAL CONGRESS EVENTS

### WELCOME CEREMONY

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Friday, September 11, 2020  
Time: 15:00 - 16:00 GMT

All participants are encouraged to attend the Virtual Congress Welcome Ceremony. MDS President Claudia Trenkwalder and other MDS leaders will introduce this inaugural event and give a preview of what to expect throughout the week.

### MDS VIRTUAL VIDEO CHALLENGE

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Sunday, September 13, 2020  
Time: 19:30 - 22:30 GMT

Monday, September 14, 2020  
Time: 2:00 - 5:00 GMT

Please join Masters of Ceremony Anthony Lang and Kapil Sethi as they host world-renowned 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 Movement Disorder 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 participants to learn from a series of unusual, very interesting patients and see how senior experts approach these types of challenging cases.

## CME INFORMATION

### TARGET AUDIENCE

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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

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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

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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, it is your responsibility to contact your licensing/certification board to determine course eligibility for your board requirement.

### ACCREDITATION STATEMENT

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This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME). The International Parkinson and Movement Disorder Society is accredited by the ACCME to provide continuing medical education for physicians.

### CREDIT DESIGNATION STATEMENT

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The International Parkinson and Movement Disorder Society designates this live activity for a maximum of 28.5 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### CONTENT VALIDITY STATEMENT

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All recommendations involving clinical medicine in MDS activities are based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the case of patients. All scientific research referred to, reported or used in CME in support or justification of a patient care recommendations conforms to the generally accepted standards of experimental design, data collection and analysis. Activities that promote recommendations, treatment or manners of practicing medicine not within the definition of CME or are knowing to have risks or dangers that outweigh the benefits or are knowing to be ineffective in the treatment of patients do not constitute valid CME.

## SCHEDULE-AT-A-GLANCE

	FRIDAY September 11	SATURDAY September 12	SUNDAY September 13	MONDAY September 14	TUESDAY September 15	WEDNESDAY September 16						
2:00			Therapeutic Plenary Session Encore Presentation 2:00 – 4:00 GMT	Virtual MDS Video Challenge Encore Presentation 2:00 – 5:00 GMT		<table border="1"> <tr><th>KEY</th></tr> <tr><td>CME Accredited Sessions</td></tr> <tr><td>Non-CME Educational Activities</td></tr> <tr><td>Sponsored Symposia (non-CME)</td></tr> <tr><td>MDS Activities and Events</td></tr> <tr><td>Breaks</td></tr> </table>	KEY	CME Accredited Sessions	Non-CME Educational Activities	Sponsored Symposia (non-CME)	MDS Activities and Events	Breaks
KEY												
CME Accredited Sessions												
Non-CME Educational Activities												
Sponsored Symposia (non-CME)												
MDS Activities and Events												
Breaks												
2:30												
3:00												
3:30												
4:00			Break 4:00 – 4:30 GMT									
4:30			Therapeutic Plenary Session Encore Presentation 4:30 – 6:30 GMT									
5:00												
5:30		MDS-AOS Regional Assembly 6:00 – 6:30 GMT										
6:00			Break 6:30 – 7:00 GMT									
6:30			Therapeutic Plenary Session Encore Presentation 7:00 – 9:00 GMT									
7:00												
7:30			Break 9:00 – 9:30 GMT									
8:00			Therapeutic Plenary Session Encore Presentation 9:30 – 11:30 GMT									
8:30												
9:00			Break 11:30 – 12:00 GMT									
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12:00		Therapeutic Plenary Session 12:00 – 14:00 GMT	Plenary Session 12:00 – 14:00 GMT	Plenary Session 12:00 – 14:00 GMT	Plenary Session 12:00 – 14:00 GMT	Plenary Session 12:00 – 14:00 GMT						
12:30												
13:00												
13:30												
14:00	Break 14:00 – 14:30 GMT	MDS Business Meeting 14:00 – 14:30 GMT	MDS-ES Regional Assembly 14:00 – 14:30 GMT	Break 14:00 – 14:30 GMT	Break 14:00 – 14:30 GMT	Break 14:00 – 14:30 GMT						
14:30												
15:00	Welcome Ceremony 15:00 – 16:00 GMT	Therapeutic Plenary Session 14:30 – 16:30 GMT	Parallel Sessions / Teaching Courses 14:30 – 16:30 GMT	Parallel Sessions / Teaching Courses 14:30 – 16:30 GMT	Science of Industry (non- CME) Session 14:30 – 16:30 GMT	Parallel Sessions / Teaching Courses 14:30 – 16:30 GMT						
15:30					Science of Industry (non- CME) Session 14:30 – 16:30 GMT	Plenary Sessions 14:30 – 16:30 GMT						
16:00												
16:30		Sponsored Symposia 16:30 – 17:30 GMT										
17:00												
17:30	Break 17:30 – 18:00 GMT		MDS-Africa Regional Assembly 17:30 – 18:00 GMT	Break 17:30 – 18:00 GMT	Break 17:30 – 18:00 GMT							
18:00												
18:30	Therapeutic Plenary Session 18:00 – 20:00 GMT	Skills Workshops / Special Topics in Movement Disorders / Video Sessions 18:00 – 19:30 GMT	Skills Workshops / Special Topics in Movement Disorders / Video Sessions 18:00 – 19:30 GMT	Skills Workshops / Special Topics in Movement Disorders / Video Sessions 18:00 – 19:30 GMT	Skills Workshops / Special Topics in Movement Disorders / Video Sessions 18:00 – 19:30 GMT							
19:00												
19:30												
20:00	Break 20:00 – 20:30 GMT											
20:30												
21:00	Therapeutic Plenary Session 20:30 – 22:30 GMT		Virtual MDS Video Challenge 19:30 – 22:30 GMT									
21:30												
22:00						MDS-PAS Regional Assembly 22:30 – 23:00 GMT						

## VIRTUAL CONGRESS SESSION DEFINITIONS

### CME Accredited Sessions

**2020 Virtual Congress Themed Sessions:** At each annual International Congress, the Congress Scientific Program Committee selects a theme that is highlighted throughout the meeting. This year's theme, *The Combined Multidisciplinary Approach to Movement Disorders*, will be showcased with international experts serving as faculty. Meeting participants can elect to attend any or all of these sessions. Themed sessions are designated in the program with .

**NEW in 2020: "Neuroscience Bridges" Plenary Session:** In this session world-renowned neuroscientists provide overviews of their clinical or basic research, on topics of broad interest and relevance for the advancement of knowledge on the nervous system in physiology and pathology.

**Controversies:** This Plenary Session is designed to involve all Virtual Congress participants. 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.

**"Highlights for 2020: Looking Towards 2021" Plenary Session:** In this session MDS experts present compilations of the hottest clinical and basic research articles published in the past year in the whole field of the Movement Disorders, and expected to impact heavily on the future research.

**Parallel Sessions:** These concurrent sessions provide an in-depth summary of new clinical and basic research findings, state-of-the-art treatment options, and future strategies on a variety of focused topics within the field of Movement Disorders.

**Plenary Sessions:** These sessions provide an overview of the latest clinical and basic science research findings and state-of-the-art information relating to topics of broad interest within the field of Movement Disorders.

**Skills Workshops:** These concurrent sessions provide practical illustrations of clinical or scientific techniques relevant to the field of Movement Disorders through video examples and equipment demonstrations.

**Special Topics in Movement Disorders:** These interactive sessions address "hot" topics in science or medicine using a variety of different formats that may include lectures, video presentations, and audience interaction.

**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.

**Therapeutic Plenary Sessions:** These sessions provide an overview of the latest, state-of-the-art treatment options in the diagnosis and management of Parkinson's disease and other movement disorders.

**Video Sessions:** These concurrent sessions focus on video demonstrations to provide an overview of clinical movement disorders.

### Non-CME Accredited Educational Activities

**Science of Industry Sessions:** These interactive sessions will provide attendees with a non-CME educational opportunity to learn about novel therapeutic agents under development by industry. Sessions may incorporate basic scientists or clinicians working in industry, and topics may address the biological rationale or development process for specific therapeutics in development within the field of Movement Disorders.

### Sponsored Symposia

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

### Video Challenge

**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 unique Movement Disorder cases as they are presented by representatives from Movement Disorder centers around the world.

### VIRTUAL CONGRESS FACULTY ROLES

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

**CSPC Liaison:** Develops the session from the onset; provides guidance to ensure that the learning objectives are met; interacts with Speakers / Presenters to ensure presentations are well integrated and overlap is minimized.

