21st International Congress of Parkinson’s Disease and Movement Disorders

PROGRAM-AT-A-GLANCE
June 4–8, 2017
VANCOUVER
British Columbia, Canada

www.mdscongress2017.org

Important Dates:
Preliminary Program Available January 2017
Abstract Submission Deadline January 6, 2017
Early Registration Deadline April 3, 2017
Final Pre-Registration Deadline May 2, 2017
## 2017 Congress Schedule-At-A-Glance

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### Therapeutic Plenary Session
- **Sunday, June 4**: 8:00 - 10:00
- **Monday, June 5**: 8:00 - 10:00
- **Tuesday, June 6**: 10:30 - 12:30
- **Wednesday, June 7**: 10:15 - 12:15
- **Thursday, June 8**: 10:15 - 12:15

### Plenary Session
- **Monday, June 5**: 8:00 - 10:00
- **Tuesday, June 6**: 11:00 - 12:30
- **Wednesday, June 7**: 8:00 - 9:30

### Regional Assemblies
- **Tuesday, June 6**: 10:00 - 11:00

### Break
- **Monday, June 5**: 10:00 - 10:30
- **Tuesday, June 6**: 15:15 - 15:30
- **Wednesday, June 7**: 14:45 - 15:00
- **Thursday, June 8**: 14:45 - 15:00

### Skills Workshops/Video Sessions
- **Tuesday, June 6**: 17:30 - 18:00
- **Thursday, June 8**: 17:30 - 19:00

### Corporate Therapeutic Symposia
- **Wednesday, June 7**: 12:15 - 13:15
- **Thursday, June 8**: 12:15 - 13:15

### MDS Business Meeting
- **Wednesday, June 7**: 10:00 - 11:00

### Blue Ribbon Highlights
- **Wednesday, June 7**: 11:00 - 12:00

### Controversies
- **Wednesday, June 7**: 10:00 - 11:00

### Break/Guided Poster Tours/Poster Sessions
- **Wednesday, June 7**: 13:15 - 14:45
- **Thursday, June 8**: 13:15 - 14:45

### Parallel Sessions/Teaching Courses
- **Wednesday, June 7**: 15:00 - 17:00
- **Thursday, June 8**: 15:00 - 17:00

### Skills Workshops/Video Sessions
- **Wednesday, June 7**: 18:00 - 19:30
- **Thursday, June 8**: 18:00 - 19:30

### MDS Video Challenge
- **Wednesday, June 7**: 19:00 - 22:00

Scan to learn more on our website.
Sunday, June 4, 2017

Dear Colleagues,

On behalf of the International Parkinson and Movement Disorder Society, we are pleased to formally invite you to attend the 21st International Congress of Parkinson’s Disease and Movement Disorders in Vancouver, BC, Canada from June 4-8, 2017.

At each annual International Congress, the Congress Scientific Program Committee selects a theme that is highlighted throughout the meeting. This year’s theme, Pathophysiology of Basal Ganglia Disorders: From Cell to System to Patient, will be showcased in two Plenary Sessions, nine Parallel Sessions, one Skills Workshop and one Teaching Course. 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 a.

We are excited to welcome you to Vancouver for the 21st International Congress and hope you will take part in this exceptional Scientific Program. We promise an unforgettable learning experience.

With kind regards,
Oscar Gershanik, President, International Parkinson and Movement Disorder Society, 2015-2017
Christine Klein, Chair, Congress Scientific Program Committee, 2015-2017
A. Jon Stoessl, Co-Chair, Congress Scientific Program Committee, 2017

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1101 Therapeutic Plenary Session
Treating Motor Complications of Parkinson’s Disease
8:00 – 10:00
Chairs: Steven Frucht
New York, NY, USA
Oscar Gershanik
Buenos Aires, Argentina

8:00 Disease Related Motor Complications: Gait, Posture, Balance
Bettina Debu
Grenoble, France

8:40 Understanding Motor Fluctuations and Dyskinesias: Clinical Aspects, Pathophysiology, Risk Factors
Han-Joon Kim
Seoul, Korea

9:20 Prevention, Treatment and Management of Motor Fluctuations and Dyskinesias
Jean-Christophe Corvol
Paris, France

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

1102 Therapeutic Plenary Session
Treatment of Dystonia
11:00 – 13:00
Chairs: Marina De Koning-Tijssen
Groningen, Netherlands
Hyder Jinnah
Atlanta, GA, USA

11:00 Assessment and Classification as the First Step in Expert Management
Alberto Albanese
Rozzano, Italy

11:40 Medical Treatment (Including Botulinum Toxins)
Mandar Jog
London, ON, Canada

