

International Parkinson and
Movement Disorder Society
Pan American Section



1st Pan American Parkinson's Disease and Movement Disorders Congress

FEBRUARY 24-26, 2017 MIAMI, FLORIDA, USA

FINAL PROGRAM

www.pascongress2017.org





Table of Contents

About MDS.....	2
About MDS-PAS.....	4
CME Information.....	5
InterContinental Miami Floor Plan.....	6
PAS Congress Schedule-At-A-Glance.....	7
Friday, February 24, 2017.....	8
Saturday, February 25, 2017.....	10
Sunday, February 26, 2017.....	12
Faculty.....	14
Poster Session Schedule.....	16
Guided Poster Tours.....	16
Abstracts by Topic.....	18
Corporate Therapeutic Symposia.....	27
Acknowledgements.....	28
Certificate of Attendance.....	31

Dear Colleagues,

On behalf of the International Parkinson and Movement Disorder Society – Pan American Section (MDS-PAS), we would like to formally welcome you to Miami, FL, USA for the 1st Pan American Parkinson's Disease and Movement Disorders Congress.

We are excited to have you participate in this important meeting, which gives us a forum to discuss relevant issues in our field that are specific to the Pan American Section. This will also be a tremendous opportunity for you to interact with colleagues from different parts of Pan America.

We hope that along with networking with colleagues, you are able to take full advantage of the exceptional Scientific Program, visit the exhibit and poster hall, participate in guided poster tours and witness the first Challenging Case MDS-PAS Rounds.

We welcome you to Miami and thank you for taking the opportunity to be part of this inaugural event.

Warmest regards,



A handwritten signature in cursive script that reads "Cynthia Comella".

Cynthia Comella
Chair, PAS Congress Scientific
Program Committee



A handwritten signature in cursive script that reads "Francisco Cardoso".

Francisco Cardoso
Chair, MDS-PAS





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 (2015-2017)



President
Oscar Gershanik,
Argentina



President-Elect
Christopher Goetz,
USA



Secretary
Claudia Trenkwalder,
Germany



Secretary-Elect
Susan Fox,
Canada



Treasurer
David John Burn,
United Kingdom



Treasurer-Elect
Victor Fung,
Australia



Past-President
Matthew Stern,
USA

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



SAVE THE DATE

June 4–8, 2017

VANCOUVER

British Columbia, Canada



www.mdscongress2017.org

Important Dates:

Abstract Submission Closes January 6, 2017

Early Registration Deadline April 3, 2017

Final Pre-Registration Deadline May 2, 2017



International Parkinson and
Movement Disorder Society



About MDS-PAS

Mission and Goals:

The mission of the MDS-PAS is to represent and promote the International Parkinson and Movement Disorder Society (MDS) in Pan America. Membership is open to all members of MDS within the Pan American region.

MDS-PAS aims to facilitate communication between clinicians and researchers in the region; disseminate updated knowledge about Movement Disorders; improve quality of life and independence of Movement Disorders patients and caregivers; and promote research in Movement Disorders within the region.

MDS-PAS Officers (2015-2017)



Chair
Francisco Cardoso,
Brazil



Chair-Elect
Henrique Ferraz,
Brazil



Secretary
Emilia Gatto,
Argentina



Secretary-Elect
Hubert Fernandez,
USA



Treasurer
Janis Miyasaki,
Canada



Treasurer-Elect
Pedro Chana-Cuevas,
Chile



Past Chair
Jorge Juncos,
USA

PAS Congress Oversight Committee

Charles Adler, USA
Francisco Cardoso, Brazil
Cynthia Comella, USA
Jorge Juncos, USA
Carlos Singer, USA
Matthew Stern, USA

PAS Congress Scientific Program Committee

Chair: Cynthia Comella, USA
Francisco Cardoso, Brazil
Pedro Chana-Cuevas, Chile
Robert Chen, Canada
Emilia Gatto, Argentina
Oscar Gershanik, Argentina
Christopher Goetz, USA
Jennifer Goldman, USA
Marcelo Merello, Argentina
Jill Ostrem, USA
Mayela Rodriguez Violante, Mexico
Carlos Singer, USA
David Standaert, USA

CME Information

Purpose

The purpose of the 1st Pan American Parkinson's Disease and Movement Disorders Congress is to offer a forum for clinical and basic science 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 20 *AMA PRA Category 1 Credits*[™]. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Target Audience

As the PAS Congress content is expansive and will focus on the Americas, the intended audience will comprise practitioners in the Pan American region whose clinical practice addresses the medical needs of patients with movement disorders. Some attendees are also currently involved in clinical research.

Financial Disclosure Information

It is the policy of the International Parkinson and Movement Disorder Society (MDS) to ensure balance, independence, objectivity and scientific rigor in all sponsored educational activities. All persons in control of content, including: planners, faculty and reviewers, participating in any MDS sponsored activities are required to disclose to the activity audience any real or apparent conflict(s) of interest that may have a direct bearing on the subject matter of the Continuing Medical Education (CME) activity. This pertains to relationships with pharmaceutical companies, biomedical device manufacturers, or other corporations who have products or services regardless of presentation topic. The intent of this policy is not to prevent a speaker with a potential conflict of interest from making a presentation. It is merely intended that any potential conflict should be identified openly so that the listeners may form their own judgments about the presentation with the full disclosure of the facts. It remains for the audience to determine whether the speaker's outside interest may reflect a possible bias in either the exposition or the conclusions presented.

All financial disclosure information will be provided to participants in Miami at the MDS membership booth and on the PAS Congress website:

www.pascongress2017.org/MDS-PAS-2017/Program.htm

Claiming CME Credit

To claim CME credit for participation in the 1st Pan American Parkinson's Disease and Movement Disorders Congress participants must complete and submit an online CME Claim Form.

Instructions for claiming credit:

After February 25, 2017, please visit www.pascongress2017.org/cme.

1. Log in after reading the instructions on the page. You will need your Member ID, which is located on your name badge. If you do not have your Member ID, please e-mail info@movementdisorders.org.
2. Follow the on-screen instructions to claim CME credit for the sessions you attended.
3. You may print your certificate from your home or office, or save it as a PDF for your records.

If you have any questions or need help claiming credit, please contact the MDS International Secretariat at education@movementdisorders.org

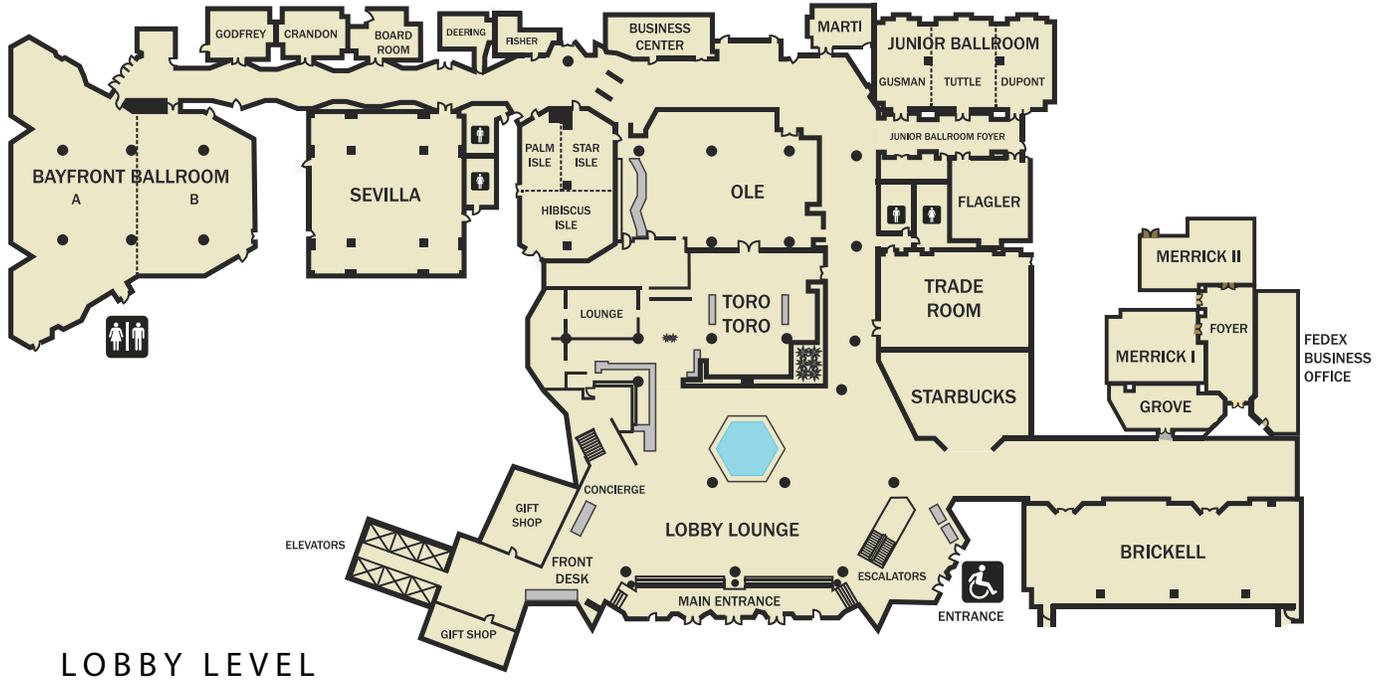
Evaluations

All CME Sessions:

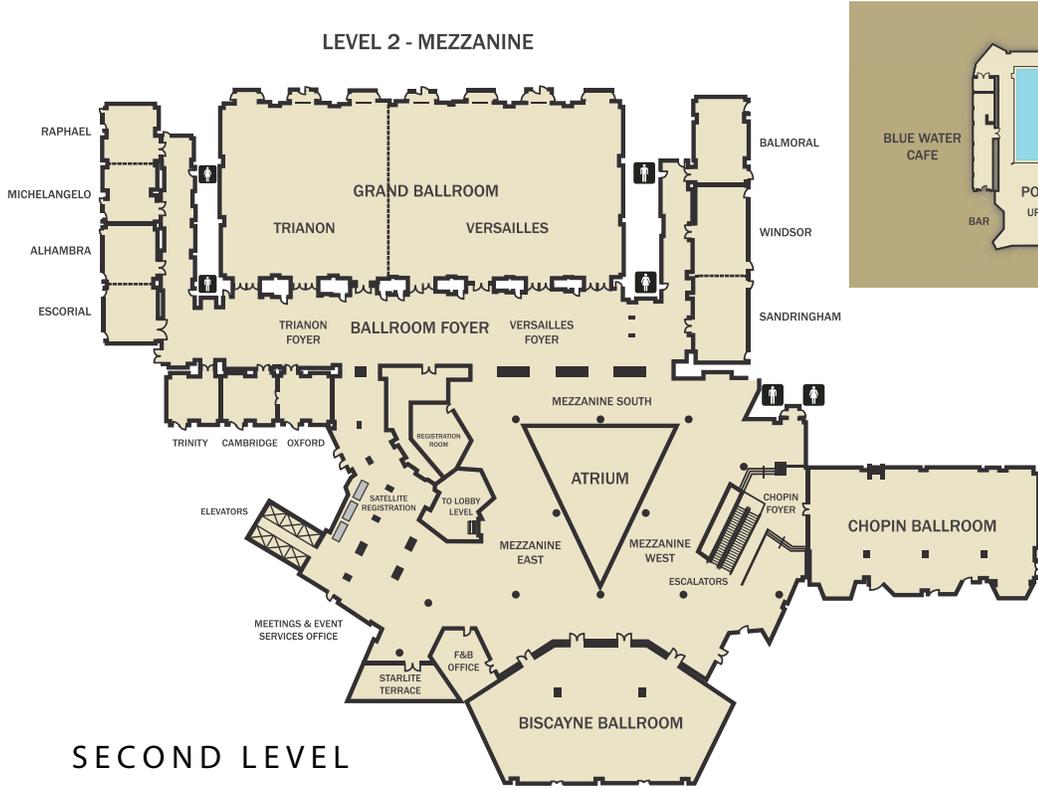
All sessions for CME credit will have hard copies of the evaluation distributed in the course. These must be completed and handed to the course liaison as you leave the course.