**Speakers:** Creates and delivers the presentation materials, and participates in the dialogue of the session.

### 2020 VIRTUAL 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 is *The Combined Multidisciplinary Approach to Movement Disorders*. International experts will serve as faculty, and the meeting participants can elect to attend any or all of these sessions.

 Themed sessions

## FRIDAY, SEPTEMBER 11, 2020

### Welcome Ceremony

15:00 - 16:00 GMT

All participants are encouraged to attend the Virtual Congress Welcome Ceremony.

## SATURDAY, SEPTEMBER 12, 2020

### MDS-AOS Regional Assembly

6:00 - 6:30 GMT

All participants from Asia and Oceania are encouraged to attend.

### 101: Therapeutic Plenary Session

#### Updates on Medical Management Strategies for Parkinson's Disease: Motor Aspects

12:00 - 14:00 GMT

Chairs: Matthew B. Stern, *USA*  
Pille Taba, *Estonia*

Early Pharmacologic Management  
Oscar Gershanik, *Argentina*

Rehabilitation Strategies  
Alice Nieuwboer, *Belgium*

Medical Management Strategies for Advancing Disease Patients  
Regina Katzenschlager, *Austria*

CSPC Liaison: Shen-Yang Lim, *Malaysia*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss current management of early-stage Parkinson's disease
2. Review the role of rehabilitation, including physical, occupational and speech therapies, and exercise in Parkinson's disease
3. Describe current medical management strategies for advancing Parkinson's disease (motor complications and other late-stage features)

### MDS Business Meeting

14:00 - 14:30 GMT

All participants are encouraged to attend.

### 102: Therapeutic Plenary Session

#### Parkinson's Disease: Non-Motor Aspects

14:30 – 16:30 GMT

Chairs: Angelo Antonini, *Italy*  
Daniel Weintraub, *USA*

Neuropsychiatric Features  
Anette Schrag, *United Kingdom*

Dysautonomia  
Horacio Kaufmann, *USA*

Sleep and Fatigue  
Ron Postuma, *Canada*

CSPC Liaison: Jennifer Goldman, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe the neuropsychiatric aspects of Parkinson's disease and their management
2. Discuss the recognition and management of dysautonomia in Parkinson's disease
3. Summarize the symptoms and management of sleep and fatigue in Parkinson's disease

### 103: Therapeutic Plenary Session

#### Therapeutic Approaches to Chorea, Dystonia, and Myoclonus

18:00 – 20:00 GMT

Chairs: Francisco Cardoso, *Brazil*  
Eduardo Tolosa, *Spain*

Chorea  
Ruth Walker, *USA*

Dystonia  
Rachel Saunders-Pullman, *USA*

Myoclonus  
Yoshikazu Ugawa, *Japan*

CSPC Liaison: Francisco Cardoso, *Brazil*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. List the therapeutics options to manage patients with different types of chorea
2. Discuss the therapeutic management of dystonia
3. Summarize the therapeutic options for myoclonus

## SATURDAY, SEPTEMBER 12, 2020

### 104: Therapeutic Plenary Session

#### Neurosurgical Management of Movement Disorders

20:30 – 22:30 GMT

Chairs: Günther Deuschl, *Germany*  
Andrea Kühn, *Germany*

Technical Advances for DBS Treatment  
Jens Volkmann, *Germany*

Long-term Effects of DBS on Motor and Non-motor Symptoms in Parkinson's Disease  
Patricia Limousin, *United Kingdom*

Alternative Strategies: Focused Ultrasound and Other Lesioning Techniques in Movement Disorders  
José Obeso, *Spain*

CSPC Liaison: Andrea Kühn, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss and apply new DBS techniques such as segmented leads for current steering, imaging guided programming, VTA models
2. Discuss indications of DBS and explain motor and non-motor benefits and risks
3. Discuss the pros and cons of different surgical approaches in movement disorders

## SUNDAY, SEPTEMBER 13, 2020

### 101: Therapeutic Plenary Session (Encore Presentation)

#### Updates on Medical Management Strategies for Parkinson's Disease: Motor Aspects

2:00 – 4:00 GMT

Chairs: Roongroj Bhidayasiri, *Thailand*  
Shengdi Chen, *Peoples Republic of China*

Early Pharmacologic Management  
Oscar Gershanik, *Argentina*

Rehabilitation Strategies  
Alice Nieuwboer, *Belgium*

Medical Management Strategies for Advancing Disease Patients  
Regina Katzenschlager, *Austria*

CSPC Liaison: Shen-Yang Lim, *Malaysia*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss current management of early-stage Parkinson's disease
2. Review the role of rehabilitation, including physical, occupational and speech therapies, and exercise in Parkinson's disease
3. Describe current medical management strategies for advancing Parkinson's disease (motor complications and other late-stage features)

### 102: Therapeutic Plenary Session (Encore Presentation)

#### Parkinson's Disease: Non-Motor Aspects

4:30 – 6:30 GMT

Chairs: Huifang Shang, *Peoples Republic of China*  
Louis Tan, *Singapore*

Neuropsychiatric Features  
Anette Schrag, *United Kingdom*

Dysautonomia  
Horacio Kaufmann, *USA*

Sleep and Fatigue  
Ron Postuma, *Canada*

CSPC Liaison: Jennifer Goldman, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe the neuropsychiatric aspects of Parkinson's disease and their management
2. Discuss the recognition and management of dysautonomia in Parkinson's disease
3. Summarize the symptoms and management of sleep and fatigue in Parkinson's disease

## SUNDAY, SEPTEMBER 13, 2020

### 103: Therapeutic Plenary Session (Encore Presentation)

#### Therapeutic Approaches to Chorea, Dystonia, and Myoclonus

7:00 – 9:00 GMT

Chairs: Victor Fung, *Australia*  
Ruey-Meei Wu, *Taiwan*

Chorea  
Ruth Walker, *USA*

Dystonia  
Rachel Saunders-Pullman, *USA*

Myoclonus  
Yoshikazu Ugawa, *Japan*

CSPC Liaison: Francisco Cardoso, *Brazil*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. List the therapeutic options to manage patients with different types of chorea
2. Discuss the therapeutics management of dystonia
3. Summarize the therapeutic options for myoclonus

### 104: Therapeutic Plenary Session (Encore Presentation)

#### Neurosurgical Management of Movement Disorders

9:30 – 11:30 GMT

Chairs: Ritsuko Hanajima, *Japan*  
Beomseok Jeon, *South Korea*

Technical Advances for DBS Treatment  
Jens Volkmann, *Germany*

Long-term Effects of DBS on Motor and Non-motor Symptoms in Parkinson's Disease  
Patricia Limousin, *United Kingdom*

Alternative Strategies: Focused Ultrasound and Other Lesioning Techniques in Movement Disorders  
José Obeso, *Spain*

CSPC Liaison: Andrea Kühn, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss and apply new DBS techniques such as segmented leads for current steering, imaging guided programming, VTA models
2. Discuss indications of DBS and explain motor and non-motor benefits and risks
3. Discuss the pros and cons of different surgical approaches in movement disorders

### 201: Plenary Session

#### Presidential Lectures

12:00 – 14:00 GMT

Chairs: Francisco Cardoso, *Brazil*  
Claudia Trenkwalder, *Germany*

Stanley Fahn Lecture  
Werner Poewe, *Austria*

C. David Marsden Lecture  
Hiroshi Shibasaki, *Japan*

Junior Award Lectures  
*To Be Announced*

CSPC Liaisons: Vincenzo Bonifati, *Netherlands*  
Claudia Trenkwalder, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

### MDS-ES Regional Assembly

14:00 – 14:30 GMT

All participants from Europe are encouraged to attend.