12:20 Surgical Treatment (Including Deep Brain Stimulation)
Joachim Krauss
Hannover, Germany

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

1103 Therapeutic Plenary Session
Update on the Treatment of Hyperkinetic Movement Disorders
14:30 – 16:30
Chairs: Jonathan Mink
Rochester, NY, USA
Raymond Rosales
Manila, Philippines

14:30 Chorea in the Clinic: Which One and Which Treatment?
Pichet Termarsarasab
Cleveland Heights, OH, USA

15:10 Tic Disorders: Diagnosis and Treatment
Jonathan Mink
Rochester, NY, USA

15:50 Myoclonus: Etiology, Pathophysiology and Treatment Insights
Yoshikazu Ugawa
Fukushima, Japan

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

1104 Therapeutic Plenary Session
Update on Neurosurgical Interventions for Movement Disorders
17:00 – 19:00
Chairs: Kelly Foote
Gainesville, FL, USA
Elena Moro
Grenoble, France

17:00 MRI-Guided Focal Ultrasound Lesions: Present and Future
Binit Shah
Charlottesville, VA, USA

17:40 Updates on Gamma-Knife Treatment
Jean Regis
Marseille, France

18:20 Emerging Interventions in Deep Brain Stimulation
Peter Brown
Oxfordshire, United Kingdom

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Monday, June 5, 2017

2101 Plenary Session

Presidential Lectures
8:00 – 10:00

Chairs:
Oscar Gerhanik
Buenos Aires, Argentina
Christopher Goetz
Chicago, IL, USA

8:00 Stanley Fahn Lecture
Ali Rajput
Saskatoon, SK, Canada

8:30 Junior Award Lectures
To be announced

9:30 C. David Marsden Lecture
Glenda Halliday
Randwick, NSW, Australia

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

2102 Plenary Session

Pathophysiological Underpinnings of Clinical Manifestations
10:30 – 12:30

Chairs:
David Eidelberg
Massachusetts, NY, USA
A. Jon Stoessl
Vancouver, BC, Canada

10:30 Pathophysiology of Motor Dysfunction
John Rothwell
London, United Kingdom

11:10 Compensatory Mechanisms - Lessons from Imaging Studies
David Eidelberg
Massachusetts, NY, USA

11:50 Pathophysiology of Cognitive and Behavioral Changes in Basal Ganglia Disorders
Anthony Phillips
Vancouver, BC, Canada

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

2203 Parallel Session

Imaging in Model Systems of Basal Ganglia Function
15:30 – 17:30

Chairs:
Bernd Pichler
Tübingen, Germany
Vesna Sossi
Vancouver, BC, Canada

15:30 Optogenetics: Enhancing our Understanding of Basal Ganglia Function
Nicole Calakos
Durham, NC, USA

16:10 Astrocytes and Microglia Studied in Vivo: Imaging Disease Mechanisms
Brian MacVicar
Vancouver, BC, Canada

16:50 Concurrent Multimodal Imaging
Bernd Pichler
Tübingen, Germany

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

2204 Parallel Session

Repeat Expansion Disorders: From Cell to System to Patient
15:30 – 17:30

Chairs:
Alexis Brice
Paris, France
Luis Velázquez-Pérez
Holguín, Cuba

15:30 Repeat Expansion Disorders – Movement Disorders and More
Alexis Brice
Paris, France

16:10 Spino cerebellar Ataxias (SCAs)
Luis Velázquez-Pérez
Holguín, Cuba

16:50 Fragile X Tremor-Ataxia
Deborah Hall
Chicago, IL, USA

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

2205 Parallel Session

Pediatric Movement Disorders
15:30 – 17:30

Chairs:
Jonathan Mink
Rochester, NY, USA
Harvey Singer
Baltimore, MD, USA

15:30 Repetitive Movement Disorders in Children
Harvey Singer
Baltimore, MD, USA

16:10 Metabolic Movement Disorders in Children
Darius Ebrahimi-Fakhari
Boston, MA, USA

16:50 Pediatric Movement Disorders Patients Transitioning into Adult Neurology
Martje van Egmond
Haren, Netherlands

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

2206 Parallel Session

Movement Disorders in Paraneoplastic and Autoimmune Disease
15:30 – 17:30

Chairs:
Sarosh Irani
Oxford, United Kingdom
Philip Thompson
Adelaide, SA, Australia