InterContinental Miami Floor Plan



LOBBY LEVEL



SECOND LEVEL



PAS Congress Schedule-At-A-Glance

	Friday, February 24	Saturday, February 25	Sunday, February 26	
8:00		Plenary Session 8:00 - 10:00	Plenary Session 8:00 - 9:30	
8:30				
9:00				
9:30	Plenary Session 9:30 - 11:00		Break 9:30 - 10:00	
10:00		Break 10:00 - 10:30	Plenary Session 10:00 - 12:00	
10:30				
11:00	Break 11:00 - 11:30	Plenary Session 10:30 - 12:00		
11:30	Plenary Session 11:30 - 13:30			
12:00		Break 12:00 - 12:15	Break 12:00 - 12:15	
12:30			Corporate Therapeutic Symposia 12:15 - 13:15	
13:00				
13:30	Break 13:30 - 14:30	Break & Poster Session/ Guided Poster Tours 13:00 - 14:30	Break & Poster Session/ Guided Poster Tours 13:00 - 14:30	
14:00				
14:30	Plenary Session 14:30 - 16:30	Parallel Sessions 14:30 - 16:30	Parallel Sessions 14:30 - 16:30	
15:00				
15:30				
16:00				
16:30	Break 16:30 - 17:00	Break 16:30 - 17:00		
17:00	Parallel Sessions 17:00 - 19:00	Skills Workshops 17:00 - 18:30		
17:30				
18:00				
18:30		Break 18:30 - 19:30		
19:00	Break 19:00 - 19:30			
19:30	Opening Ceremony 19:30 - 21:00	Challenging Case MDS-PAS Rounds 19:30 - 22:00	 Scan to learn more on our website	
20:00				
20:30				
21:00				
21:30				
22:00				



Friday, February 24, 2017

1101 Themed Plenary Session

Parkinson's Disease Across the Americas 9:30 – 11:00

Location: Versailles Ballroom
Chairs: Oscar Gershanik
Buenos Aires, Argentina
Stanley Fahn
New York, NY, USA

9:30 How Levodopa Therapy for
Parkinson's Disease Came to be
Developed in the Americas
Stanley Fahn
New York, NY, USA

10:00 Parkinson's Disease Genetics
Across the Americas
Jeffery Vance
Miami, FL, USA

10:30 Therapeutics: Accessibility,
Cultural Differences and Habits
Across the Americas
Oscar Gershanik
Buenos Aires, Argentina

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

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

1. Describe the emergence of levodopa as a treatment for
Parkinson's disease: the American experience
2. Discuss the polymorphisms and risk alleles of the
different populations in the Americas
3. Recognize how cultural differences, ingrained habits
and access to different treatment options determine
therapeutic decisions across the Americas

1102 Plenary Session

From Bench to Bedside - Clinico-Pathological Markers of Parkinson's Disease 11:30 – 13:30

Location: Versailles Ballroom
Chairs: Sarah Camargos
São Paulo, Brazil
Jennifer Goldman
Chicago, IL, USA

11:30 Evidence for a Systemic
Synucleinopathy
C. Warren Olanow
New York, NY, USA

12:10 The Potential Role of Tissue and
Fluid Biomarkers
Kathleen Shannon
Madison, WI, USA

1102 Plenary Session, cont.

12:50 The Spread of Synuclein in
Parkinson's Disease
Jeffrey Kordower
Chicago, IL, USA

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

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

1. Review the latest scientific findings regarding the
presence of synuclein in the central and peripheral
nervous system in Parkinson's disease
2. Discuss recent data on the potential role of a tissue and
fluid biomarkers
3. Discuss theories and evidence regarding the spread of
synuclein in the pathogenesis of Parkinson's disease

1103 Plenary Session

Update on Parkinson's Disease Therapeutics 14:30 – 16:30

Location: Versailles Ballroom
Chairs: Cecilia Peralta
Buenos Aires, Argentina
David Standaert
Birmingham, AL, USA

14:30 Levodopa: Old Drug, New
Approaches
Robert Hauser
Tampa, FL, USA

15:10 Next Generation Deep Brain
Stimulation
Jill Ostrem
San Francisco, CA, USA

15:50 Non-Motor Therapies: Present
and Future
Cecilia Peralta
Buenos Aires, Argentina

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

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

1. Recognize how new delivery strategies are expanding
the application of levodopa
2. Describe how newer techniques and technologies may
impact use of DBS
3. Recognize current and emerging therapies for non-
motor symptoms of Parkinson's disease

1204 Parallel Session

Dopaminergic and Cholinergic Imaging in Parkinson's Disease 17:00 – 19:00

Location: Versailles Ballroom
Chairs: A. Jon Stoessl
Vancouver, BC, Canada
Antonio Strafella
Toronto, ON, Canada

17:00 Presynaptic Dopaminergic
Imaging and its Role in
Parkinson's Disease
A. Jon Stoessl
Vancouver, BC, Canada

17:40 Imaging in Behavioral and
Cognitive Complications in
Parkinson's Disease
Antonio Strafella
Toronto, ON, Canada

18:20 Insights From Cholinergic
Imaging in Parkinson's Disease
Nicolaas Bohnen
Saline, MI, 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. Discuss the clinical and research utility of different
presynaptic dopaminergic PET tracers in Parkinson's
disease
2. Recognize how dopaminergic imaging contributes
to the understanding of cognitive and behavioral
complications of Parkinson's disease
3. Describe the insights provided by cholinergic imaging
on the pathophysiology of non-dopaminergic features
of Parkinson's disease

Special Meeting Theme:

The PAS Congress Scientific Program Committee has selected a theme that is highlighted throughout the meeting. This year's theme, Movement Disorders in the Americas: State of the Art, will be showcased in two Plenary Sessions and two Parallel Sessions, focusing on cutting edge research into disorders relevant to the Americas. Themed sessions are designated in the program with .

Friday, February 24, 2017

1205 Parallel Session

Surgical Procedures in Movement Disorders 17:00 – 19:00

Location: Chopin Ballroom

Chairs: Corneliu Luca
Miami, FL, USA

Jill Ostrem
San Francisco, CA, USA

17:00 Lesions Versus Deep Brain Stimulation

Corneliu Luca
Miami, FL, USA

17:40 Latin America Experiences with Subthalamotomy

Jose Obeso
Madrid, Spain

18:20 Focused Ultrasound

William Elias
Charlottesville, VA, 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. Identify the factors that contribute to patient candidacy for various surgical treatments of Parkinson's disease
2. Recognize the regional variability of surgical procedures performed for Parkinson's disease and the long-term management of such patients
3. Recognize the utility of focused ultrasound in the treatment of movement disorders

1206 Themed Parallel Session

Drug- Or Toxin-Induced Movement Disorders in America 17:00 – 19:00

Location: Brickell Room

Chairs: Pedro Chana-Cuevas
Santiago, Chile

Caroline Tanner
San Francisco, CA, USA

17:00 Metal Exposure and Movement Disorders

Marcelo Miranda
Santiago, Chile

17:40 Toxin-Induced Movement Disorders

Caroline Tanner
San Francisco, CA, USA

18:20 Drug-Induced Movement Disorders

Pedro Chana-Cuevas
Santiago, Chile

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

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

1. Recognize the role of metal exposure (manganese, iron) in movement disorders
2. Recognize the pathogenic role of toxin (MPTP, Rotenone and Paraquat) in movement disorders
3. Describe the movement disorders associated with the use of drugs, from psychotropics to non psychotropics and identify clues leading to the suspicion of drug-induced movement disorders

Welcome Ceremony

19:30 – 21:00

Location: Versailles Ballroom



Saturday, February 25, 2017

2101 Themed Plenary Session

Hyperkinetic Movement Disorders in Ethnic Populations in the Americas 8:00 – 10:00

Location: Versailles Ballroom
Chairs: Francisco Cardoso
Belo Horizonte, Brazil
Rachel Saunders-Pullman
New York, NY, USA

8:00 Hyperkinetic Movement Disorders in the Amish-Mennonite Population
Rachel Saunders-Pullman
New York, NY, USA

8:40 Genetic Dystonia in Brazil
Sarah Camargos
São Paulo, Brazil

9:20 Huntington's Disease-Like 2 and Other Huntington's Disease-Like Diseases in the Americas
Ruth Walker
Bronx, NY, USA

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

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

1. Describe the hyperkinetic movement disorders found in the Amish-Mennonite population
2. Recognize the heterogeneity of genetic dystonias in Brazil
3. Discuss the epidemiology, genetics, and clinical features of HD-like diseases in the Americas

2102 Plenary Session

Huntington's Disease Update 10:30 – 12:00

Location: Versailles Ballroom
Chairs: Emilia Gatto
Buenos Aires, Argentina
Blair Leavitt
Vancouver, BC, Canada

10:30 History of Huntington's Disease in the Americas
Roberto Weiser
Caracas, Venezuela

11:00 Phenotype-Genotype
Emilia Gatto
Buenos Aires, Argentina

2102 Plenary Session, cont.

11:30 Experimental Therapies in Huntington's Disease
Blair Leavitt
Vancouver, BC, Canada

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

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

1. Identify the historical significance of the region in Huntington's disease development
2. Identify different phenotypes of Huntington's disease
3. Identify new therapeutics tools for Huntington's disease and cutting edge new therapies