### 301: Parallel Session

#### COVID-19 and Movement Disorders

14:30 – 16:30 GMT

Chairs: Huifang Shang, *Peoples Republic of China*  
Indu Subramanian, *USA*

Neurological Manifestations in patients with COVID-19  
Elena Moro, *France*

COVID-19 in Patients with Parkinson's Disease or Movement Disorders  
Alfonso Fasano, *Canada*

Caring of Patients with Movement Disorders in the COVID-19 Era  
Esther Cubo, *Spain*

CSPC Liaison: Buz Jinnah, *USA*

Recommended Audience: Clinical Academicians, Practitioners Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Summarize the current knowledge about the neurological manifestations and neuropathology in subjects affected by the COVID-19
2. Summarize the clinical phenomenology and outcomes of the COVID-19 disease in patients with Parkinson's disease and other movement disorders
3. Discuss the impact of the COVID-19 pandemic on the clinical care of patients with movement disorders, and the available strategies to ensure continuity of care and best outcomes

## SUNDAY, SEPTEMBER 13, 2020

### 302: Parallel Session



#### MSA and Pure Autonomic Failure

14:30 – 16:30 GMT

Chairs: Howard Hurtig, *USA*  
Ryosuke Takahashi, *Japan*

Molecular Mechanisms  
Virginia Lee, *USA*

The Challenge of Early Diagnosis  
Wassilios Meissner, *France*

Pure / Isolated Autonomic Failure  
Lucy Norcliffe-Kaufmann, *USA*

CSPC Liaisons: Pietro Cortelli, *Italy*  
Ryosuke Takahashi, *Japan*

Recommended Audience: Basic Scientists, Clinical Academicians, Students/Residents/Trainees

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

1. Discuss the role of alpha-synuclein in the initiation and progression of neurodegeneration across Parkinson's disease and atypical parkinsonism
2. Recognize Multiple System Atrophy at an early stage
3. Recognize Pure/Isolated Autonomic failure and discuss its role in predicting the onset of other synucleinopathies (MSA, DLB, PD)

### 303: Parallel Session



#### Update on Functional Movement Disorders

14:30 – 16:30 GMT

Chairs: Mark Edwards, *United Kingdom*  
Mark Hallett, *USA*

Phenomenology  
Francesca Morgante, *United Kingdom*

Electrophysiology and Imaging  
Tereza Serranova, *Czech Republic*

Psychological Aspects to Aetiology and Management  
Timothy Nicholson, *United Kingdom*

CSPC Liaison: Beomseok Jeon, *South Korea*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the phenomenology of functional movement disorders
2. Summarize the electrophysiological and imaging features of functional movement disorders
3. Discuss the psychopathology and management of functional movement disorders

### 304: Parallel Session

#### Update on Genetics of Movement Disorders

14:30 – 16:30 GMT

Chairs: Christine Klein, *Germany*  
Carolyn Sue, *Australia*

Parkinsonism  
Chin-Hsien Lin, *Taiwan*

Dystonia  
Patricia Maria Carvalho Aguiar, *Brazil*

Ataxia  
Martin Paucar Arce, *Sweden*

CSPC Liaison: Carolyn Sue, *Australia*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, 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
3. Summarize recently identified genes related to ataxia

### 305: Parallel Session

#### Heterogeneity of Parkinson's Disease: Clinical Phenotypes and Progression

14:30 – 16:30 GMT

Chairs: Nabila Dahodwala, *USA*  
Connie Marras, *Canada*

Influence of the Genetic Determinants  
Clemens Scherzer, *USA*

Role of Environment, Lifestyle and Comorbidities  
Connie Marras, *Canada*

Lessons from Large Cohort Studies  
Rodolfo Savica, *USA*

CSPC Liaison: Claudia Trenkwalder, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Students/Residents/Trainees

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

1. Discuss the influence of different genetic variants (rare/Mendelian, intermediate-effects variants such as GBA and LRRK2-G2019S, and common GWAS variants) on phenotypes and progressions of Parkinson's disease
2. Discuss the influence of environment, diet, exercise, comorbidities and inflammation on the heterogeneity of Parkinson's disease
3. Discuss the potential of ongoing large longitudinal cohorts-studies to understand Parkinson's disease heterogeneity

## SUNDAY, SEPTEMBER 13, 2020

### 306: Parallel Session

#### Huntington's Disease Continuum and Non-Huntington's Choreas

14:30 – 16:30 GMT

Chairs: Joaquim Ferreira, *Portugal*  
Amanda Krause, *South Africa*

The Natural History of Huntington's Disease  
G. Bernhard Landwehrmeyer, *Germany*

When Genetic Testing is Negative: Huntington's Phenocopies  
Amanda Krause, *South Africa*

A Critical Appraisal of Clinical Trials in Huntington's Disease  
Joaquim Ferreira, *Portugal*

CSPC Liaison: Francisco Cardoso, *Brazil*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss the natural history of Huntington's Disease
2. List the differential diagnosis of Huntington's Disease phenocopies
3. Appraise recent clinical trials in Huntington's Disease

### 401: Teaching Course

#### Cognitive and Psychiatric Issues in the Parkinsonian Spectrum

14:30 – 16:30 GMT

Chairs: Cristian Falup-Pecurariu, *Romania*  
James Morley, *USA*

Apathy: Why, Who, and What to Do About It  
Marcelo Merello, *Argentina*

It's Not Just MCI / Dementia: The Many Cognitive Changes in Parkinsonism  
Madeleine Sharp, *Canada*

Parkinson's Disease Treatments: How do They Change Neuropsychiatric Symptoms?  
Daniel Weintraub, *USA*

CSPC Liaison: Ron Postuma, *Canada*

Recommended Audience: Clinical Academicians, Practitioners, Students/Residents/Trainees

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

1. Discuss the pathophysiology, disease spectrum and management of apathy in parkinsonian conditions
2. Evaluate the broad spectrum of non-dementia cognitive changes in parkinsonian conditions
3. Differentiate treatment vs. disease-related effects on neuropsychiatric symptoms in Parkinson's disease

### 402: Teaching Course

#### Dystonia, Ataxia, and Tics

14:30 – 16:30 GMT

Chairs: Cynthia Comella, *USA*  
Susanne Schneider, *Germany*

My Approach to Dystonia  
Susanne Schneider, *Germany*

My Approach to Ataxia  
José Luiz Pedrosa, *Brazil*

My Approach to Tic Disorders  
Tamara Pringsheim, *Canada*

CSPC Liaison: Ron Postuma, *Canada*

Recommended Audience: Clinical Academicians, Practitioners, Students/Residents/Trainees

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

1. Describe the phenomenology and diagnostic approach to dystonia
2. Describe the phenomenology and diagnostic approach to ataxia
3. Summarize the phenomenology and diagnostic approach to tic disorders

### MDS-Africa Regional Assembly

17:30 – 18:00 GMT

All participants from the African continent are encouraged to attend.

### 501: Skills Workshop

#### A Multidisciplinary Approach for Palliative Care

18:00 – 19:30 GMT

*This session aims to help providers identify and manage palliative care needs, collaborate with other allied healthcare team members, and develop advance care planning with patients, families and their caregivers.*

Stefan Lorenzl, *Germany*  
Janis Miyasaki, *Canada*

CSPC Liaison: Claudia Trenkwalder, *Germany*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the relevance of palliative care in movement disorders
2. Develop a multidisciplinary approach to the management of patients in advanced care

## SUNDAY, SEPTEMBER 13, 2020

### 502: Skills Workshop

#### DBS and Functional Communication in Parkinson's Disease: Insights and Intervention

18:00 – 19:30 GMT

*In this interactive session, the faculty will examine the impact of Deep Brain Stimulation on speech intelligibility in Parkinson's disease. Evidence-based interventions will be compared to optimize functional communication.*

Elina Tripoliti, *United Kingdom*  
Michelle Troche, *USA*

CSPC Liaison: Terry Ellis, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Examine the impact of Deep Brain Stimulation on speech intelligibility in Parkinson's disease
2. Compare treatment strategies to optimize functional communication in Parkinson's disease

### 503: Skills Workshop

#### Imaging in Parkinson's Disease

18:00 – 19:30 GMT

*In this interactive session, the faculty will review the nuts and bolts of how radioisotope imaging, MRI, and ultrasonography are used for diagnosis and prognostication in Parkinson's disease.*

Marios Politis, *United Kingdom*  
Klaus Seppi, *Austria*

CSPC Liaison: Per Borghammer, *Denmark*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe how PET and SPECT are used for the diagnosis, prognostication, and as progression markers of Parkinson's disease
2. Describe the application of anatomical and functional MRI, and ultrasonography in the diagnosis, prognostication, and as progression markers of Parkinson's disease

### 504: Skills Workshop

#### Phenomenology of Movement Disorders for Young Neurologists: Semiological Tricks and Pitfalls

18:00 – 19:30 GMT

*In this interactive session, the faculty will discuss tricks and maneuvers they employ in clinical practice for the detection and examination of movement disorders.*