15:30 Autoimmune Encephalopathies
Sarosh Irani
Oxford, United Kingdom

16:10 Sydenham's Chorea
Hilla Ben-Pazi
Jerusalem, Israel

16:50 Paraneoplastic Movement Disorders
Sean Pittcock
Rochester, MN, USA

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Monday, June 5, 2017

2207 Parallel Session [TICKET]
Monogenic Movement Disorders in the Next Generation Sequencing Era
15:30 – 17:30

Chairs:
Thomas Bird
Seattle, WA, USA
Katja Lohmann
Lübeck, Germany

15:30 Finding Genes for Movement Disorders in the Next Generation Sequencing Era: Parkinsonism as Example
Enza Maria Valente
Rome, Italy

16:10 Genes Causing Isolated Dystonia – New Mutations and Pathogenetic Pathways
Katja Lohmann
Lübeck, Germany

16:50 Monogenic Hyperkinetic Disorders with Pleomorphic Phenotypes
Thomas Bird
Seattle, WA, USA

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

2208 Parallel Session [TICKET]
Integrated Management of Movement Disorders: Is It Needed in All Stages?
15:30 – 17:30

Chairs:
Bastiaan Bloem
Nijmegen, Netherlands
Daniel Corcos
Chicago, IL, USA

15:30 The Case for Integrated Care Management of Parkinson’s Disease: An Evidence-Based Perspective
Carsten Eggers
Cologne, Germany

16:10 Update on the Most Recent Evidence for Non-Pharmacological Interventions
Daniel Corcos
Chicago, IL, USA

16:50 Logistics of Integrated Care
Geraldine Acuna-Sunshine
Boston, MA, USA

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

2309 Teaching Course [TICKET]
Neuroimaging Techniques of Systems Neuroscience
15:30 – 17:30

Chairs:
Paola Piccini
London, United Kingdom
Irena Rektorova
Brno, Czech Republic

15:30 Principles of Tractography
Federica Agosta
Milan, Italy

16:10 Imaging the Human Connectome
Shunsuke Kobayashi
Fukushima, Japan

16:50 Principles of Molecular Imaging
Paola Piccini
London, United Kingdom

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

2310 Teaching Course [TICKET]
Practical Management of Common Non-Motor Symptoms in Parkinson’s Disease
15:30 – 17:30

Chairs:
Paolo Barone
Naples, Italy
Pablo Martinez-Martin
Madrid, Spain

15:30 How to Evaluate and Treat Autonomic Dysfunction in Parkinson’s Disease
Christopher Mathias
London, United Kingdom

16:10 How to Evaluate and Treat Sleep Dysfunction in Parkinson’s Disease
Aleksandar Videnovic
Brookline, MA, USA

16:50 How to Evaluate and Treat Cognitive and Psychiatric Disturbances in Parkinson’s Disease
Jennifer Goldman
Chicago, IL, USA

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

2411 Skills Workshop [TICKET]
Functional Capacity in Parkinson’s Disease: How Can Practice Help?
18:00 – 19:30
Elke Heremans
Heverlee, Belgium
Ingrid Sturkenboom
Nijmegen, Netherlands

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

2412 Skills Workshop [TICKET]
Which Targeting Technique for Botulinum Toxin Injections?
18:00 – 19:30
Joseph Tsui
Vancouver, BC, Canada
Uwe Walter
Rostock, Germany

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

2413 Skills Workshop [TICKET]
Post-Surgical Management of Deep Brain Stimulation Therapies
18:00 – 19:30
Genko Oyama
Tokyo, Japan
Maria Rodriguez-Oroz
Pamplona, Spain

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

2414 Skills Workshop [TICKET]
Lessons from My Patients
18:00 – 19:30
Susan Bressman
New York, NY, USA
Barry Snow
Auckland, New Zealand

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Monday, June 5, 2017

2415 Skills Workshop [TICKET]
The Challenge of Molecular Genetics for the Clinician
18:00 – 19:30
Alexandra Durr
Paris, France
Marialuisa Quadri
Rotterdam, Netherlands
Recommended Audience: Basic scientists, Clinical academicians, Practitioners, Students/Residents/Trainees

2516 Video Session [TICKET]
Movement Disorders in Autoimmune Diseases
18:00 – 19:30
Bettina Balint
London, United Kingdom
Andrew McKeon
Rochester, MN, USA
Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

2517 Video Session [TICKET]
Update on Paroxysmal Movement Disorders
18:00 – 19:30
Roberto Erro
Verona, Italy
Jennifer Friedman
Del Mar, CA, USA
Recommended Audience: Clinical academicians, Practitioners, Students/Residents/Trainees

2518 Video Session [TICKET]
Acquired Choreas: What is New?
18:00 – 19:30
Kalyan Bhattacharyya
Kolkata, India
Kathleen Shannon
Madison, WI, USA
Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
### Tuesday, June 6, 2017