Poster Session

13:00 – 14:30

Abstract Numbers: 1-74

Location: Biscayne Ballroom

Guided Poster Tours

Guided Poster Tour 1

13:30 – 14:30

Location: Biscayne Ballroom

Guided Poster Tour 2

13:30 – 14:30

Location: Biscayne Ballroom

2203 Parallel Session

Genetics of Parkinson's Disease

14:30 – 16:30

Location: Versailles Ballroom
Chairs: Karen Marder
Bronx, NY, USA

Andrew Singleton
Bethesda, MD, USA

16:30 Genetics of Sporadic Parkinson's Disease

Andrew Singleton
Bethesda, MD, USA

15:10 Spectrum of LRRK2-and GBA-Associated Parkinson's Disease
Karen Marder
New York, NY, USA

15:50 Genetics of Cognitive Impairment in Parkinson's Disease
Ignacio Fernandez Mata
Seattle, WA, USA

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

2203 Parallel Session, cont.

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

1. Recognize the genetic contributions to the cause of Parkinson's disease
2. Describe the spectrum of different clinical characteristics seen in LRRK2 and GBA-associated Parkinson's disease
3. Discuss the contribution of genetic factors to the development of cognitive impairment in Parkinson's disease

2204 Parallel Session

Spinocerebellar Ataxias 14:30 – 16:30

Location: Chopin Ballroom
Chairs: Stefan Pulst
Los Angeles, CA, USA

Mayela Rodriguez Violante
Mexico City, Mexico

14:30 Molecular Pathogenesis
Stefan Pulst
Los Angeles, CA, USA

15:10 Clinical Features and Work-Up
Anelyssa D'Abreu
Campinas, Brazil

15:50 Current Treatments and Future Directions
Theresa Zesiewicz
Oldsmar, FL, USA

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

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

1. Describe the role of polyglutamine expansion and other molecular issues on the pathophysiology of spinocerebellar ataxias
2. Recognize the main clinical features of the most prevalent spinocerebellar ataxias and improve the diagnostic approach
3. Provide management to subjects with spinocerebellar ataxia, including genetic counseling, rehabilitation, as well as current and future pharmacologic interventions

Saturday, February 25, 2017

2205 Parallel Session

Parkinson's Disease Across the PAS: Cross-Cultural Influences on its Neuropsychiatric Issues 14:30 – 16:30

Location: Brickell Room
Chairs: Oscar Bernal-Pacheco
Chía, Colombia
Bonnie Levin
Miami, FL, USA

14:30 Neuropsychiatric Features of Parkinson's Disease: Similarities and Differences Across the Americas

Oscar Bernal-Pacheco
Chía, Colombia

15:10 Cultural Influences on Perceptions and Treatments of Neuropsychiatric Features in Parkinson's Disease

Jennifer Goldman
Chicago, IL, USA

15:50 Neuropsychological Evaluations in Parkinson's Disease in the Context of Culture and Language

Bonnie Levin
Miami, FL, 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 epidemiology and clinical features of neuropsychiatric problems affecting cognition, behavior, and mood in Parkinson's disease across the Pan Americas
2. Discuss how cultural differences influence our perceptions, recognition, and management of neuropsychiatric features in Parkinson's disease
3. Discuss the effects of cultural and language on neuropsychological testing, normative data, particularly in the evaluation of neuropsychiatric features of Parkinson's disease

2306 Skills Workshop

Challenges to Publish Movement Disorders Research for Non-English Speakers 17:00 – 18:30

Location: Versailles Ballroom
Christopher Goetz
Chicago, IL, USA
Marcelo Merello
Buenos Aires, Argentina

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

Session Description:

In this session, participants will hear the editors explain the various ways of publishing research and discuss the most common style mistakes made by non-English speakers when writing a paper. The presenters will address how writing a scientific paper is a difficult and highly skilled process, which starts with posing a hypothesis and develops into the proper methodology. Participants will see how transmitting and convincing the medical community about the validity and relevance of research and findings is an art.

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

1. Recognize that publication of research starts before writing a paper
2. Identify different ways of publishing their research
3. Discuss the most common style mistakes made by non-English speakers when writing a paper

2307 Skills Workshop

MDS-UPDRS and UDysRS 17:00 – 18:30

Location: Chopin Ballroom
Mayela Rodriguez Violante
Mexico City, Mexico
Glenn Stebbins
Chicago, IL, USA

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

Session Description:

In this session, participants will be provided with the tools to understand the MDS-UPDRS and UDysRS, its administration and scoring so that they can be used in clinical practice and research.

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

1. Describe the conceptual constructs of the MDS-UPDRS and UDysRS
2. Engage patients and caregivers in their role in the MDS-UPDRS and UDysRS
3. Complete sample ratings on items in the MDS-UPDRS and UDysRS

2308 Skills Workshop

Chemodenervation in Movement Disorders 17:00 – 18:30

Location: Brickell Room
Chairs: Robert Chen
Toronto, ON, Canada
Joseph Jankovic
Houston, TX, USA

17:00 Clinical and Pharmacological Aspects of Botulinum Toxins

Joseph Jankovic
Houston, TX, USA

17:30 Applications in Dystonia

Cynthia Comella
Chicago, IL, USA

18:00 Applications in Parkinsonism

Robert Chen
Toronto, ON, Canada

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

Session Description:

In this session, participants will be given an overview of the applications of Botulinum toxin. One of the pioneers in the use of Botulinum toxin, Dr. Jankovic, will introduce participants to recent biotechnological developments in the field. Dr. Comella will also share her views on the adjunctive use of electromyography and other techniques. Dr. Chen will provide an overview of proper targeting, different techniques, expected benefits and side effect profile of this versatile therapy.

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

1. Discuss the mechanisms of action and clinical pharmacological effects of the different formulations of Botulinum toxins
2. Describe the use of Botulinum toxin for the focal dystonias
3. Describe the use of Botulinum toxin in the treatment of the motor and non-motor manifestations of Parkinson's disease

Challenging Case MDS-PAS Rounds

19:30 – 22:00

Location: Versailles Ballroom
Experts: Alberto Espay
Cincinnati, OH, USA
Steven Frucht
New York, NY, USA
Helio Teive
Curitiba, Brazil

Witness clinical experts present and discuss a case by phenomenology, syndromic classification and differential diagnosis.



Sunday, February 26, 2017

3101 Plenary Session

Hot Topics in Movement Disorders 8:00 – 9:30

Location: Versailles Ballroom
Chairs: Jorge Juncos
Atlanta, GA, USA
Irene Litvan
La Jolla, CA, USA

8:00 Deep Brain Stimulation for Tourette's Syndrome
Michael Okun
Gainesville, FL, USA

8:30 Emerging Treatments for Tauopathies
Irene Litvan
La Jolla, CA, USA

9:00 Stem Cell Tourism
Carlos Singer
Miami, FL, USA

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

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

1. Discuss current options for surgical intervention in Tourette's syndrome
2. Recognize recent advances in the treatment of Tauopathies
3. Discuss the risks of uncontrolled advertising of unsubstantiated stem cell treatments for neurodegenerative diseases

3102 Plenary Session

Controversies 10:00 – 12:00

Location: Versailles Ballroom
Chairs: Cynthia Comella
Chicago, IL, USA
Marcelo Merello
Buenos Aires, Argentina

10:00 Can We Diagnose Parkinson's Disease at an Early or Prodromal Stage? (YES)
Matthew Stern
Philadelphia, PA, USA

10:20 Can We Diagnose Parkinson's Disease at an Early or Prodromal Stage? (NO)
Ron Postuma
Montreal, QC, Canada

3102 Plenary Session, cont.

10:40 Is There a Role for Immunotherapy for Synucleinopathies? (YES)
Elvira Valera
La Jolla, CA, USA

11:00 Is There a Role for Immunotherapy for Synucleinopathies? (NO)
David Standaert
Birmingham, AL, USA

11:20 Is Genetics In, and Clinical Phenomenology Out? (YES)
Laurie Ozelius
Charlestown, MA, USA

11:40 Is Genetics In, and Clinical Phenomenology Out? (NO)
Connie Marras
Toronto, ON, Canada

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

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

1. Understand the difficulties of an early diagnosis in Parkinson's disease
2. Assess the promises and pitfalls of immunotherapy in Parkinson's disease
3. Discuss the value of clinical phenomenology vs. whole exome sequencing

Poster Session

13:00 – 14:30

Abstract Numbers: 75-150

Location: Biscayne Ballroom

Guided Poster Tours

Guided Poster Tour 3
13:00 – 14:30

Location: Biscayne Ballroom

Guided Poster Tour 4
13:00 – 14:30

Location: Biscayne Ballroom

3203 Themed Parallel Session

Inflammation, Infections and Immunity in Movement Disorders 14:30 – 16:30

Location: Versailles Ballroom
Chairs: Mayela Rodriguez Violante
Mexico City, Mexico

Helio Teive
Curitiba, Brazil

14:30 Inflammation and Movement Disorders
David Standaert
Birmingham, AL, USA

15:10 Viral and Parasitic Infections
Carlos Cosentino
Lima, Peru

15:50 Post Infectious and Autoimmune Movement Disorders
Francisco Cardoso
Belo Horizonte, Brazil

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

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

1. Recognize the role of inflammation in the pathophysiology of movement disorders
2. Identify the pathogenesis features of viral infection and parasitic causing movement disorders
3. Recognize the pathogenesis or post infectious and autoimmune movement disorders

Sunday, February 26, 2017

3204 Parallel Session

**Focus on the Patient/Family:
Completing the Circle of Care
in the Americas
14:30 – 16:30**

- Location: Chopin Ballroom
 Chairs: Pedro Chana-Cuevas
Santiago, Chile
 Ruth Hagestuen
Minnnetonka, MN, USA
- 14:30 Focus on the Patient/Family:
 Completing the Circle of Care
 Elaine Book
Vancouver, BC, Canada
- 15:10 Home Management, Family and
 People with Parkinson's Disease
 Daniela Albuquerque
Santiago, Chile
- 15:50 Palliative Care and Parkinson's
 Disease
 Julie Carter
Portland, OR, 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. Identify the impact of Parkinson's disease on the care partners in the early, middle and advanced stages of Parkinson's disease as well as options for support along the journey
2. Distinguish different alternatives in Parkinson's disease care within the home, consider cultural and family perspective
3. Identify key palliative care with respect to Parkinson's disease and how a palliative care approach can be used throughout the disease trajectory

3205 Parallel Session

**Rare Movement Disorders:
What We Can Learn?
14:30 – 16:30**

- Location: Brickell Room
 Chairs: Emilia Gatto
Buenos Aires, Argentina
 Anthony Lang
Toronto, ON, Canada
- 14:30 Approach to Rare Movement
 Disorders
 Anthony Lang
Toronto, ON, Canada
- 15:10 Neurodegeneration with Brain
 Iron Accumulation
 Susan Hayflick
Portland, OR, USA
- 15:50 Gaucher Disease and Niemann
 Pick Type C
 Emilia Gatto
Buenos Aires, Argentina