Mona Obaid, *Saudi Arabia*  
Mayela Rodriguez Violante, *Mexico*

CSPC Liaison: Oscar Gershanik, *Argentina*

Recommended Audience: Practitioners, Students/Residents/Trainees

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

1. Explore the phenomenology of movement disorders
2. Apply semiological tricks to better detect and examine movement disorders

### 601: Special Topics in Movement Disorders

#### Big Data Analytics in Clinical Research for Movement Disorders

18:00 – 19:30 GMT

*In this session the Faculty will discuss the impact of big data analytics in the current clinical research on Parkinson's disease and other movement disorders, as well as the potential implications of the research findings in the clinical management.*

Ivo Dinov, *USA*  
Allison Willis, *USA*

CSPC Liaison: Roongroj Bhidayasiri, *Thailand*

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 concept of big data analytics and the impact in clinical research in the field of Movement Disorders
2. Discuss findings from studies based on big data analytics, and their potential implications in the clinical management

### 602: Special Topics in Movement Disorders

#### Revisiting the Role of Non-Neuronal Cells in Parkinson's Disease

18:00 – 19:30 GMT

*In this interactive session, the faculty will discuss recent data suggesting that brain non-neuronal cells, including glial and inflammatory cells, are involved in the pathogenesis and pathophysiology of Parkinson's disease.*

Antonella Consiglio, *Spain*  
David Sulzer, *USA*

CSPC Liaison: Etienne Hirsch, *France*

Recommended Audience: Basic Scientists, Clinical Academicians, Students/Residents/Trainees

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

1. Discuss the roles for non-neuronal cells in the pathophysiology of Parkinson's disease
2. Describe the putative roles for non-neuronal cells in the pathogenesis

### 701: Video Session

#### Gait Disorders

18:00 – 19:30 GMT

*In this interactive session, participants will gain knowledge on different gait disorders through illustrative videos. Key features of gait disorders and different treatment strategies will be discussed, including surgical interventions.*

Nir Giladi, *Israel*  
Evzen Ruzicka, *Czech Republic*

CSPC Liaison: Andrea Kühn, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Review the clinical features of normal gait and recognize key abnormalities of gait disorders
2. Recognize specific dysfunction in gait disorders, discuss differential diagnosis and the respective therapeutic management

## SUNDAY, SEPTEMBER 13, 2020

### 702: Video Session

#### Tardive Syndromes and Other Drug Induced Movement Disorders

18:00 – 19:30 GMT

*In this interactive session, the faculty will demonstrate iatrogenic movement disorders in a case-based format, highlighting acute, chronic, and tardive syndromes, emphasizing phenotypic features that can be overlooked or misattributed to other disorders. Pearls and pitfalls of drug-related complications will be discussed.*

Hubert Fernandez, *USA*

Deborah Hall, *USA*

CSPC Liaison: Alberto Espay, *USA*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize typical and atypical forms of tardive syndromes and distinguish from mimics
2. Identify clinical clues associated with drug-induced movement disorders

### MDS Video Challenge (non CME)

19:30 – 22:30 GMT

Please join Masters of Ceremony Anthony Lang and Kapil Sethi as they host world-renowned 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 Movement Disorder 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 participants to learn from a series of unusual, very interesting patients and see how senior experts approach these types of challenging cases.

Featured Experts:

Bettina Balint, *Germany*

Orlando Barsottini, *Brazil*

Kailash Bhatia, *United Kingdom*

Francisco Cardoso, *Brazil*

Roberto Erro, *Italy*

Alberto Espay, *USA*

Alfonso Fasano, *Canada*

Jennifer Friedman, *USA*

Victor Fung, *Australia*

Christos Ganos, *Germany*

Dan Healy, *Ireland*

Marina Koning-Tijssen, *Netherlands*

Manju Kurian, *United Kingdom*

Tim Lynch, *Ireland*

Stephen Reich, *USA*

Maria Stamelou, *Greece*

MONDAY, SEPTEMBER 14, 2020

**MDS Video Challenge (Encore Presentation)**

2:00 – 5:00 GMT

Please see page 15 for complete description.

**202: Plenary Session**

**Treatable, Rare Movement Disorders Not to Miss**

12:00 – 14:00 GMT

Chairs: Victor Fung, *Australia*  
Mayela Rodriguez-Violante, *Mexico*

Clinical Approach  
Jennifer Friedman, *USA*

Diagnostic Workup  
Manju Kurian, *United Kingdom*

Current and Future Treatments  
Buz Jinnah, *USA*

CSPC Liaison: Maria Stamelou, *Greece*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Appraise clinically a patient with a suspected treatable, rare movement disorder and recognize clinical clues not to be missed
2. Decide, determine and interpret the necessary investigations for a patient with a suspected treatable, rare movement disorder
3. Apply current therapies and identify upcoming new therapy options for rare movement disorders

**203: Plenary Session**

**Parkinson's Disease Biomarkers: A Multidisciplinary Approach**

12:00 – 14:00 GMT

Chairs: Per Borghammer, *Denmark*  
Andrew Siderowf, *USA*

Update on Imaging Biomarkers for Parkinson's Disease  
A. Jon Stoessl, *Canada*

Clinical Utility of Fluid Biomarkers for Parkinson's Disease  
Brit Mollenhauer, *Germany*

Peripheral Pathology as a Parkinson's Disease Biomarker  
Charles Adler, *USA*

CSPS Liaison: Andrew Siderowf, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Evaluate the clinical value of imaging biomarkers, including emerging PET and SPECT ligands and MRI
2. Describe current status of biochemical biomarkers for Parkinson's disease
3. Summarize recent developments in peripheral tissue assays for alpha-synuclein pathology in Parkinson's disease

**307: Parallel Session**

**Innovative Models in the Integrated Management of Parkinson's Disease**

14:30 – 16:30 GMT

Chairs: Bastiaan Bloem, *Netherlands*  
Terry Ellis, *USA*

Interdisciplinary Team Models of Care in Parkinson's Disease  
Jennifer Goldman, *USA*

An Integrated Telemedicine Approach in Parkinson's Disease  
Mark Guttman, *Canada*

Integrated Palliative Care in Parkinson's Disease: Timing Matters  
Maya Katz, *USA*

CSPC Liaison: Terry Ellis, *USA*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe interdisciplinary team models of care to optimize the management of Parkinson's disease
2. Discuss innovative models on integrated care using telehealth in Parkinson's disease
3. Describe a palliative care model integrated over the disease continuum in Parkinson's disease

**308: Parallel Session**

**Sleep Disorders in Parkinsonism: Science and Clinical Aspects**

14:30 – 16:30 GMT

Chairs: Roongroj Bhidayasiri, *Thailand*  
Ron Postuma, *Canada*

Basic Science Aspects of RBD  
Pierre Luppi, *France*

Clinical Aspects of RBD  
Ambra Stefani, *Austria*

Sleep Disorders in Atypical Parkinsonism  
Federica Provini, *Italy*

CSPC Liaison: Per Borghammer, *Denmark*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe the pathophysiology and neuropathology underlying RBD
2. Describe clinical manifestations of RBD, their relationship with other clinical features, and management
3. Describe prominent sleep disorders in atypical parkinsonisms, their relation with other clinical features, and management

## MONDAY, SEPTEMBER 14, 2020

### 309: Parallel Session

#### Update on Recent Clinical Trials

14:30 – 16:30 GMT

Chairs: Hubert Fernandez, *USA*  
Oscar Gershanik, *Argentina*

Parkinson's Disease  
Tatyana Simuni, *USA*

Atypical Parkinsonian Disorders  
Günter Höglinger, *Germany*

Huntington's Disease  
Blair Leavitt, *Canada*

CSPC Liaison: Wassilios Meissner, *France*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, 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 atypical parkinsonian disorders
3. Discuss recent clinical trials for hyperkinetic movement disorders

### 310: Parallel Session

#### The Crossroads of Spasticity and Ataxia

14:30 – 16:30 GMT

Chairs: Orlando Barsottini, *Brazil*  
Brent Fogel, *USA*

Clinical Syndromes and Diagnostic Evaluation  
To Be Announced

Biological Basis  
Brent Fogel, *USA*

Management  
Carlos Henrique Camargo, *Brazil*

CSPC Liaison: Buz Jinnah, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe the clinical features and diagnostic workup of syndromes that feature spasticity and ataxia
2. Summarize the pathogenesis of spasticity and ataxia
3. Describe management strategies for clinical syndromes that combine spasticity and ataxia