#### 3101 Plenary Session

**Disease Mechanisms of Parkinson’s Disease: From Cell to System**  
**8:00 – 10:00**

**Chairs:** Marie-Francoise Chesselet  
Los Angeles, CA, USA  
Andrew West  
Birmingham, AL, USA

- **8:00**  
  **Protein Degradation and Mitochondrial Dysfunction**  
  Anthony Schapira  
  London, United Kingdom

- **8:40**  
  **Axonal Transport and Membrane Sorting**  
  Matthew Seaman  
  Cambridge, United Kingdom

- **9:20**  
  **Neuroinflammation**  
  Andrew West  
  Birmingham, AL, USA

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

#### 3102 Plenary Session

**Huntington’s Disease: Molecular and Therapeutic Advances**  
**11:00 – 12:30**

**Chairs:** Christopher Goetz  
Chicago, IL, USA  
Werner Poewe  
Innsbruck, Austria

- **11:00**  
  **The Huntington’s Disease Gene and Its Modifiers**  
  Jong-Min Lee  
  Boston, MA, USA

- **11:30**  
  **Molecular Imaging in Huntington’s Disease - Recent Advances**  
  Andrea Varrone  
  Stockholm, Sweden

- **12:00**  
  **Emerging Therapies in Huntington’s Disease: Promises and Challenges**  
  Blair Leavitt  
  Vancouver, BC, Canada

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

#### 3203 Parallel Session

**Promises of Induced Pluripotent Stem Cells: From Modeling to Therapy**  
**15:30 – 17:30**

**Chairs:**  
Steven Finkbeiner  
San Francisco, CA, USA  
Miquel Vila  
Barcelona, Spain

- **15:30**  
  **iPSC-Derived Neuronal Models for Basal Ganglia Diseases**  
  Steven Finkbeiner  
  San Francisco, CA, USA

- **16:10**  
  **Application of iPSC-Derived Models and Novel Therapeutic Approaches**  
  Brent Ryan  
  Oxford, United Kingdom

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

#### 3204 Parallel Session

**Imaging Genetics and Pathophysiology in Humans**  
**15:30 – 17:30**

**Chairs:** Doris Doudet  
Vancouver, BC, Canada  
Wayne Martin  
Edmonton, AB, Canada

- **15:30**  
  **Neurotransmitter Studies in Genetic Disease and Prodromal Populations**  
  Marios Politis  
  London, United Kingdom

- **16:10**  
  **Structural and Functional Connectivity**  
  Hartwig Siebner  
  Hvidovre, Denmark

- **16:50**  
  **Imaging Pathology - Inflammation and Abnormal Protein**  
  Vesna Sossi  
  Vancouver, BC, Canada

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

#### 3205 Parallel Session

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

**Chairs:**  
Michael Schlossmacher  
Ottawa, ON, Canada  
Matthew Stern  
Philadelphia, PA, USA

- **15:30**  
  **Imaging Pathology of Neurodegenerative Movement Disorders: Why is it Important and So Difficult?**  
  Per Borghammer  
  Aarhus, Denmark

- **16:10**  
  **New Genes, New Mechanisms: Why Do We Care?**  
  Niccolò Menacci  
  London, United Kingdom

- **16:50**  
  **Biomarkers and Clinical Trials: Where are We?**  
  Michael Schlossmacher  
  Ottawa, ON, Canada

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

#### 3206 Parallel Session

**Management of Common Axial Problems in Advanced Parkinson’s Disease**  
**15:30 – 17:30**

**Chairs:**  
Yael Manor  
Tel Aviv, Israel  
Alice Nieuwboer  
Heverlee, Belgium

- **15:30**  
  **Effective Pharmacological and Surgical Treatment Strategies for Common Late Stage Axial**  
  Caroline Moreau  
  Marq en Baroeil, France

- **16:10**  
  **Speech and Respiratory Therapy Options to Treat Hypophonia**  
  Yael Manor  
  Tel Aviv, Israel

- **16:50**  
  **When Recurrent Falls and Postural Instability are Prevalent, is Rehabilitation Too Late?**  
  Colleen Canning  
  Sydney, NSW, Australia

**Recommended Audience:** Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Tuesday, June 6, 2017

3207 Parallel Session

Function and Dysfunction of the Synapse
15:30 – 17:30

Chairs: Micaela Morelli
Cagliari, Italy
Jose Obeso
Madrid, Spain

15:30 Modulation of the Synapse in the Normal and Denervated Striatum
Christian Pifl
Wien, Austria