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 rare movement disorders and explain how these conditions contribute to the understanding of more common disorders
2. Explain clinical and pathologic features of degenerative disorders with brain iron accumulation
3. Discuss the clinical features, diagnosis and treatment of Gaucher disease and Niemann Pick Type C



Faculty

Daniela Alburquerque

Santiago, Chile
3204

Oscar Bernal-Pacheco

Chía, Colombia
2205

Nicolaas Bohnen

Saline, MI, USA
1204

Elaine Book

Vancouver, BC, Canada
3204

Sarah Camargos

São Paulo, Brazil
1102, 2101

Francisco Cardoso

Belo Horizonte, Brazil
2101, 3203

Julie Carter

Portland, OR, USA
3204

Robert Chen

Toronto, ON, Canada
2308

Cynthia Comella

Chicago, IL, USA
2308, 3102

Carlos Cosentino

Lima, Peru
3203

Pedro Chana-Cuevas

Santiago, Chile
1206, 3204

Anelyssa D'Abreu

Campinas, Brazil
2204

William Elias

Charlottesville, VA, USA
1205

Alberto Espay

Cincinnati, OH, USA
Challenging Case MDS-PAS Rounds

Stanley Fahn

New York, NY, USA
1101

Ignacio Fernandez Mata

Seattle, WA, USA
2203

Steven Frucht

New York, NY, USA
Challenging Case MDS-PAS Rounds

Emilia Gatto

Buenos Aires, Argentina
2102, 3205

Oscar Gershanik

Buenos Aires, Argentina
1101

Christopher Goetz

Chicago, IL, USA
2306

Jennifer Goldman

Chicago, IL, USA
1102, 2205

Ruth Hagestuen

Minnetonka, MN, USA
3204

Robert Hauser

Tampa, FL, USA
1103

Susan Hayflick

Portland, OR, USA
3205

Joseph Jankovic

Houston, TX, USA
2308

Jorge Juncos

Atlanta, GA, USA
3101

Jeffrey Kordower

Chicago, IL, USA
1102

Anthony Lang

Toronto, ON, Canada
3205

Blair Leavitt

Vancouver, BC, Canada
2102

Bonnie Levin

Miami, FL, USA
2205

Irene Litvan

La Jolla, CA, USA
3101

Corneliu Luca

Miami, FL, USA
1205

Karen Marder

New York, NY, USA
2203

Connie Marras

Toronto, ON, Canada
3102

Marcelo Merello

Buenos Aires, Argentina
2306

Marcelo Miranda

Santiago, Chile
1206

Jose Obeso

Madrid, Spain
1205

Michael Okun

Gainesville, FL, USA
3101

C. Warren Olanow

New York, NY, USA
1102

Jill Ostrem

San Francisco, CA, USA
1103, 1205

Laurie Ozelius

Charlestown, MA, USA
3102

Cecilia Peralta

Buenos Aires, Argentina
1103

Ron Postuma

Montreal, QC, Canada
3102

Stefan Pulst

Los Angeles, CA, USA
2204

Mayela Rodriguez Violante

Mexico City, Mexico
2204, 2307, 3203

Rachel Saunders-Pullman

New York, NY, USA
2101

Kathleen Shannon

Madison, WI, USA
1102

Carlos Singer

Miami, FL, USA
3101

Andrew Singleton

Bethesda, MD, USA
2203

David Standaert

Birmingham, AL, USA
1103, 3102, 3203

Glenn Stebbins

Chicago, IL, USA
2307

Matthew Stern

Philadelphia, PA, USA
3102

A. Jon Stoessl

Vancouver, BC, Canada
1204

Antonio Strafella

Toronto, ON, Canada
1204

Caroline Tanner

San Francisco, CA, USA
1206

Helio Teive

Curitiba, Brazil
3203, Challenging Case MDS-PAS
Rounds

Elvira Valera

La Jolla, CA, USA
3102

Jeffery Vance

Miami, FL, USA
1101

Ruth Walker

Bronx, NY, USA
2101

Roberto Weiser

Caracas, Venezuela
2102

Theresa Zesiewicz

Oldsmar, FL, USA
2204

VERCISE™

Deep Brain Stimulation System

INTREPID Clinical Research Study Implantable Neurostimulator for the treatment of Parkinson's Disease



The Vercise™ Deep Brain Stimulation (DBS) System is an investigational device and part of the INTREPID study.

The Vercise™ DBS System is limited by Federal (or United States) Law to investigational use.

Additional Information can be located on the INTREPID DBS Clinical Trial website (<https://www.intrepiddbs.com>)

All cited trademarks are the property of their respective owners.

3-300589_NOV2016 © 2016 Boston Scientific Corporation or its affiliates. All rights reserved.



Poster Session Schedule

Saturday, February 25, 2017

Poster Session: 13:00 - 14:30
Poster Viewing Hours: 9:00 – 17:00
Location: Biscayne Ballroom

1-7	Ataxia
8-9	Choreas (Non-Huntington's Disease)
10-13	Clinical Trials and Therapy in Movement Disorders
14	Cognitive Disorders
15-21	Drug-Induced Movement Disorders
22-28	Dystonia
29-30	Education in Movement Disorders
31-36	Epidemiology
38	Genetics (Non-Parkinson's Disease)
39-43	Huntington's Disease
44	Myoclonus
45	Neuroimaging (Non-Parkinson's Disease)
46-47	Neuropharmacology
48-49	Neurophysiology (Non-Parkinson's Disease)
51-59	Other
60-64	Pediatric Movement Disorder
65-67	Quality of Life / Caregiver Burden in Movement Disorders
68	Rare Genetic and Metabolic Diseases
69	Rating Scales
70	Restless Legs Syndrome and Other Sleep Disorders
71-74	Tremor

Sunday, February 26, 2017

Poster Session: 13:00 - 14:30
Poster Viewing Hours: 9:00 – 17:00
Location: Biscayne Ballroom

75-92	Parkinson's Disease: Clinical Trials, Pharmacology and Treatment
93-96	Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)
97-108	Parkinson's Disease: Cognition
109-114	Parkinson's Disease: Genetics
115-121	Parkinson's Disease: Neuroimaging and Neurophysiology
122-132	Parkinson's Disease: Non-Motor Symptoms
133-137	Parkinson's Disease: Pathophysiology
138-139	Parkinson's Disease: Psychiatric Manifestations
140-146	Phenomenology and Clinical Assessment of Movement Disorders
147-148	Surgical Therapy: Other Movement Disorders
149-150	Surgical Therapy: Parkinson's Disease

Late-Breaking Abstracts will be on display Saturday and Sunday during normal Poster Viewing Hours. They will be presented on Saturday, February 25, 2017 from 13:00 – 14:30.

Guided Poster Tours

Guided Poster Tour 1

Saturday, February 25, 2017 13:30-14:30

Includes the top scoring abstracts in the following categories:

- Ataxia
- Clinical Trials and Therapy in Movement Disorders
- Dystonia

Leaders: A. Jon Stoessl and Helio Teive

Guided Poster Tour 2

Saturday, February 25, 2017 13:30-14:30

Includes the top scoring abstracts in the following categories:

- Epidemiology
- Neuroimaging (Non-PD)
- Neurophysiology (Non-PD)
- Rating Scales

Leaders: Caroline Tanner and Mayela Rodriguez Violante

Guided Poster Tour 3

Sunday, February 26, 2017 13:00-14:30

Includes the top scoring abstracts in the following categories:

- Parkinson's Disease: Clinical Trials, Pharmacology and Treatment
- Parkinson's Disease: Cognition

Leaders: Susan Fox and Marcelo Merello

Guided Poster Tour 4

Sunday, February 26, 2017 13:00-14:30

Includes the top scoring abstracts in the following categories:

- Parkinson's Disease: Genetics
- Parkinson's Disease: Neuroimaging and Neurophysiology
- Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)
- Parkinson's Disease: Non-Motor Symptoms

Leaders: Jennifer Goldman and Emilia Gatto



www.acorda.com

LIFE. SCIENCE.™

ACORDA

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

Acorda Therapeutics is proud to be a Gold Level Sponsor at the 1st Pan American Parkinson's Disease and Movement Disorders Congress. We're proud to support their objectives to improve the quality of life and independence of people with Parkinson's.



Abstracts by Topic

Ataxia

- 1 Early interventions in sca2: Ethical considerations and neurorehabilitation therapy
Luis Velázquez-Pérez, Julio Cesar Rodríguez Díaz, Roberto Rodríguez-Labrada, Jacqueline Medrano-Montero, Annelié Estupiñan-Rodríguez, Lorenzo Reynaldo Cejas, Mariela Gongora Marrero, Miguel Velazquez-Santos, Yanetza Gonzalez Zaldivar, Reydenis Torres-Vega (Holguín, Cuba)
- 2 Biomarkers of dys-executive decline in Spinocerebellar Ataxia type 2: Insights into physiopathology and therapies
Roberto Rodríguez-Labrada, Luis Velázquez-Pérez, Annelié Estupiñan-Rodríguez, Reydenis Torres-Vega, Jacqueline Medrano-Montero, Ricardo Ortega-Sanchez, Yáimee Vazquez-Mojena, Arnoy Peña Acosta, Nalia Canales-Ochoa (Holguín, Cuba)
- 3 Ataxia, 83 clinical case series
Paula Saffie (Santiago de Chile, Chile)
- 4 Withdrawn by author
- 5 Fragile x - associated tremor / ataxia syndrome (fxtas) atypical presentation
Mauricio Chamorro (Rosario, Argentina)
- 6 Comparison of mental practice and proprioceptive neuromuscular facilitation in sisters with cerebellar atrophy
Cynthia Bedeschi, Diego Guedes, Daniela Ambrosano (Sao Paulo, Brazil)
- 7 Steroid-Responsive Encephalopathy with Associated Thyroiditis (SREAT) presenting with pure cerebellar ataxia
Pichet Termsarasab, Yuvadee Pitakpatapee, Steven Frucht, Prachaya Srivanitchapoom (Cleveland Heights, OH, USA)

Choreas (Non-Huntington's Disease)

- 8 Hemichorea induced by sertraline: Case report and literature review
Victoria Aldinio, María Bres Bullrich, Emilia Gatto, Pilar Sánchez de Paz, Gustavo Andres Da Prat de Magalhaes, Galeno Rojas, Virginia Parisi, Gabriel Persi (Buenos Aires, Argentina)
- 9 Challenges in diagnosis and treatment of acute rheumatic fever in a young female with multiple stress-related complaints
Kalea Colletta, Priya Malhotra, Eugene Schnitzler (Orland Hills, IL, USA)