### 311: Parallel Session

#### Advanced Multi-Modal Imaging and Big Imaging Data in Parkinson's Disease

14:30 – 16:30 GMT

Chairs: A. Jon Stoessl, *Canada*  
Antonio Strafella, *Canada*

Multi-Modal Imaging of the Braak Stages and Parkinson's Disease Subtypes  
Per Borghammer, *Denmark*

Multi-Modal Imaging for Diagnosis, Prognosis and Progression  
Jee-Young Lee, *South Korea*

Simulating Parkinson's Disease in Computer Models and Using A.I. for Big Imaging Data  
Alain Dagher, *Canada*

CSPC Liaison: Per Borghammer, *Denmark*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe how multi-modal imaging enables visualization of damage to distinct neurotransmitter systems in Parkinson's disease
2. Describe how multi-modal MRI and other imaging techniques are used for diagnosis, prognostication, and as progression markers
3. Describe computer simulations of Parkinson's disease and how artificial intelligence algorithms allow in-depth analysis of very large imaging datasets

### 403: Teaching Course

#### Atypical Parkinsonisms: Clinical Overview

14:30 – 16:30 GMT

Chairs: Carlo Colosimo, *Italy*  
John Duda, *USA*

PSP/CBD  
Marina Picillo, *Italy*

MSA  
Han-Joon Kim, *South Korea*

Clinical Look-Alikes  
Kailash Bhatia, *United Kingdom*

CSPC Liaison: Ron Postuma, *Canada*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Evaluate the clinical spectrum and imaging features of PSP/CBS
2. Evaluate the clinical spectrum and imaging features of MSA
3. Discuss the disorders which can clinically mimic PSP, CBD, and MSA

## MONDAY, SEPTEMBER 14, 2020

### 404: Teaching Course

#### Update on Neurosurgery for Movement Disorders

14:30 – 16:30 GMT

Chairs: Elena Moro, *France*  
Michael Okun, *USA*

DBS for Parkinson's Disease: Who, Where, and How?  
Michael Okun, *USA*

DBS for Dystonia: Who, Where, and How?  
Andrea Kühn, *Germany*

DBS and Lesioning in Tremor  
Günther Deuschl, *Germany*

CSPC Liaison: Ron Postuma, *Canada*

Recommended Audience: Basic Scientists, Clinical Academicians, Students/Residents/Trainees

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

1. Identify good candidates for DBS surgery in PD, the best surgical target, and novel types of segmented lead technology
2. Identify good candidates for DBS in dystonia, the outcome over the long term, and novel types of adaptive stimulation
3. Identify how to select candidates for surgery in tremor, how to use DBS, and when surgical vs. ultrasound lesioning should be used

### 901: Science of Industry (non-CME)

#### Antisense Oligonucleotides for Treating Movement Disorders

14:30 – 16:30 GMT

See page page 26 for complete session information.

### 505: Skills Workshop

#### Managing Comorbidities and Polypharmacy Issues in Parkinson's Disease

18:00 – 19:30 GMT

*In this interactive session, the faculty will discuss common comorbidities and the polypharmacy these lead to in the management of Parkinson's disease.*

David Burn, *United Kingdom*  
Tove Henriksen, *Denmark*

CSPC Liaison: Tove Henriksen, *Denmark*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the most common comorbidities in Parkinson's disease
2. Manage the comorbidities and the related polypharmacy in Parkinson's disease

### 506: Skills Workshop

#### Botulinum Toxins: A Case-Based Approach

18:00 – 19:30 GMT

*In this interactive session, the faculty will use a case-based approach to describe the use of botulinum toxins for the most common forms of dystonia and spasticity.*

Carlo Colosimo, *Italy*  
Andres Deik, *USA*

CSPC Liaison: Buz Jinnah, *USA*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe optimal strategies for the application of botulinum toxins for the more common forms of dystonia such as cervical dystonia, blepharospasm, and limb dystonia
2. Describe the optimal strategies for the application of botulinum toxins for the treatment of the more common forms of spasticity affecting the upper and lower limb

### 507: Skills Workshop

#### New Perspectives on Phenotype-Genotype Relationships

18:00 – 19:30 GMT

*In this interactive session, faculty will describe various types of genotype-phenotype relationships, how to apply genetic testing for diagnosis in different movement disorders, and several online tools available for understanding the outcomes of genetic testing.*

Pedro Gonzalez-Alegre, *USA*  
Joanne Trinh, *Germany*

CSPC Liaison: Buz Jinnah, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe the sometimes complex relationships between various genotypes and their associated phenotypes
2. Describe some of the tools available to help the clinician make better use of the results of genetic testing for diagnosis

## MONDAY, SEPTEMBER 14, 2020

### 603: Special Topics in Movement Disorders

#### Physical Exercise and Parkinson's Disease

18:00 – 19:30 GMT

*In this interactive session, the faculty will discuss the role of physical exercise in modifying the risk of developing Parkinson's disease and the disease progression.*

Terry Ellis, *USA*  
Priya Jagota, *Thailand*

CSPC Liaison: Beomseok Jeon, *South Korea*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss the role of physical exercise in modifying the risk for developing Parkinson's disease
2. Discuss the role of exercise in modifying Parkinson's disease progression

### 604: Special Topics in Movement Disorders

#### Setting Up Your Telemedicine Clinic

18:00 – 19:30 GMT

*In this interactive session, participants will gain practical knowledge on the resources needed to set up a telemedicine clinic. Faculty will also discuss both the advantages and disadvantages of this interface for delivery of care and highlight obstacles, potential pitfalls, and opportunities for future enhancements.*

Piu Chan, *People's Republic of China*  
Nijdeka Okubadejo, *Nigeria*  
Meredith Spindler, *USA*

CSPC Liaison: Alberto Espay, *USA*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Apply readily available technology resources into an interface for telemedicine
2. Recognize the challenges and opportunities of a telemedicine clinic

### 605: Special Topics in Movement Disorders

#### How to Become a Successful Movement Disorders Specialist

18:00 – 19:30 GMT

*In this interactive session, participants will gain insight on the best approaches to pursue a career in Movement Disorders.*

Beomseok Jeon, *South Korea*  
Pille Taba, *Estonia*

CSPC Liaison: Oscar Gershanik, *Argentina*

Recommended Audience: Students/Residents/Trainees

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

1. Choose the right career path, and acquire the necessary skills to become a successful Movement Disorders Specialist
2. Recognize the importance of searching for good mentors when pursuing specialization

### 703: Video Session

#### Eye Movement Disorders

18:00 – 19:30 GMT

*In this interactive session, attendees will learn bedside examination techniques, recognize categories of abnormal eye movements, and become familiar with ocular and oculomotor abnormalities in many movement disorders.*

Tim Anderson, *New Zealand*  
Joyce Liao, *USA*

CSPC Liaison: Shen-Yang Lim, *Malaysia*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Undertake a bedside neuro-ophthalmological examination relevant to movement disorders
2. Describe characteristic clinical ocular and eye movement abnormalities that aid diagnosis in common and uncommon movement disorders

### 704: Video Session

#### Movement Disorder Emergencies

18:00 – 19:30 GMT

*In this interactive session, the faculty will show videos of hypokinetic and hyperkinetic movement disorder emergencies, and discuss the practical management of these conditions*

Steven Frucht, *USA*  
Asha Kishore, *India*

CSPC Liaison: Roongroj Bhidayasiri, *Thailand*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize clinical settings and signs of hypokinetic and hyperkinetic movement disorder emergencies, including those related to device-aided therapies
2. Outline management strategies of various movement disorder emergencies

## TUESDAY, SEPTEMBER 15, 2020

### 204: Plenary Session

#### Neuroscience Bridges

12:00 – 14:00 GMT

Chairs: Vincenzo Bonifati, *Netherlands*  
Etienne Hirsch, *France*

Speakers: Karl Deisseroth, *USA*  
Beth Stevens, *USA*

CSPC Liaison: Vincenzo Bonifati, *Netherlands*  
Etienne Hirsch, *France*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

### 312: Parallel Session



#### The Evolving Spectrum of Movement Disorder Tauopathies

14:30 – 16:30 GMT

Chairs: Adam Boxer, *USA*  
Maria Stamelou, *Greece*

Clinical Spectrum  
Maria Stamelou, *Greece*

Biomarkers  
James Rowe, *United Kingdom*

Therapeutic Pipeline  
Adam Boxer, *USA*

CSPC Liaison: Wassilios Meissner, *France*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the spectrum of movement disorder tauopathies
2. Discuss biomarkers for movement disorder tauopathies
3. Describe the therapeutics pipeline for movement disorder tauopathies