16:10 Therapeutic Complications Arising from Synaptic Dysfunction
Manolo Carta
Cagliari, Italy

16:50 Therapies Targeting Synaptic Plasticity
Per Svenningsson
Stockholm, Sweden

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

3309 Teaching Course

Clues in the Clinical Examination of Movement Disorders
15:30 – 17:30

Chairs: Peter Bain
Richmond, United Kingdom
Francisco Cardoso
Belo Horizonte, Brazil

15:30 Tips in Tremor
Peter Bain
Richmond, United Kingdom

16:10 Pointers in Parkinsonism
Vincent Mok
Shatin, Peoples Republic of China

16:50 Hints for Hyperkinetic Movement Disorders
Emilia Gatto
Buenos Aires, Argentina

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

3308 Parallel Session

Progressive Supranuclear Palsy: Towards Early Diagnosis and Causal Therapies
15:30 – 17:30

Chairs: Adam Boxer
San Francisco, CA, USA
Günter Höglinger
Munich, Germany

15:30 The MDS-Criteria for Diagnosis of Progressive Supranuclear Palsy
Christer Nilsson
Lund, Sweden

16:10 Imaging the Diagnosis and Progression of Progressive Supranuclear Palsy
Jennifer Whitwell
Rochester, MN, USA

16:50 Current and Future Therapies for Progressive Supranuclear Palsy
Adam Boxer
San Francisco, CA, USA

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

3310 Teaching Course

Classification, Pathogenesis, and Management of Dystonia
15:30 – 17:30

Chairs: Petr Kanovsky
Olomouc, Czech Republic
Christine Klein
Lübeck, Germany

15:30 Applying the Dystonia Classification to Your Patient
Petr Kanovsky
Olomouc, Czech Republic

16:10 Pathogenesis of Dystonia
Aloysius Domingo
Lübeck, Germany

16:50 Current Treatments in Dystonia
Takahiro Mezaki
Tokamazuka, Japan

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

3411 Skills Workshop

How to Interpret Systems Neuroscience Findings
18:00 – 19:30

Rudi Balling
Luxembourg, Germany
Alfons Schnitzler
Düsseldorf, Germany

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

3412 Skills Workshop

Telemedicine and Technology in Parkinson’s Disease Management: The Why, What and How
18:00 – 19:30

Esther Cubo Delgado
Burgos, Spain
Meredith Spindler
Philadelphia, PA, USA

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

3413 Skills Workshop

Honing the MDS-UPDRS to Deal With Real-Life Challenges
18:00 – 19:30

Mayela Rodriguez Violante
Mexico City, Mexico
Glenn Stebbins
Chicago, IL, USA

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

3414 Skills Workshop

Colleague to Colleague: Recognizing and Managing Tardive Syndromes
18:00 – 19:30

Tove Henriksen
Copenhagen, Denmark
Daniel Tarsy
Boston, MA, USA

Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Tuesday, June 6, 2017

3415 Skills Workshop [TICKET]
Technology in Assessment of Parkinson's Disease: How Does it Help?
18:00 – 19:30
Fay Horak
Portland, OR, USA
Walter Maetzler
Kiel, Germany
Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3416 Skills Workshop [TICKET]
Noninvasive Stimulation in Movement Disorders
18:00 – 19:30
Robert Chen
Toronto, ON, Canada
Angelo Quartarone
Messina, Italy
Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3517 Video Session [TICKET]
Eye Movement Characteristics in Movement Disorders
18:00 – 19:30
Adolfo Bronstein
London, United Kingdom
Aasef Shaikh
Cleveland, OH, USA
Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

3518 Video Session [TICKET]
Movement Disorders in Children
18:00 – 19:30
Yoshiko Nomura
Tokyo, Japan
Toni Pearson
St. Louis, MO, USA
Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

CME Information

Purpose
The purpose of the 21st International Congress of Parkinson's Disease and Movement Disorders is to offer a forum for clinical and basic discussion on a variety of movement disorder topics, including presentations of current research and available treatments.

Learning Objectives
Through state-of-the-art lectures, hot topic reviews, controversy debates, teaching courses, skills workshops and video sessions, participants will be better able to:

1. Describe the pathophysiology and neurobiology of Parkinson's disease and other movement disorders;
2. Discuss the diagnostic approaches and tools available for Parkinson's disease and other movement disorders;
3. Discuss the pharmacological and non-pharmacological treatment options available for Parkinson's disease and other movement disorders.