Clinical Trials and Therapy in Movement Disorders

- 10 Efficacy and safety of a 2 ml dilution of abobotulinumtoxinA compared with placebo in adult patients with cervical dystonia
Mark Lew, Daniel Snyder (Los Angeles, CA, USA)
- 11 Exploratory trial results for SAGE-547 injection in essential tremor
George Nomikos, Aaron Ellenbogen, Shane Raines, Ryan Arnold, Helen Colquhoun, James Doherty, Stephen Kanes (Cambridge, MA, USA)
- 12 Clinical, demographic, imaging and long-term treatment with botulinum toxin in a series of 141 patients with facial hemispasm
Nicolas Morera, Gabriela Raina, Andrea Tschopp, Cristian Calandra, Maria Cersosimo, Ricardo Maiola, Fernando Auvieux, Silvia Folgar, Carolina Ramírez Gómez, Carol Aguilar Alvarado, Gonzalo Castro, Verónica Montilla-Uzcátegui, Cynthia Garcia Fernandez, Federico Micheli (Buenos Aires, Argentina)

- 13 A comparison of cycle exercise, functional training and Xbox Kinect® in cardiorespiratory fitness of elderly with Parkinson's disease: a randomized controlled trial
Daniel Ferraz, Karen Trippo, Gabriel Duarte, Ramon Kruschewsky, Jamily Oliveira Filho (Salvador, Brazil)

Cognitive Disorders

- 14 Psychosocial features of patients with essential tremor in Parkinson's disease in Uzbekistan
Dilshod Tolibov, Gulnora Rakhimbayeva, Azamatjon Umarov (Tashkent, Uzbekistan)

Drug-Induced Movement Disorders

- 15 Substance abuse and parkinsonism
Kaushalendra Tripathi, Richa Tripathi, Edwin George (Ahmedabad, India)
- 16 Inhaled steroid induced hemichorea-hemiballism
Hee Jin Kim, Hee Jin Kang (Seoul, Korea)
- 17 Rolipram, a PDE-IV inhibitor protects against experimental parkinsonism in mice
Nitin Kumar, R Khanna (New Delhi, India)
- 18 Myoclonus and tremor induced by Flunarizine and Cinnarizine: A report of four cases in El Salvador
Jose Ricardo Lopez-Castellanos, Jose Lopez-Contreras (Cincinnati, OH, USA)
- 19 Isoniazid induced myoclonus a case report
Daniel Pereira Contreras (Quezaltepeque, El Salvador)
- 20 Risk of Parkinson's disease in zolpidem user: A systematic review and meta-analysis
Md Salman Hussain, Abul Najmi, Dasari Anil (New Delhi, India)
- 21 A case of possible delayed akathisia due to risperidone
Priya Mahajan (Kalamazoo, MI, USA)

Dystonia

- 22 A multiparametric MEG study of the effect of medications on neuronal oscillations in generalized or cervical dystonia
Abhimanyu Mahajan, Susan Bowyer, Andrew Zillgitt, Peter LeWitt, Patricia Kaminski, Christos Sidiropoulos (Detroit, MI, USA)
- 23 AbobotulinumtoxinA injection patterns in patients with cervical dystonia from the anchor-cd registry study
Cynthia Comella, Daniel Truong, Alberto Espay, Daniel Snyder, Dominic Marchese, Richard Trosch (Chicago, IL, USA)
- 24 Bilateral facial movements following Guillian-Barre syndrome
Zain Guduru, Julie Kurek, John Morgan, Kapil Sethi (Augusta, GA, USA)
- 25 Demographic and clinical features in a series of 171 patients with blepharospasm after long-term treatment with botulinum toxin
Carol Aguilar Alvarado, Gabriela Raina, Nicolas Morera, Lorena Tschopp, Verónica Montilla-Uzcátegui, Carolina Ramírez Gómez, Gonzalo Castro, Cynthia Garcia Fernandez, Juan Pablo Paviolo, Verónica Tkachuk, Cristian Calandra, Luis Pellene, Graciela Cersósimo, Ricardo Maiola, Fernando Auvieux, Silvia Folgar, Federico Micheli (Quetzaltenango, Guatemala)

Abstracts by Topic

- 26 Withdrawn by author
- 27 Quality of life improvements persist in people with dystonia over 10 years following DBS surgery
Elliot Hogg, Emmanuel During, Kishore Athreya, Echo Tan, Michele Tagliati (Beverly Hills, CA, USA)
- 28 Stimulation induced parkinsonism is uncommon in people with dystonia 10 years following DBS surgery
Michele Tagliati, Jonathan Eskenazi, Emmanuel During, Kishore Athreya, Elliot Hogg (Los Angeles, CA, USA)

Education in Movement Disorders

- 29 Parkinson's disease risk score (PDRS) for Parkinson's disease screening in aging population: Effect of yoga and meditation
Vinod Sharma (Delhi, India)
- 30 Implementation process of the translation and adaptation of European Physiotherapy Guideline for Parkinson's disease to Portuguese
Tamine Capato, Josefa Domingos, Lorena Almeida, Bastiaan Bloem, Samyra Keus (Sao Paulo, Brazil)

Epidemiology

- 31 Prevalence, incidence and risk factors associations of Parkinson's disease in an elderly population in Cuba
Jorge Jesus Llibre Guerra, Juan Llibre Guerra, Erika Guartazaca Guerrero, Ana Rodriguez Salgado, Juan Pablo Diaz Marante (La Habana, Cuba)
- 32 Outpatient care for Parkinson's disease in the US: A national perspective
Gurkirpal Singh, Bharathi Lingala, Amy Guo, David Squillacote, Alexander Niyazov, Alka Mithal (Palo Alto, USA)
- 33 Mortality in patients with Parkinson's disease: Analysis of data from tertiary referral movement disorder clinic
Juyeon Kim, Young Jin Kim, Kiju Kim, Ho-Sung Ryu, Sun Ju Chung (Anyang, Korea)
- 34 Emergency department visits and hospitalizations for Parkinson's disease in the US: A national perspective
Gurkirpal Singh, Bharathi Lingala, Alexander Niyazov, Amy Guo, David Squillacote, Alka Mithal (Palo Alto, CA, USA)
- 35 Movement disorders in El Salvador: An eleven years-survey
Jose Ricardo Lopez-Castellanos, Jose Lopez-Contreras (Cincinnati, OH, USA)
- 36 Characteristics of the onset of Parkinson's disease in a Bolivian population
Juan Carlos Duran (La Paz, Bolivia)

Genetics (Non-Parkinson's Disease)

- 37 Withdrawn by author
- 38 Phenotypical variability in an Argentinian family, with history of frontotemporal lobar degeneration, caused by a mutation in the microtubule-associated protein tau
Ignacio Fernandez Mata, Emilia Gatto, Ricardo Allegri, Ezequiel Surace, Gustavo Andres Da Prat de Magalhaes, Hanna David, Chrem Mendez Patricio, Dorschner Michael (Seattle, WA, USA)

Huntington's Disease

- 39 Clinical, demographic and genetic features of 73 patients with Huntington's disease in Argentina
Carolina Ramirez Gómez, Natalia Araoz Olivos, Verónica Montilla-Uzcátegui, Carol Aguilar Alvarado, Gonzalo Castro, Cynthia Fernández, Ricardo Maiola, Cristian Calandra, Nicolas Morera, Andrea Tschopp, Gabriela Raina, Graciela Cersósimo, Federico Micheli (Ixtlahuaca de Cuauhtémoc, Mexico)
- 40 Clinical and demographic differences in patients with Huntington's disease according to main initial symptom
Lidia Mendoza Vega, Mayela Rodriguez Violante, Amin Cervantes, Ned Davilal-Avila, Sara Isais Millan, Karla Salinas (Estado de México, Mexico)
- 41 Deficits in temporal processing correlate with clinical progression in Huntington's disease
Martin Cesarini, Emilia Gatto, Jose Luis Etcheverry, Ana Sanguinetti, Patricia Agostino, Diego Golombek (La Plata, Argentina)
- 42 Magnetic resonance imaging and pyramidal impairment in Huntington's disease
Emilia Gatto, Martin Cesarini, Jose Luis Etcheverry, Ana Sanguinetti, Leonardo Bevacqua, Sebastian Lescano (Buenos Aires, Argentina)
- 43 Clinical suspicion of juvenile Huntington's disease in Uruguay: Case report
Adriana Cardozo Dodera (Maldonado, Uruguay)

Myoclonus

- 44 Adult-onset opsoclonus-myoclonus syndrome - small case series
Luis Tieppo Fornari, André Palmeira, Carlos Roberto Rieder, Arlete Hilbig (Porto Alegre, Brazil)

Neuroimaging (Non-Parkinson's Disease)

- 45 Biomarkers of abnormal motor control in handwriting: a neuroanatomical comparison
Ketan Jhunjhunwala, Lija George, Rajini Naduthota, Jitender Saini, Abhishek Lenka, Lauren Giamberardino, Ravi Yadav, Pramod Pal, Priyantha Herath (Columbia, SC, USA)

Neuropharmacology

- 46 Serine Peptidase Spd2 can specifically degrade Neurotoxic Prion Protein PrPSC in vivo in Drosophila
Mohammad Abu Hena Jamal, Hyeon Kim, Seong Hong (Jeonju, Korea)
- 47 Curcumin exhibit neuroprotective potential by mitigating rotenone induced oxidative and mitochondrial dysfunctions in mouse model of Parkinson's disease
Dharmendra Khatri, Archana Juvekar (Mumbai, India)

Neurophysiology (Non-Parkinson's Disease)

- 48 Decreased complexity of cardiovascular autonomic regulation: A promising clinical biomarker of prodromal spinocerebellar ataxia type 2
Claudia Carricarte, Andrés Machado, Lazaro Sanchez-Rodriguez, Mario Estévez, Julio Montes-Brown, Claudia Sanchez, Dennis Francos, Luis Velázquez-Pérez (La Habana, Cuba)
- 49 The utility of cortical silent period to differentiate different pathologies of the pyramidal and extrapyramidal systems
María Del Pilar Rodríguez Rodríguez, Carlos Armando Tello Valdes (Texcoco, Mexico)