### 313: Parallel Session

#### Essential Tremor, Dystonia and Their Relationships

14:30 – 16:30 GMT

Chairs: Kailash Bhatia, *United Kingdom*  
Louis Tan, *Singapore*

The Phenotypic Spectrum of Essential Tremor-Plus  
Syndromes

Franziska Hopfner, *Germany*

The Phenotypic Spectrum of Tremor in Dystonias  
Aasef Shaikh, *USA*

Differentiating Essential Tremor-Plus and Dystonic  
Tremor: Neurophysiological Tools

Maja Kojovic, *Slovenia*

CSPC Liaison: Maria Stamelou, *Greece*

Recommended Audience: Clinical Academicians, Practitioners, Students/Residents/Trainees

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

1. Describe and recognize the phenotypic spectrum of essential tremor-plus syndromes
2. Examine and identify the characteristics of tremor in a patient with dystonia
3. Evaluate neurophysiological tools for the differential diagnosis of essential tremor and dystonia syndromes

### 314: Parallel Session

#### Microbiome and the Gut-Brain Axis

14:30 – 16:30 GMT

Chairs: Carolyn Sue, *Australia*  
Ruey-Meei Wu, *Taiwan*

The Gut Microbiome in Health and Disease  
Filip Scheperjans, *Finland*

The Gut Microbiome in the Pathogenesis of Parkinson's  
Disease

Heinz Reichmann, *Germany*

Perspectives for Clinical Management  
Ai Huey Tan, *Malaysia*

CSPC Liaison: Carolyn Sue, *Australia*

Recommended Audience: Basic Scientists, Clinical Academicians, Students/Residents/Trainees

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

1. Summarize the scientific evidence for the role of the gut microbiome in health and disease
2. Appraise animal studies investigating the role of the gut microbiome in the pathogenesis of Parkinson's disease
3. Appraise clinical studies investigating the role of the gut microbiome in the pathogenesis of Parkinson's disease

## TUESDAY, SEPTEMBER 15, 2020

### 315: Parallel Session

#### DNA Repeat Expansions: Old and New Forms

14:30 – 16:30 GMT

Chairs: Thomas Klockgether, *Germany*  
Henry Paulson, *USA*

Genotypes and Phenotypes  
Thomas Klockgether, *Germany*

Molecular Mechanisms  
Henry Paulson, *USA*

Emerging Therapeutics Avenues  
Edward Wild, *United Kingdom*

CSPC Liaison: Jennifer Friedman, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the genetic and clinical spectrum of repeat expansions in movement disorders
2. Describe the molecular mechanisms of repeat expansion disorders
3. Describe the emerging therapeutic avenues for repeat expansion disorders

### 316: Parallel Session

#### Dementia with Lewy Bodies (DLB)

14:30 – 16:30 GMT

Chairs: Melissa Armstrong, *USA*  
Karen Marder, *USA*

Genetics Insights to the Pathogenesis  
Rita Guerreiro, *United Kingdom*

Imaging  
Kejal Kantarci, *USA*

Diagnosis and Management  
Melissa Armstrong, *USA*

CSPC Liaison: Karen Marder, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the role of genetic variants in the pathogenesis of Lewy Body disorders
2. Discuss the role of imaging in differential diagnosis of Lewy Body disorders
3. Identify multidisciplinary approaches to Lewy Body disorders

### 317: Parallel Session

#### Gene-Driven Therapies Under Development for Parkinson's Disease

14:30 – 16:30 GMT

Chairs: Etienne Hirsch, *France*  
Dan Kremens, *USA*

At the Crossroads Between Gaucher's and Parkinson's Disease  
Ellen Sidransky, *USA*

LRRK2 Inhibition as a Target for Intervention in Parkinson's Disease  
Elisa Greggio, *USA*

Alpha-synuclein Aggregation as a Target for Therapeutic Intervention  
Daniel Otzen, *Denmark*

CSPC Liaison: Tiago Outeiro, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Students/Residents/Trainees

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

1. Discuss the role of GBA1 as a genetic risk factor and target for intervention in Parkinson's disease
2. Discuss the current status of LRRK2 inhibition as a therapeutic strategy for Parkinson's disease
3. Compare different possible therapeutic strategies targeting alpha-synuclein aggregation

### 405: Teaching Course



#### Parkinson's Disease Biomarkers

14:30 – 16:30 GMT

Chairs: Shengdi Chen, *People's Republic of China*  
Brit Mollenhauer, *Germany*

What Makes a Good Biomarker?  
Michele Hu, *United Kingdom*

Key Updates in Fluid and Tissue Biomarkers of Parkinson's Disease  
Alice Chen-Plotkin, *USA*

Key Updates in Imaging Biomarkers  
Kathleen Poston, *USA*

CSPC Liaison: Ron Postuma, *Canada*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss different types and uses of biomarkers in Parkinson's disease
2. Summarize key updates in the field of Parkinson's disease fluid and tissue biomarkers
3. Summarize updates in the field of Parkinson's disease neuroimaging biomarkers

## TUESDAY, SEPTEMBER 15, 2020

### 406: Teaching Course

#### Autonomic Disturbances in Movement Disorders

14:30 – 16:30 GMT

Chairs: Pietro Cortelli, *Italy*  
David Goldstein, *USA*

Physiology and Pathophysiology  
David Goldstein, *USA*

Clinical Evaluation and Diagnostic Tests  
Valeria Iodice, *United Kingdom*

Management  
Pietro Cortelli, *Italy*

CSPC Liaison: Ron Postuma, *Canada*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Recognize the important movement disorders associated with autonomic dysfunction
2. Discuss clinical testing for autonomic dysfunction in movement disorders
3. Evaluate pathophysiology and treatment options for autonomic dysfunction in movement disorders

### 902: Science of Industry (non-CME)

#### Immunotherapy for Proteinopathies

14:30 – 16:30 GMT

See page page 26 for complete session information.

### 508: Skills Workshop

#### Genetic Testing, Counseling and Ethical Issues

18:00 – 19:30 GMT

*In this interactive session, the faculty will discuss basic issues regarding genetic testing and counseling for movement disorders, including the rationale, process, challenges and ethical concerns, such as privacy and testing minors, that may arise. Faculty will provide insights regarding ethical aspects of genetics in movement disorders in the next generation sequencing era. Case examples will be used to illustrate the pros and cons of genetic testing, ethical considerations, and challenges faced by clinicians, geneticists, and patients and their families.*

Roy Alcalay, *USA*  
Christine Klein, *Germany*  
Avi Orr-Urtreger, *Israel*

CSPC Liaisons: Jennifer Goldman, *USA*  
Karen Marder, *USA*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss genetic testing and counseling for movement disorders, including the “when, what, why, and how”
2. Recognize the ethical issues relevant to genetic testing and the management of patients with movement disorders

### 509: Skills Workshop

#### How to Use the MDS-UPDRS

18:00 – 19:30 GMT

*In this interactive session, movement disorders experts will facilitate the understanding of participants on the core elements of the MDS-UPDRS and enable them to become fluent in the grading system. Participants will have an opportunity to practice on test cases and determine how to use this standardized measure to optimize clinical and research evaluations, train others in a standardized assessment of Parkinson's disease, and increase communication amongst providers.*

Emilia Gatto, *Argentina*  
Matej Skorvanek, *Slovakia*

CSPC Liaison: Veronica Santini, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Evaluate patients and participants in clinical and research settings with the MDS-UPDRS
2. Practice using the MDS-UPDRS through interactive exercises and test cases

### 510: Skills Workshop

#### Lessons From My Patients

18:00 – 19:30 GMT

*In this interactive session, experienced clinical specialists will discuss important lessons they have learned from patients, analyzing the important clinical features of the history and examination that aided in the diagnosis, as well as pitfalls of the evaluation process. Faculty will also discuss approaches to management and key features that assist in determining appropriate strategies.*

Cynthia Comella, *USA*  
Marie Vidailhet, *France*

CSPC Liaisons: Tove Henriksen, *Denmark*  
Veronica Santini, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Interpret and critique the pertinent historical and examination elements that may be advantageous when diagnosis and management are elusive
2. Identify common pitfalls in the evaluation of movement disorders