Accreditation Statement
The International Parkinson and Movement Disorder Society is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Credit Designation
The International Parkinson and Movement Disorder Society designates this live activity for a maximum of 35 AMA PRA Category 1 Credits™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Target Audience
The target audience of the 21st International Congress of Parkinson's Disease and Movement Disorders includes clinicians, researchers, post-doctoral fellows, medical residents, medical students and other healthcare professionals with an interest in the current research and approaches for the diagnosis and treatment of movement disorders.
Wednesday, June 7, 2017

**4101  Plenary Session**

**Challenges in Clinicogenetic Correlations: One Gene - Many Phenotypes; One Phenotype - Many Genes**

8:00 – 9:30

Chairs: Kailash Bhatia  
London, United Kingdom  
Victor Fung  
Sydney, NSW, Australia

8:00  One Gene – Many Phenotypes  
Kailash Bhatia  
London, United Kingdom

8:30  One Phenotype – Many Genes  
Vincenzo Bonifati  
Rotterdam, Netherlands

9:00  Clinical Implications – Diagnosis and Treatment  
Hyder Jinnah  
Atlanta, GA, USA

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

**4102  Plenary Session**

**Grand Rounds**

10:00 – 12:00

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

Chairs: Silke Appel-Cresswell  
Vancouver, BC, Canada  
Martin McKeown  
Vancouver, BC, Canada  
MDS Experts: Giovanni Fabbri  
Rome, Italy  
Susan Fox  
Toronto, ON, Canada  
Carolyn Sue  
Sydney, NSW, Australia  
Marie Vidalhiet  
Paris, France

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

**4103  Plenary Session**

**From Genes to Functional Pathways in Parkinsonism**

15:00 – 17:00

Chairs:  
Vincenzo Bonifati  
Rotterdam, Netherlands  
Matthew LaVoie  
Boston, MA, USA

15:00  Dominantly Inherited Parkinsonism: What are the Common Pathways?  
Andreas Puschmann  
Lund, Sweden

15:40  Linking Monogenic Parkinsonism to the Immune System  
Matthew LaVoie  
Boston, MA, USA

16:20  Retromer Dysfunction as a Common Pathway Underlying Parkinson’s Disease  
Matthew Farrer  
Vancouver, BC, Canada

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

**4104  Plenary Session**

**Are all Neurodegenerative Diseases Prion Disorders?**

15:00 – 17:00

Chairs:  
Glenda Halliday  
Randwick, NSW, Australia  
Mathias Jucker  
Tübingen, Germany

15:00  Synucleinopathies  
Maria Grazia Spillantini  
Cambridge, United Kingdom

15:40  Amyloidopathies  
Mathias Jucker  
Tübingen, Germany

16:20  Tauopathies  
John Trojanowski  
Philadelphia, PA, USA

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

**4105  Plenary Session**

**Food, Gut and Parkinson’s Disease: You Are What You Ingest**

15:00 – 17:00

Chairs:  
Alberto Ascherio  
Boston, MA, USA  
Carlo Colosimo  
Rome, Italy

15:00  The Gut Microbiome, Parkinson’s Disease and Motor, Non-Motor Clinical Subtypes  
Filip Scheperjans  
Hus, Finland

15:40  Caffeine, Uric Acid and Smoking  
Alberto Ascherio  
Boston, MA, USA

16:20  Does Vagotomy Have a Role in Parkinson’s Disease Pathogenesis or Treatment?  
Elisabeth Svensson  
Aarhus, Denmark

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

**4106  Plenary Session**

**James Parkinson’s 200 Years: The Non-Motor Parkinson’s New Visions**

15:00 – 17:00

Chairs:  
K. Ray Chaudhuri  
London, United Kingdom  
Pablo Martinez-Martin  
Madrid, Spain

15:00  Novel Ways of Grading Parkinson’s Disease Using Motor and Non-Motor Assessments: An Essential Clinical Paradigm  
Pablo Martinez-Martin  
Madrid, Spain

15:40  Motor and Non-Motor Endophenotypes of Parkinson’s Disease: Controversies and Clinical Description  
Connie Marras  
Toronto, ON, Canada

16:20  Ethnicity and Its Impact on Parkinson’s Disease: A Global View With a Non-Motor Perspective  
Yoshio Tsuibo  
Fukuoka, Japan

Recommended Audience: Basic scientists, Clinical academicians, Epidemiologists, General physicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
# 21st International Congress of Parkinson’s Disease and Movement Disorders