Abstracts by Topic

Other

- 50 Withdrawn by author
- 51 Gait and anthropometric characteristics of patients with Parkinson's disease seen in a Nigerian tertiary hospital
Abiola Ogundele, Matthew Olaogun, Morenikeji Komolafe (Ile-Ife, Nigeria)
- 52 Assessing barriers/motivations for participating in Parkinson's disease genetic studies in Hispanic versus Non-Hispanic whites
Karen Nuytemans, Clara Manrique, Michael Cuccaro, William Scott, Corneliu Luca, Carlos Singer, Jeffrey Vance (Miami, FL, USA)
- 53 Psychogenic movement disorder: Demographic and clinical profile of 52 patients
Sanjay Pandey, Neelav Sarma (New Delhi, India)
- 54 Motor and body composition variables by Parkinson's disease staging
Luciano Alves Leandro, Carolina Moreira (Curitiba, Brazil)
- 55 Painless legs and moving toes syndrome
Laveena Singla, Sivaprasad Pesala, Syed Shah Abdullah, Pradeep Bollu (Columbia, OH, USA)
- 56 Telemedicine vs. office visits in a movement disorder specialty clinic: Comparative patient satisfaction
Ryan Hanson, Christopher Goetz, Marisa Truesdal, Glenn Stebbins, Allison Weathers (Chicago, IL, USA)
- 57 Aquatic physical therapy in people with Parkinson's disease: Repercussions in functional mobility and balance
Vera Israel, Thalysa Mocelin, Juliana Siega, Adriano Silva, Bruna Yamaguchi (Curitiba, Brazil)
- 58 Aquatic physical therapy in people with Parkinson's disease: Effects on cardiorespiratory fitness
Vera Israel, Juliana Siega, Thalysa Mocelin, Bruna Yamaguchi, Adriano Silva (Curitiba, Brazil)
- 59 Effects of green tea extract (GTE) on Ca²⁺ ATPase and lipid peroxidation in brains of aging male rats
Sumit Rajput, Sukrat Sinha (Delhi, India)

Pediatric Movement Disorder

- 60 A natural history of Sydenham's chorea in Filipino children: A case series
Ariel Rabanes, Marilyn Ortiz, Lillian Lee (Iloilo City, Philippines)
- 61 Paroxysmal non-kinesigenic dyskinesia, complex motor tics, autism spectrum disorder, and psychiatric diseases in a family with a novel PNKD mutation
Darius Ebrahimi-Fakhari, Darryl De Vivo, Timothy Yu (Boston, MA, USA)
- 62 An interesting case of potassium channelopathy mimicking paroxysmal non-kinesigenic dyskinesia
Kallol Set, Debabrata Ghosh, Ahm Huq, Aimee Luat (Detroit, MI, USA)
- 63 Experience in developmental and benign movement disorders in childhood: 113 Chilean patients
Valentina Naranjo Lobo, Mónica Troncoso, Andrés Barrios, Ledia Troncoso, Paola Santander, Scarlet Witting, Susana Lara, María José Hidalgo, Daniela Muñoz, Isadora Ruiz (Santiago, Chile)

- 64 Neurotransmitter diseases with onset age before six years old: Nine Chilean children
Mónica Troncoso, Valentina Naranjo Lobo, Nelly Luza, Paola Santander, Carla Rojas, Álvaro Wicki, María Magdalena González, Isadora Ruiz, Daniela Muñoz, María José Hidalgo (Santiago, Chile)

Quality of Life/Caregiver Burden in Movement Disorders

- 65 Diagnosis and management of an extended family with Huntington's disease in a resource-limited community
Emily Smith, Lindyann Lessy, Jeffon Telesford, Ruth Walker, Andrew Sobering (St. George's, Grenada)
- 66 The impact of dysarthria on quality of life in a Brazilian sample: Preliminary findings
Victor Quintas, Tiago Attoni, Francisco Cardoso, Ana Teresa Britto, Hugo de Resende, Marcelo Vieira, Larissa Baracho, Rui Rothe-Neves, Serge Pinto (Belo Horizonte, Brazil)
- 67 Gait analysis and MDS-UPDRS Part II (motor experiences of daily living) in a sample of patients with Parkinson's disease in Cali, Colombia
Beatriz Muñoz Ospina, Beatriz Muñoz Ospina, Jorge Luis Orozco, Alejandro Enriquez (Cali, Colombia)

Rare Genetic and Metabolic Diseases

- 68 Clinical features of Wilson's disease in Peru: Review of eight cases
Elison Sarapura, Jorge Ramirez-Quinones, Mario Cornejo-Olivas, Luis Torres (Lima, Peru)

Rating Scales

- 69 Hoehn & Yahr staging and postural stability in the MDS-UPDRS scale for Parkinson's disease
Deepak Gupta, Stanley Fahn, Un Kang (New York, NY, USA)

Restless Legs Syndrome and Other Sleep Disorders

- 70 99mtc - trodat-1 spect in seven patients with RLS
Giorgio Fabiani, Raul Martins Filho, Helio Teive (Curitiba, Brazil)

Tremor

- 71 Patients with essential tremor (ET): Does symptoms such as mild tremor or bradykinesia detrimental to the execution of an activity of daily living?
Christian Duval, Etienne Goubault, Hung Nguyen, Sarah Bogard, Genevieve Faucher, Noushin Roofigari-Esfahani (Montréal, QC, Canada)
- 72 Fragile x-associated tremor/ataxia syndrome in a female child
Shivam Mittal, Kenneth Mark, James Bower (Rochester, MN, USA)
- 73 Differential diagnostics of essential tremor and Parkinson's disease according to electrophysiological parameters of postural tremor
Dilshod Tolibov, Azamatjon Umarov, Gulnora Rakhmibayeva (Tashkent, Uzbekistan)
- 74 Novel treatment with levetiracetam of lower extremity myorhythmia associated with multiple sclerosis
Momina Soudagar Turkey, Neha Prakash, Florian Thomas, Pratap Chand (Saint Louis, MO, USA)

Impax is committed to improving
our patient support programs:



Make The

myRytary®

Connection For Your Patients.

MyRytary® is a personalized program helping patients prescribed Rytary® (carbidopa and levodopa) connect to case management, access and affordability support, and educational resources. Getting started is easy. To enroll, log into MyRYTARY.com or call 1.844.IMPAX2U (467-2928).

MyRytary® Instant Savings Program

Eligible patients
pay no more than **\$25** per month*

1.844.IMPAX2U

Monday-Friday, 8am-8pm EST

MyRYTARY.com

Come see us in Miami on February 24-26 at Booth #9.

Rytary®
(Carbidopa and Levodopa)
Extended-Release Capsules
23.75 mg / 95 mg • 36.25 mg / 145 mg
48.75 mg / 195 mg • 61.25 mg / 245 mg

* Subject to eligibility. For private insurance programs only. Up to \$100 maximum benefit. Individual out-of-pocket costs may vary. See terms, conditions, and eligibility criteria at <https://rytary.com/patients-resources/savings-card>.

© 2017 Impax Specialty Pharma, a division of Impax Laboratories, Inc.,
All rights reserved. Printed in USA. PP-ADP-RYT-US-0013 12/2016





Abstracts by Topic

Parkinson's Disease: Clinical Trials, Pharmacology and Treatment

- 75 Cognitive and cerebral changes related to an integrative cognitive rehabilitation program in Parkinson's disease
Naroa Ibarretxe-Bilbao, María Díez-Cirarda, Javier Peña, Alberto Cabrera-Zubizarreta, Olaia Lucas-Jiménez, Juan Carlos Gómez-Esteban, María Ángeles Gómez-Beldarrain, Natalia Ojeda (Bilbao, Spain)
- 76 Human factors testing of the levodopa-carbidopa intestinal gel delivery system in advanced Parkinson's disease patients and healthcare providers
Ramon Rodriguez, Hubert Fernandez, Alberto Espay, Rajkumar Conjeevaram, Ji Zhou, Matthew Kuntz, Edward Halpern, Janet Benesh (Orlando, FL, USA)
- 77 Efficacy of sublingual apomorphine film (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease: Results from the Phase 3 study dose-titration phase
Robert Hauser, Stuart Isaacson, Rajesh Pahwa, Daniel Truong, Eric Pappert, Peter Gardzinski, Bruce Dzyngel, Albert Agro, Alberto Espay (Tampa, FL, USA)
- 78 Efficacy of IPX066, extended-release levodopa-carbidopa in patients with advanced Parkinson's disease: Responder analyses
Suneel Gupta, Sarita Khanna, Nathan Rustay, Robert Rubens, Sherron Kell (Hayward, CA, USA)
- 79 Protective effects of Myristicin against neurodegeneration in a 6-hydroxydopamine induced model of Parkinson's disease in rats
Ali Moradganjeh (Tehran, Iran)
- 80 Study design of an efficacy and safety phase 3, randomized, double-blind, placebo-controlled trial of APL-130277 in the treatment of OFF episodes (CTH-300)
C. Warren Olanow, Eric Pappert, Peter Gardzinski, Bruce Dzyngel, Albert Agro (Rye, NY, USA)
- 81 Improvement in motor and non-motor Parkinson's disease symptoms in patients changed from sinemet ir to rytary after deep brain stimulator placement; a case series
Drew Falconer, Mahesh Shenai, Sean Rogers (Alexandria, VA, USA)
- 82 Withdrawn by author
- 83 'Advanced' Parkinson's disease characteristics in clinical practice: Results from the observe-PD study, a cross-sectional observational study of 2,615 patients
Alfonso Fasano, Leonardo Lopiano, Bulent Elibol, Irina Smolentseva, Klaus Seppi, Annamaria Takats, Koray Onuk, Juan Parra Riaza, Lars Bergmann, Ashley Yegin, Kavita Sail, Zvezdan Pirtosek (Toronto, ON, Canada)
- 84 Improvement in motor and non-motor symptoms in lewy body and Parkinson's dementia patients on rytary as compared to sinemet: A case series
Drew Falconer, Mahesh Shenai, Sean Rogers (Alexandria, VA, USA)
- 85 Improvement in motor and non-motor Parkinson's disease symptoms with use of rytary (carbidopa/levodopa) in dopamine-naïve patients; a case series
Drew Falconer, Mahesh Shenai, Sean Rogers (Alexandria, VA, USA)
- 86 Safety of sublingual apomorphine film (APL-130277) for the treatment of OFF episodes in patients with Parkinson's disease: Results from the Phase 3 study dose titration phase
Stuart Isaacson, Alberto Espay, Rajesh Pahwa, Daniel Truong, Eric Pappert, Peter Gardzinski, Bruce Dzyngel, Albert Agro, Robert Hauser (Boca Raton, FL, USA)
- 87 Virtual assistant for rehabilitation exercises of people with Parkinson's disease
Pedro Chana-Cuevas, Alvaro Fernandez-Lopez, Elena Herrera-Gomez, Fiorella Barbagelata, Lissette Cabrera (Santiago, Chile)
- 88 Impulse Control Disorder on Parkinson's disease. A new approach from art?
Victoria Aldinio, María Bres Bullrich, Pilar Sánchez de Paz, Gustavo Andres Da Prat de Magalhaes, Galeno Rojas, Virginia Parisi, Gabriel Persi, Emilia Gatto (Buenos Aires, Argentina)
- 89 Retrospective claims database analysis assessing Parkinson's disease treatment patterns in the United States
Alexander Niyazov, Francis Vekeman, Amy Guo, David Squillacote, Eric Wu, Susan Criswell (Ardsey, NY, USA)
- 90 Postural balance and elderly quality of life with Parkinson's disease treated with functional training, stationary bike and exergame: Pilot study of a randomized clinical trial
Karen Trippo, Daniel Ferraz, Keith Farinha, Ramon Kruschewsky, Jamary Oliveira-Filho (Salvador-Bahia, Brazil)
- 91 Association between deficiencies in implicit learning and dual-task gait performance and balance control in patients with Parkinson's disease
Maria Elisa Piemonte, Maria Elisa Piemonte, Matheus D' Alencar, Bruno Monte, Andre Helene, Jefferson Galves (Sao Paulo, Brazil)
- 92 Update to interim results of a long-term open-label safety study of ADS-5102 (amantadine HCl) extended-release capsules for treatment of levodopa-induced dyskinesia (LID) (EASE LID 2 Study)
Robert Hauser, Rajesh Pahwa, Caroline Tanner, Wolfgang Oertel, Reed Johnson, Larissa Felt, Mary Stempien (Tampa, FL, USA)

Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)

- 93 Withdrawn by author
- 94 PanMSA consortium database
Martin Cesarini, Jose Luis Etcheverry, Ana Sanguinetti, Emanuel Mosto, Irene Litvan, Emilia Gatto (La Plata, Argentina)
- 95 Powassan virus post-encephalitic parkinsonism
Shivam Mittal, Anhar Hassan, Joyce Sanchez, Carrie Robertson (Rochester, MN, USA)
- 96 Dementia and severe parkinsonism following Wernicke's encephalopathy - a case report
Giorgio Fabiani, Camila Richter, Silvia Scremin (Curitiba, Brazil)

Parkinson's Disease: Cognition

- 97 Predictors of change in the diagnosis of mild cognitive impairment subtypes after attending a cognitive rehabilitation program in Parkinson's disease
María Díez-Cirarda, Natalia Ojeda, Javier Peña, Olaia Lucas-Jiménez, María Ángeles Gómez-Beldarrain, Juan Carlos Gómez-Esteban, Naroa Ibarretxe-Bilbao (Bilbao, Spain)
- 98 Cognitive and brain resting-state profile in alpha-synucleinopathies
Olaia Lucas-Jiménez, Naroa Ibarretxe-Bilbao, Iñigo Gabilondo, Natalia Ojeda, Javier Peña, Alberto Cabrera-Zubizarreta, Rocío Del Pino, María Díez-Cirarda, Juan Carlos Gómez-Esteban (Bilbao, Spain)

Abstracts by Topic

- 99 Does hypertension moderate cognition in Parkinson's disease?
 Laura Segala, Katalina McInerney, Joshua Rooks, Sharlet Anderson, Ni Sun-Suslow, Christina Bermudez, Corneliu Luca, Henry Moore, Carlos Singer, Bonnie Levin (Miami, FL, USA)
- 100 Classification of neurocognitive impairment in Spanish speaking Parkinson's disease patients
 Sharlet Anderson, Christina Bermudez, Ni Sun-Suslow, Laura Segala, Corneliu Luca, Henry Moore, Jonathan Jagid, Gustavo Rey, Bonnie Levin (Chicago, IL, USA)
- 101 The effect of anxiety on cognition in Parkinson's disease
 Sharlet Anderson, Glenn Stebbins, Bryan Bernard, Alice Witczak-Negron, Jennifer Goldman (Chicago, IL, USA)
- 102 Multicenter study of case series of Parkinson's disease in Central America (Central America movement disorders working group)
 Fernando Gracia, Ernesto Cornejo-Valse, Ricardo Lopez-Contreras, Daniel Pereira Contreras, Heike Hesse, Walter Diaz, Amilkar Zelaya, Alejandra Medina, Alejandra Molina, Michelle Ortiz, Blas Armién (Panama, Panama)
- 103 The role of social support on cognitive functioning after deep brain stimulation in Parkinson's disease
 Ni Sun-Suslow, Katalina McInerney, Christina Bermudez, Sharlet Anderson, Laura Segala, Quinn McKinnon, Corneliu Luca, Jonathan Jagid, Henry Moore, Carlos Singer, Bonnie Levin (Coral Gables, FL, USA)
- 104 Which items on the Montreal Cognitive Assessment (MoCA) in Parkinson's disease predict progression from mild cognitive impairment (MCI) to dementia?
 Melissa Mackenzie, Kristen Sundvick, Jiayue Cai, Daryl Wile, Martin McKeown, Silke Appel-Cresswell (Vancouver, BC, Canada)
- 105 Neuropsychological performances and striatal DAT availability in Brazilian Parkinson's disease subjects: Preliminary findings
 Luis Tieppo Fornari, Sabrina Cardoso, Camila Carpenedo, Arlete Hilbig, Carlos Roberto Rieder (Porto Alegre, Brazil)
- 106 Predictors of cognitive decline in Parkinson's disease (PD) patients
 Nino Khizanishvili, Maia Beridze, Nana Kvirkvelia, Maka Khaburzan, Tinatin Kherkheulidze, Tamar Kherkheulidze and Ivane Avazashvili (Tbilisi, Georgia)
- 107 Does exposure to toxins influence cognition in Parkinson's disease?
 Katalina McInerney, Christina Bermudez, Laura Segala, Ni Sun-Suslow, Joshua Rooks, Quinn McKinnon, Corneliu Luca, Carlos Singer, Jonathan Jagid, Sharlet Anderson, Bonnie Levin (Miami, FL, USA)
- 108 Cognitive profile of patients with PD: Compared with healthy controls
 Maira Olchik, Annelise Ayres, Sabrina Cardoso, Larissa Freire, Artur Schumacher Schuh, Carlos Roberto Rieder (Porto Alegre, Brazil)
- 109 LRRK2 analysis in the largest Latin American PD cohort: The LARGE-PD consortium
 Mario Cornejo-Olivas, Luis Torres, Mario Velit-Salazar, Miguel Inca-Martinez, Pilar Mazzetti Soler, Carlos Cosentino, Federico Micheli, Claudia Perandones, Elena Dieguez, Victor Raggio, Vitor Tumas, Vanderi Borges, Henrique Ferraz, Carlos Roberto Rieder, Artur Schumacher Schuh, Carlos Velez-Pardo, Marlene Jimenez-Del-Rio, Francisco Lopera, Jorge Chang Castello, Brennie Anreé-Munoz, Ignacio Fernandez Mata, Sarah Waldherr, Dora Yearout, Cyrus Zabetian (Lima, Peru)
- 110 LRRK2-exon 31 mutations in Parkinson's disease patients from Ecuador
 Jorge Chang Castello, Brennie Andree Muñoz, Ramiro Burgos, Cyrus Zabetian, Ignacio Mata (Guayaquil, Ecuador)
- 111 Hereditary atypical parkinsonism with novel mutation of the VPS35 and FBXO7 genes
 Katerina Mensikova, Tereza Bartonikova, Lenka Mikulicová, Radek Vodicka, Radek Vrtel, Marek Godava, Iva Dolinova, Miroslav Vastik, Michaela Kaiserova, Pavel Otruba, Petr Kanovsky (Olomouc, Czech Republic)
- 112 LRRK2, MAPT and HTRA2 mutations in the pedigree of familial neurodegenerative parkinsonism with cognitive deterioration spanning five generations in a genetically isolated population of south-eastern Moravia, Czech Republic
 Petr Kanovsky, Tereza Bartonikova, Radek Vodicka, Katerina Mensikova, Radek Vrtel, Marek Godava, Pavel Otruba, Michaela Kaiserova, Miroslav Vastik, Lenka Mikulicová (Olomouc, Czech Republic)
- 113 Occupational pesticide exposure and penetrance of LRRK2 Parkinson's disease (PD)
 Caroline Tanner, Connie Marras, Karen Marder, Susan Bressman, Roy Alcalay, Rachel Saunders-Pullman, Cheryl Chen Meng, Samuel Goldman, Monica Korell, Marta San Luciano, Eduardo Tolosa, Birgitt Schuele, J William Langston, Alexis Brice, George Mellick, Joaquim Ferreira, Meriem Tazir, Christine Klein, Daniela Berg, Anthony Lang (San Francisco, CA, USA)
- 114 Lewy Body and Tau pathology in a patient with parkinsonism, cognitive decline, rapid progression and the GBA1 T269M variant
 Hannah Walters, Rachel Saunders-Pullman, John Crary, Deborah Raymond, Susan Bressman (New York, NY, USA)

Parkinson's Disease: Neuroimaging and Neurophysiology

- 115 Amyloid- β deposition effects microglial activation in Parkinson's disease
 Christine Ghadery, Yuko Koshimori, Jinhee Kim, Sarah Coakeley, Madeleine Harris, Leigh Christopher, Pablo Rusjan, Anthony Lang, Sylvain Houle, Antonio Strafella (Toronto, ON, Canada)
- 116 The utility of dopamine transporter imaging in clinically uncertain parkinsonian syndrome: Experience from general neurology practice
 Juebin Huang, Syed Hussain, Vani Vijayakumar, Saumya Goel, Alexander Auchus (Jackson, MS, USA)
- 117 [18F]-AV-1451 Binding to neuromelanin in the substantia nigra in PD and PSP
 Sarah Coakeley, Sang Soo Cho, Yuko Koshimori, Pablo Rusjan, Anthony Lang, Lorraine Kalia, Elizabeth Slow, Sylvain Houle, Antonio Strafella (Toronto, ON, Canada)
- 118 The patient's perspective: the effect of levodopa on Parkinson's disease symptoms
 Heidemarie Zach, Michiel Dirx, Jacobus Pasman, Bastiaan Bloem, Rick Helmich (Vienna, Austria)
- 119 Cognitive stress reduces the effect of levodopa on Parkinson's disease resting tremor
 Heidemarie Zach, Michiel Dirx, Jacobus Pasman, Bastiaan Bloem, Rick Helmich (Vienna, Austria)



Abstracts by Topic

- 120 Transcranial sonography in real clinical practice: Differential diagnosis between idiopathic Parkinson's disease, atypical parkinsonism and essential tremor
Talyta Grippe, Pedro Renato Brandão, Danilo Pereira, Flavio Pereira, Marcelo Lobo, Iruena Kessler, Nasser Allam (Brasília, Brazil)
- 121 Hemiparkinsonism after cryptococcal meningoencephalitis in an immunocompetent man
Giorgio Fabiani, Raul Martins Filho, Helio Teive (Curitiba, Brazil)