TUESDAY, SEPTEMBER 15, 2020

**606: Special Topics in Movement Disorders**

**Autonomic Dysfunction: Pathophysiology and Advanced Testing**

18:00 – 19:30 GMT

*In this interactive session, the pathophysiology and advanced methods for investigating, diagnosing and imaging cardiovascular, gastrointestinal and urogenital systems in Parkinson's disease and atypical parkinsonism will be illustrated. Participants will be able to discuss the relevance of advanced diagnostic techniques to define and manage neurogenic orthostatic hypotension, gastrointestinal and urogenital dysfunctions.*

Ryuji Sakakibara, *Japan*  
Paola Sandroni, *USA*

CSPC Liaison: Pietro Cortelli, *Italy*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Assess the pathophysiology of neurogenic orthostatic hypotension, gastrointestinal and urogenital autonomic dysfunctions
2. Interpret the results of advanced investigations for planning appropriate management of these autonomic dysfunctions

**607: Special Topics in Movement Disorders**

**IPCs and Organoids for Parkinson's Disease**

18:00 – 19:30 GMT

*In this session, the technology of induced pluripotent stem cells (iPS) and brain organoids as innovative tools for Parkinson's disease modeling and development of novel therapies will be discussed.*

Wado Akamatsu, *Japan*  
Eng-King Tan, *Singapore*

CSPC Liaison: Ryosuke Takahashi, *Japan*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Students/Residents/Trainees

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

1. Illustrate the application of human pluripotent stem cell technology and brain organoids to study the molecular mechanisms of Parkinson's disease
2. Discuss the potential of human pluripotent stem cell and organoid technologies for the development of novel therapies for Parkinson's disease

**608: Special Topics in Movement Disorders**

**Metals and Calcium in my Brain**

18:00 – 19:30 GMT

*In this interactive session the presenters will discuss clinical and imaging aspects of movement disorders related to iron, copper, manganese, and calcium brain accumulation. The audience will learn important tips to clinically distinguish different forms of these disorders and the available treatment options.*

Annu Aggarwal, *India*  
Miryam Carecchio, *Italy*

CSPC Liaison: Orlando Barsottini, *Brazil*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss the phenotypic spectrum of movement disorders associated with brain metal accumulations
2. Recognize different imaging hallmarks of these disorders

**609: Special Topics in Movement Disorders**

**Nutrition and Microbiome in Health and Neurodegenerative Disease**

18:00 – 19:30 GMT

*In this interactive session, faculty will discuss nutrition and the microbiome in health and disease. They will present research on nutrition and dietary patterns and their effects on maintaining health and the development of disease, cognitive decline, and parkinsonism. Faculty will discuss the microbiome and how it relates to the pathogenesis of Parkinson's disease, different fecal and blood microbiota in animal and human models, and implications for research and clinical care.*

John Duda, *USA*  
Qin Xiao, *People's Republic of China*

CSPC Liaison: Jennifer Goldman, *USA*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe how nutrition and different dietary patterns influence both health and disease
2. Discuss the role of the microbiome in the pathogenesis of Parkinson's disease, highlighting evidence from animal models to human studies

**705: Video Session**

**Pediatric Hyperkinetic Movement Disorders: Approach to a Child Who Moves Too Much**

18:00 – 19:30 GMT

*In this interactive session, the presenters will demonstrate with illustrative videos the wide phenotypic spectrum of hyperkinetic pediatric movement disorders. The audience will also observe video cases of potentially treatable hyperkinetic pediatric movement disorders that are important not to miss.*

Serena Galosi, *Italy*  
Toni Pearson, *USA*

CSPC Liaisons: Orlando Barsottini, *Brazil*  
Jennifer Friedman, *USA*

Recommended Audience: Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Describe the phenotypic spectrum of hyperkinetic movement disorders in children
2. Recognize potentially treatable hyperkinetic pediatric movement disorders

## WEDNESDAY, SEPTEMBER 16, 2020

### 205: Plenary Session



#### Digital Health Technologies in Movement Disorders

12:00 – 14:00 GMT

Chairs: Roongroj Bhidayasiri, *Thailand*  
Christopher Goetz, *USA*

Digital Health Technologies: The Toolbox in 2020  
Walter Maetzler, *Germany*

Digital Technologies for Diagnosis and Disease Monitoring  
Bastiaan Bloem, *Netherlands*

Digital Health Pathway for Personalized and Integrated Care  
Alberto Espay, *USA*

CSPC Liaison: Roongroj Bhidayasiri, *Thailand*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Summarize the digital health technologies available for research and clinical care of movement disorders
2. Discuss opportunities and challenges of digital health technologies for diagnosis and disease monitoring in clinical trials and patients management
3. Discuss the concept of digital health pathway for patient-centered integrated care

### 206: Plenary Session

#### Translational Insights into New Parkinson's Disease-Modifying Therapies

12:00 – 14:00 GMT

Chairs: Joseph Jankovic, *USA*  
Tiago Outeiro, *Germany*

Lysosomal Dysfunction in Parkinson's Disease: From Genetics to the Bedside  
Leonidas Stefanis, *Greece*

The Immune System as a Target for Intervention in Parkinson's Disease  
Malu Tansey, *USA*

Antibody-Based Therapies: Present and Future  
Eliezer Masliah, *USA*

CSPC Liaison: Tiago Outeiro, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Discuss the potential of lysosome-targeted therapies in Parkinson's disease
2. Discuss the role of the immune system as a target for intervention in Parkinson's disease
3. Summarize the status of antibody-based therapies for Parkinson's disease

### 207: Plenary Session

#### Controversies in Movement Disorders

14:30 - 16:30 GMT

Chairs: Tove Henriksen, *Denmark*  
Irene Litvan, *USA*

Antibodies Panels are Under-Utilized in Movement Disorders Diagnosis (YES)  
Bettina Balint, *Germany*

Antibodies Panels are Under-Utilized in Movement Disorders Diagnosis (NO)  
Francisco Cardoso, *Brazil*

Clinical Judgement vs. A.I. Algorithms: A.I. Will Outperform the Clinical Neurologist in the Near Future (YES)

Roongroj Bhidayasiri, *Thailand*

Clinical Judgement vs. A.I. Algorithms: A.I. Will Outperform the Clinical Neurologist in the Near Future (NO)

Christopher Goetz, *USA*

CSPC Liaison: Vincenzo Bonifati, *Netherlands*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Debate the advantages and disadvantages of antibodies panels in movement disorders diagnosis
2. Debate whether artificial intelligence will outperform clinical judgement in the near future

## WEDNESDAY, SEPTEMBER 16, 2020

### 208: Plenary Session

#### Highlights from 2020: Looking Toward 2021

14:30 – 16:30 GMT

Chairs:

Vincenzo Bonifati, *Netherlands*

Claudia Trenkwalder, *Germany*

Basic Science: Parkinson's Disease

Ryosuke Takahashi, *Japan*

Basic Science: Other Movement Disorders

Carolyn Sue, *Australia*

Clinical Studies: Parkinson's Disease

Shen-Yang Lim, *Malaysia*

Clinical Studies: Other Movement Disorders

Orlando Barsottini, *Brazil*

CSPC Liaisons:

Vincenzo Bonifati, *Netherlands*

Claudia Trenkwalder, *Germany*

Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Non-Physician Health Professionals, Students/Residents/Trainees

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

1. Critically review high-impact scientific discoveries in the field of Movement Disorders published in the past year, and important areas of scientific focus for 2021 research
2. Critically review high-impact clinical studies in the field of Movement Disorders published in the past year, and important ongoing trials with anticipated completion in 2020

### MDS-PAS Regional Assembly

22:30 – 23:00 GMT

All participants from Pan America are encouraged to attend.

## NON-CME EDUCATIONAL ACTIVITIES

### SCIENCE OF INDUSTRY SESSION (NON-CME):

These interactive sessions will provide participants with a non-CME educational opportunity to learn about novel therapeutic agents under development by industry. Sessions may incorporate basic scientists or clinicians working in industry, and topics may address the biological rationale or development process for specific therapeutics in development within the field of Movement Disorders.