**June 4–8, 2017 • VANCOUVER • British Columbia, Canada • www.mdscongress2017.org**

### Wednesday, June 7, 2017

#### 4207 Parallel Session [Ticket](#)

**From Fish to Primates: Genetic and Mechanistic Animal Models for Parkinson’s Disease**  
15:00 – 17:00  
Chairs: Stephane Palfi  
Creteil, France  
Ryosuke Takahashi  
Kyoto, Japan  
15:00: How do Fish Models Contribute to Understanding of Parkinson’s Disease?  
Ryosuke Takahashi  
Kyoto, Japan  
15:40: Modeling Non-Motor Symptoms of Parkinson’s Disease in Rodents  
Penelope Hallett  
Belmont, MA, USA  
16:20: Primate Models of Parkinson’s Disease: From MPTP to Synucleinopathy  
Erwan Bezard  
Bordeaux, France

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

#### 4309 Teaching Course [Ticket](#)

**Uncommon Treatable Movement Disorders Not to Be Missed**  
15:00 – 17:00  
Chairs: Carlos Cosentino  
Lima, Peru  
Aurelie Meneret  
Paris, France  
15:00: Movement Disorder in Toxic and Infectious Diseases  
Carlos Cosentino  
Lima, Peru  
15:40: Autoimmune Movement Disorders  
Jessica Panzer  
Philadelphia, PA, USA  
16:20: Metabolic Diseases Presenting with Movement Disorders in Adults  
Aurelie Meneret  
Paris, France

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

#### 4411 Skills Workshop [Ticket](#)

**Novel Insights Into Bladder and Sexual Dysfunction in Parkinson’s Disease**  
17:30 – 19:00  
Gila Bronner  
Ramat-Gan, Israel  
Ryuji Sakakibara  
Sakura, Japan

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

#### 4412 Skills Workshop [Ticket](#)

**From Phenotype to Genotype and Back: The MDSGene Database**  
17:30 – 19:00  
Valerija Dobricic  
Belgrade, Serbia  
Christine Lill  
Lübeck, Germany

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

#### 4413 Skills Workshop [Ticket](#)

**How to Become a Successful Movement Disorder Specialist**  
17:30 – 19:00  
Stanley Fahn  
New York, NY, USA  
Claudia Trenkwalder  
Kassel, Germany

Recommended Audience: Clinical academicians, Students/Residents/Trainees

#### 4414 Skills Workshop [Ticket](#)

**New Molecular Techniques That are Changing the Clinical Landscape**  
17:30 – 19:00  
Richard Myers  
Boston, MA, USA  
Richard Wade-Martins  
Oxford, United Kingdom

Recommended Audience: Basic scientists, Clinical academicians, Students/Residents/Trainees
Wednesday, June 7, 2017

4515  Video Session  
Psychogenic Movement Disorders  
17:30 – 19:00  
Hubert Fernandez  
Cleveland, OH, USA  
Jon Stone  
Edinburgh, United Kingdom  
Recommended Audience: Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

4516  Video Session  
Minerals in the Brain  
17:30 – 19:00  
Petr Dušek  
Prague, Czech Republic  
Susan Hayflick  
Portland, OR, USA  
Recommended Audience: Basic scientists, Clinical academicians, Practitioners, Students/Residents/Trainees

4517  Video Session  
Movement Disorder Emergencies  
17:30 – 19:00  
Roberto Ceravolo  
Pisa, Italy  
Sun Ju Chung  
Seoul, Korea  
Recommended Audience: Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees

4518  Video Session  
Recently Described Rare Disorders  
17:30 – 19:00  
Victor Fung  
Sydney, NSW, Australia  
Dan Healy  
Dublin, Ireland  
Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Thursday, June 8, 2017

5101 Plenary Session
Development of Targeted Therapies for Parkinson’s Disease
8:00 – 9:30

Chairs: Dimitri Krainc
Charlestown, MA, USA
Werner Poewe
Innsbruck, Austria

8:00 Novel Targeted Therapies for Parkinson’s Disease
Werner Poewe
Innsbruck, Austria

8:30 Development of Small Molecule Activators for GBA1
Dimitri Krainc
Charlestown, MA, USA

9:00 Translating LRRK2 Biology into Novel Therapies
Mark Cookson
Bethesda, MD, USA

5103 Plenary Session
Blue Ribbon Highlights
11:00 – 12:00

Chairs: David John Burn
Newcastle upon Tyne, United Kingdom
Susan Fox
Toronto, ON, Canada

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.