#### MONDAY, SEPTEMBER 14, 2020

901	Science of Industry (non-CME)
	<b>Antisense Oligonucleotides for Treating Movement Disorders</b> 14:30 - 16:30 GMT
Chairs:	Stanley Fahn, <i>USA</i> Buz Jinnah, <i>USA</i>
	Biological Basis Stefan Pulst, <i>USA</i>
	Preclinical Treatment Pipeline To Be Announced
	Current Status of Clinical Development Lauren Boak, <i>Switzerland</i>
CSPC Liaisons:	Wassilios Meissner, <i>France</i> Tiago Outeiro, <i>Germany</i>
	Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Students/Residents/Trainees
	At the conclusion of this session, participants should be better able to:
	1. Discuss the biological basis for using antisense oligonucleotides as treatment for movement disorders
	2. Summarize the results of preclinical studies using antisense oligonucleotides for treating movement disorders
	3. Discuss the current status of clinical trials using antisense oligonucleotides for treating movement disorders

#### TUESDAY, SEPTEMBER 15, 2020

902	Science of Industry (non-CME)
	<b>Immunotherapy for Proteinopathies</b> 14:30 - 16:30 GMT
Chairs:	Wassilios Meissner, <i>France</i> Tiago Outeiro, <i>Germany</i>
	Biological Basis Andrew Siderowf, <i>USA</i>
	Update on Preclinical Studies Warren Hirst, <i>USA</i>
	Current Status of Clinical Development Wagner Zago, <i>USA</i>
CSPC Liaisons:	Wassilios Meissner, <i>France</i> Tiago Outeiro, <i>Germany</i>
	Recommended Audience: Basic Scientists, Clinical Academicians, Practitioners, Students/Residents/Trainees
	At the conclusion of this session, participants should be better able to:
	1. Discuss the biological basis for immunotherapy in neurological disease
	2. Summarize the results of preclinical studies based on immunotherapy strategies for treating movement disorders
	3. Summarize the current status of clinical trials based on immunotherapy strategies for treating movement disorders

### SPONSORED SYMPOSIA

Join daily at 16:30 GMT for our Sponsored Symposia. These industry-based informational sessions provide attendees with non-CME educational opportunities to learn the latest in therapeutics.

#### SATURDAY, SEPTEMBER 12

AbbVie  
ACADIA Pharmaceuticals, Inc.  
Sunovion Pharmaceuticals, Inc.  
Zambon

#### SUNDAY, SEPTEMBER 13

Acorda Therapeutics  
Bial  
Genentech, a Member of the Roche Group  
Medtronic

#### MONDAY, SEPTEMBER 14

Neurocrine Biosciences, Inc.  
Sanofi Genzyme

#### TUESDAY, SEPTEMBER 15

Teva

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**Charles Adler, USA**  
203

**Annu Aggarwal, India**  
608

**Wado Akamatsu, Japan**  
607

**Roy Alcalay, USA**  
508

**Tim Anderson, New Zealand**  
703

**Angelo Antonini, Italy**  
102

**Melissa Armstrong, USA**  
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**Bettina Balint, Germany**  
207

**Orlando Barsottini, Brazil**  
208, 310

**Kailash Bhatia, United Kingdom**  
313, 403

**Roongroj Bhidayasiri, Thailand**  
205, 207, 308

**Bastiaan Bloem, Netherlands**  
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**Lauren Boak, Switzerland**  
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**Vincenzo Bonifati, Netherlands**  
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**Per Borghammer, Denmark**  
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**Adam Boxer, USA**  
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**David Burn, United Kingdom**  
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**Carlos Henrique Camargo, Brazil**  
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**Francisco Cardoso, Brazil**  
103, 201, 207

**Miryam Carecchio, Italy**  
608

**Patricia Maria Carvalho Aguiar, Brazil**  
304

**Piu Chan, Peoples Republic of China**  
604

**Shengdi Chen, Peoples Republic of China**  
101, 405

**Alice Chen-Plotkin, USA**  
405

**Carlo Colosimo, Italy**  
403, 506

**Cynthia Comella, USA**  
402, 510

**Antonella Consiglio, Spain**  
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**Pietro Cortelli, Italy**  
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**Esther Cubo Delgado, Spain**  
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**Alain Dagher, Canada**  
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**Nabila Dahodwala, USA**  
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**Andres Deik, USA**  
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**Karl Deisseroth, USA**  
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**Günther Deuschl, Germany**  
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**Ivo Dinov, USA**  
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**John Duda, USA**  
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**Mark Edwards, United Kingdom**  
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**Terry Ellis, USA**  
307, 603

**Alberto Espay, USA**  
205

**Stanley Fahn, USA**  
901

**Cristian Falup-Pecurariu, Romania**  
401

**Alfonso Fasano, Canada**  
301

**Hubert Fernandez, USA**  
309, 702

**Joaquim Ferreira, Portugal**  
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**Brent Fogel, USA**  
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**Jennifer Friedman, USA**  
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**Steven Frucht, USA**  
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**Victor Fung, Australia**  
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**Serena Galosi, Italy**  
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**Emilia Gatto, Argentina**  
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**Oscar Gershanik, Argentina**  
101, 309

**Nir Giladi, Israel**  
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**Christopher Goetz, USA**  
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**Jennifer Goldman, USA**  
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**David Goldstein, USA**  
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**Pedro Gonzalez-Alegre, USA**  
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**Rita Guerreiro, United Kingdom**  
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**Mark Guttman, Canada**  
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**Deborah Hall, USA**  
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**Mark Hallett, USA**  
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**Tove Henriksen, Denmark**  
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**Etienne Hirsch, France**  
204, 317

**Warren Hirst, USA**  
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**Günter Höglinger, Germany**  
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**Franziska Hopfner, Germany**  
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**Michele Hu, United Kingdom**  
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**Howard Hurtig, USA**  
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**Valeria Iodice, United Kingdom**  
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603

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101, 605

**Hyder Jinnah, USA**  
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**Kejal Kantarci, USA**  
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**Maya Katz, USA**  
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**Regina Katzenschlager, Austria**  
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**Horacio Kaufmann, USA**  
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**Lucy Norcliffe-Kaufmann, USA**  
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**Han-Joon Kim, South Korea**  
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**Asha Kishore, India**  
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**Christine Klein, Germany**  
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**Thomas Klockgether, Germany**  
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**Maja Kojovic, Slovenia**  
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**Amanda Krause, South Africa**  
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**Daniel Kremens, USA**  
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**Andrea Kuehn, Germany**  
104, 404

**Manju Kurian, United Kingdom**  
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**G. Bernhard Landwehrmeyer, Germany**  
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**Blair Leavitt, Canada**  
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**Jee-Young Lee, South Korea**  
311

**Virginia Lee, USA**  
302

**Y. Joyce Liao, USA**  
703

**Shen-Yang Lim, Malaysia**  
208

**Patricia Limousin, United Kingdom**  
104

**Chin-Hsien Lin, Taiwan**  
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**Irene Litvan, USA**  
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**Stefan Lorenzl, Germany**  
501

**Pierre-Hervé Luppi, France**  
308

**Walter Maetzler, Germany**  
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**Eliezer Masliah, USA**  
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**Wassilios Meissner, France**  
302, 902

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401

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501

**Brit Mollenhauer, Germany**  
203, 405

**Francesca Morgante, United Kingdom**  
303

**James Morley, USA**  
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**Elena Moro, France**  
301, 404

**Timothy Nicholson, United Kingdom**  
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**Alice Nieuwboer, Belgium**  
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**Mona Obaid, Saudi Arabia**  
504

**Jose Obeso, Spain**  
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**Njideka Okubadejo, Nigeria**  
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**Tiago Outeiro, Germany**  
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**Martin Paucar Arce, Sweden**  
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**Toni Pearson, USA**  
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**Marios Politis, United Kingdom**  
503

**Kathleen Poston, USA**  
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**Ron Postuma, Canada**  
102, 308

**Tamara Pringsheim, Canada**  
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**Federica Provini, Italy**  
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**Stefan Pulst, USA**  
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**Heinz Reichmann, Germany**  
314

**Mayela Rodriguez Violante, Mexico**  
202, 504

**James Rowe, United Kingdom**  
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**Evzen Ruzicka, Czech Republic**  
701

**Ryuji Sakakibara, Japan**  
606

**Paola Sandroni, USA**  
606

**Rachel Saunders-Pullman, USA**  
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**Rodolfo Savica, USA**  
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**Susanne Schneider, Germany**  
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**Anette Schrag, United Kingdom**  
102

**Klaus Seppi, Austria**  
503

**Tereza Serranova, Czech Republic**  
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**Aasef Shaikh, USA**  
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**Huifang Shang, Peoples Republic of China**  
301

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