Paolo Calabresi
Perugia, Italy
Okane Suchowersky
Edmonton, AB, Canada

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

5104 Parallel Session
Hereditary Spastic Paraplegias: An Expanding and Challenging Field
15:00 – 17:00

Chairs: Giovanni Stevanin
Paris, France
Carolyn Sue
Sydney, NSW, Australia

15:00 Autosomal Dominant Forms
Toshitaka Kawarai
Tokushima, Japan

15:40 Autosomal Recessive and X-Linked Forms
Giovanni Stevanin
Paris, France

16:20 Pathogenic Pathways and Therapeutic Insights
John Fink
Ann Arbor, MI, USA

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

5205 Parallel Session
Novel Insights From Inherited Dyskinesias
15:00 – 17:00

Chairs: Michael Okun
Gainesville, FL, USA
Zhi-Ying Wu
Shanghai, Peoples Republic of China

15:00 Isolated Dystonias: From Gene to Network
Brian Berman
Aurora, CO, USA

15:40 Paroxysmal Dyskinesias
Zhi-Ying Wu
Shanghai, Peoples Republic of China

16:20 Basal Ganglia-Related Dystonias: XDP, DRD, and Others
Alexander Münchau
Hamburg, Germany

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

5206 Parallel Session
Clinical Role of Neuropathology
15:00 – 17:00

Chairs: Ian MacKenzie
Vancouver, BC, Canada
Eng-King Tan
Singapore

15:00 Neuropathology for the Clinicians: The Nuts and Bolts
Ian MacKenzie
Vancouver, BC, Canada

15:40 Clinico-Pathological Correlations of Neurodegenerative Diseases
Holly Shill
Phoenix, AZ, USA

16:20 Imaging-Pathological Correlations of Parkinson’s Disease
Makoto Higuchi
Chiba, Japan

Recommended Audience: Basic scientists, Clinical academicians, Non-physician Health Professionals, Practitioners, Students/Residents/Trainees
Thursday, June 8, 2017

**5207 Parallel Session**

‘Atypical’ Atypical Parkinsonism
15:00 – 17:00

Chairs: Jeffrey Kordower
Chicago, IL, USA
Gregor Wenning
Innsbruck, Austria

15:00 Corticobasal Degeneration and Its Look-Alikes
Carmela Tartaglia
Toronto, ON, Canada

15:40 Progressive Supranuclear Palsy and Its Look-Alikes
Gesine Respondek
München, Germany

16:20 Multiple System Atrophy and Its Look-Alikes
Gregor Wenning
Innsbruck, Austria

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

**5208 Parallel Session**

Complementary and Alternative Medicine in Movement Disorders
15:00 – 17:00

Chairs: Beomseok Jeon
Seoul, Korea
Aikaterini Kompoliti
Chicago, IL, USA

15:00 The Landscape of Options
Aikaterini Kompoliti
Chicago, IL, USA

15:40 The Science of Placebo Effects and Complementary Medicine
Fabrizio Benedetti
Turin, Italy

16:20 Incorporating Complementary Medicine into Movement Disorders Care
Benzi Kluger
Denver, CO, USA

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

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### Parallel Session 5209

**The Ataxias: The Spinocerebellar Ataxias, Recessive Ataxias and Secondary Ataxias**

**15:00 – 17:00**

**Chairs:** Joaquim Ferreira  
Lisbon, Portugal  
Stefan Pulst  
Los Angeles, CA, USA

#### 15:00

**Classifications and Etiologies of Ataxias: A Clinical Approach**

Helio Teive  
Curitiba, Brazil

#### 15:40

**Genetic Testing in Spinocerebellar Ataxias in Clinics: Challenges and Limitations**

Yih-Ru Wu  
Taipei, Taiwan

#### 16:20

**Clinical and Experimental Therapies in Ataxias**

Stefan Pulst  
Los Angeles, CA, USA

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

### Teaching Course 5310

**Classification and Management of Tremor**

**15:00 – 17:00**

**Chairs:** Günther Deuschl  
Kiel, Germany  
Yoshikazu Ugawa  
Fukushima, Japan

#### 15:00

**Evolving Classification of Tremor with Updates on New Tremor Entities**

Günther Deuschl  
Kiel, Germany

#### 15:40

**Clinical Examination of Tremor**

Alexander Rajput  
Saskatoon, SK, Canada

#### 16:20

**Current Treatment Options for Tremor**

Matej Skorvanek  
Kosice, Slovakia

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

### Teaching Course 5311

**Management of Advanced Parkinson’s Disease**

**15:00 – 17:00**

**Chairs:** Nir Giladi  
Tel Aviv, Israel  
Lars Timmermann  
Cologne, Germany

#### 15:00

**Pharmacological Strategies for Managing Motor Complications**

Angelo Antonini  
Venice, Italy

#### 15:40

**Surgery and Other Invasive Therapies for Managing Motor Complications**

Thomas Kimber  
Adelaide, SA, Australia

#### 16:20

**Management of Levodopa-Unresponsive Symptoms**

Nir Giladi  
Tel Aviv, Israel

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