Parkinson's Disease: Non-Motor Symptoms

- 122 Low and high apathy symptoms are associated with distinct brain alterations in Parkinson's disease: A multimodal imaging study
Naroa Ibarretxe-Bilbao, Olaia Lucas-Jiménez, Javier Peña, Alberto Cabrera-Zubizarreta, María Díez-Cirarda, Juan Carlos Gómez-Esteban, María Ángeles Gómez-Beldarrain, Natalia Ojeda (Bilbao, Spain)
- 123 Autonomic dysfunction is a key determinant of fatigue in Parkinson's disease
Kelvin Chou, Sid Gilman, Nicolaas Bohnen (Ann Arbor, MI, USA)
- 124 Premotor sleep disorders and its impact on the severity in NMSS scale during the course of Parkinson's disease
Sara Isais Millan, Ned Davila Avila, Amin Cervantes, Mayela Rodriguez Violante, Karla Salinas, Lidia Mendoza Vega (Mexico City, Mexico)
- 125 Constipation before and after diagnosis of Parkinson's disease
Karla Salinas, Sara Isais Millan, Ned Davila Avila, Lidia Mendoza Vega, Mayela Rodriguez Violante, Amin Cervantes (Mexico City, Mexico)
- 126 Relationship between subjective and objective measures of sleepiness in Parkinson's disease
Adeel Memon, Raima Memon, Allen Joop, Jennifer Pilkington, Kimberly Wood, Amy Amara (Birmingham, AL, USA)
- 127 Non-motor symptoms in Parkinson's disease patients in El Salvador, Central America
Susana Peña Martinez, Alex Medina (Santa Tecla, El Salvador)
- 128 Ease of olfactory assessment in the developing world
Alex Medina, Rina Medina, Pedro Gomez, Susana Peña Martinez, Claudia Avila (Tegucigalpa, Honduras)
- 129 Withdrawn by author
- 130 Association between freezing of gait and symptoms of anxiety and depression in people with Parkinson's disease
Milla Pimenta, Taísa Nogueira, Dandara Moreira, Carolina Lima, Elen Pinto, Guilherme Valenca, Lorena Almeida (Salvador, Brazil)
- 131 Impact of autonomic neuropathy in surgically treated-Parkinson's disease
Michela Rosso, Aristide Merola, Tamour Khan Tareen, Alberto Romagnolo, Maurizio Zibetti, Simona Maule, Leonardo Lopiano, Alberto Espay (Cincinnati, OH, USA)
- 132 Comparison of actigraphy with polysomnographic studies in patients with Parkinson's disease
Raima Memon, Adeel Memon, Allen Joop, Jennifer Pilkington, Kimberly Wood, Amy Amara (Birmingham, AL, USA)

Parkinson's Disease: Pathophysiology

- 133 Fluvoxamine maleate normalizes striatal neuronal inflammatory cytokine activity in a parkinsonian rat model associated with depression
Ernest Dalle, Willie Daniels, Musa Mabandla (Pietermaritzburg, South Africa)
- 134 Effects of siRNA targeting PGC-1 α gene on MPP $^{+}$ -induced SH-SY5Y Cell
Ye Qin-Yong, Chun Chen, Erwang Si, Juhua Wang (Fuzhou, Peoples Republic of China)
- 135 Withdrawn by author
- 136 Nurr1 based research on pathogenesis and therapy for Parkinson's disease
Weidong Le (Dalian, Peoples Republic of China)
- 137 Physical mobility predictors and the bone health in Parkinson's disease
Luciano Alves Leandro, Carolina Moreira (Curitiba, Brazil)

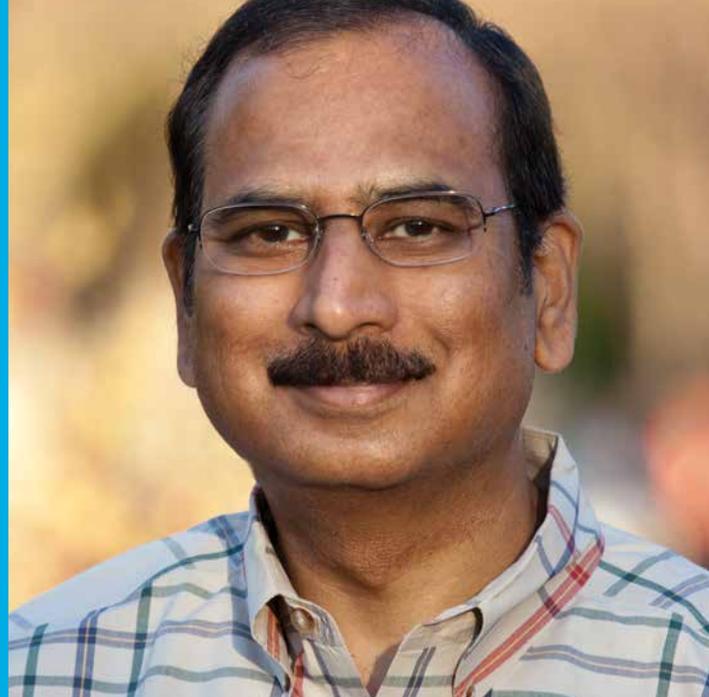
Parkinson's Disease: Psychiatric Manifestations

- 138 Impulsive Control Disorder in Parkinson's disease and its relation to other behaviour symptoms
Maria Villa, Alejandro Bottini Bonfanti, Daniela Romero, Noelia Flores, Gabriela Orzuza, Marcos Burgos (Salta, Argentina)
- 139 Impulse control disorders in Parkinson's disease: Prevalence and clinical features in the Rush University Movement Disorders Clinic
Michael Rossi, Glenn Stebbins, Brandon Barton (Chicago, IL, USA)

Phenomenology and Clinical Assessment of Movement Disorders

- 140 Diagnostic accuracy of common bedside ataxia examination tests
Rebecca Thompson, Peter Woolman, Danish Bhatti, Amy Hellman, John Bertoni, Diego Torres-Russotto (Omaha, NE, USA)
- 141 Movement disorders cases from a small Caribbean island
Shruthi Rethi (Calgary, AB, Canada)
- 142 Post-stroke movement disorders in Santa Clara, Cuba
Miriam Batule Dominguez (Santa Clara, Cuba)
- 143 Objective assessment of bradykinesia and dyskinesia in advanced Parkinson's disease
Ammar Rasul, Ashar Farooqi, Joseph Martinez, Jason Margolesky, Corneliu Luca (Miami, FL, USA)
- 144 Predicting multiple falls in people with Parkinson's disease: A statistical approach
Lorena Almeida, Natalie Allen, Colleen Canning, Catherine Sherrington, Guilherme Valenca, Jamily Oliveira-Filho, Serene Paul (Salvador, Brazil)
- 145 Withdrawn by author
- 146 How to assess functional capacity upper limbs in patients with Parkinson's disease and atypical parkinsonism?
Tamime Capato, Rubia Magalhaes, Thamires Silva, Lygia Nogueira, Cynthia Dionizio, Egberto Barbosa (Sao Paulo, Brazil)

FURTHER, TOGETHER



At Medtronic, we're changing what it means to live with chronic disease. We're creating innovative therapies that help patients get back to enjoying some of the things in life they thought they had lost forever. Seeing our work improve lives is a powerful motivator. The more we do, the more we're driven to push the boundaries of medical technology.

To learn more about Medtronic, visit [MedtronicDBS.com](https://www.MedtronicDBS.com).



Medtronic



Abstracts by Topic

Surgical Therapy: Other Movement Disorders Technology

- 147 Successful unilateral GPI and VIM Deep Brain Stimulation in a case of Dystonia Myoclonus
Verónica Montilla-Uzcátegui, Carolina Ramírez Gómez, Carol Aguilar Alvarado, Gonzalo Castro, Fabián Piedimonte, Federico Micheli (Buenos Aires, Argentina)
- 148 Effect of thalamic deep brain stimulation on postural balance in subjects with essential tremor
Ashar Farooqi, Ammar Rasul, Joseph Martinez, Victor Velez-Aldahondo, Jonathan Jagid, Corneliu Luca (Miami, FL, USA)

Surgical Therapy: Parkinson's Disease

- 149 Deep brain stimulation for Parkinson's disease: Short-term outcomes, referral patterns and health disparities
Daniel Garbin Di Luca, Victor Velez-Aldahondo, Walter Jermakowicz, Laura Segala, Henry Moore, Carlos Singer, Bonnie Levin, Jonathan Jagid, Corneliu Luca (Miami Beach, FL, USA)
- 150 Intraoperative recording from the red nucleus during deep brain stimulation surgery
Tamour Khan Tareen, George Mandybur, Kevin Biddell, Hilary Perez, Alberto Espay, Andrew Duker, Aristide Merola (Cincinnati, OH, USA)

Late-Breaking Abstracts

- LBA 01 Comparative time course changes between Parkinson's disease and age-matched elders during power resistance training
Joseph Signorile, Kirk Roberson, Melanie Potiaumpai, Savannah Wooten (Miami, FL, USA)
- LBA 02 Assessing changes in physical function, cognitive function, and quality of life in individuals with Parkinson's disease
Bryan Riemann, Kaitlyn Stanfield, Jessica Santaniello, Michael Cohen (Savannah, GA, USA)
- LBA 03 The efficacy of an intensive piano training program on information processing speed in adults with Parkinson's disease
Jennifer Bugos, Teresa Lesiuk (Miami, FL, USA)
- LBA 04 Discordance between neurophysiologic and radiographic subthalamic nucleus during microelectrode recording in patients with Parkinson's disease
Ryan Kochanski, Sander Bus, Gian Pal, Leo Verhagen Metman, Sepehr Sani (Chicago, IL, USA)

Lundbeck Proudly Supports International Parkinson and Movement Disorder Society

Our mission, to improve the quality of life for people diagnosed with brain disorders, fuels our passion and drives us forward to make a difference... one patient at a time.

To learn more about Lundbeck, visit
www.lundbeckus.com.



UBR-C-00055 9/2014

Corporate Therapeutic Symposia

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

Saturday, February 25, 2017

Acadia Pharmaceuticals

12:15-13:15

Location: Brickell Room

Treating Hallucinations and Delusions Associated With Parkinson's Disease Psychosis

Speakers: Alberto Espay
Cincinnati, OH, USA
Tanya Simuni
Chicago, IL, USA

Sunovion

12:15-13:15

Location: Chopin Ballroom

A Practical Approach to OFF Episodes in Parkinson's Disease

Speakers: Charles Adler
Scottsdale, AZ, USA
Stewart Factor
Atlanta, GA, USA
Anthony Lang
Toronto, ON, Canada

Sunday, February 26, 2017

AbbVie

12:15-13:15

Location: Chopin Ballroom

Reevaluating Our Approach to Parkinson's Disease and Disease Progression

Speakers: Hubert Fernandez
Cleveland, OH, USA
Alberto Espay
Cincinnati, OH, USA





Acknowledgements

The 1st Pan American Parkinson's Disease and Movement Disorders Congress Oversight Committee wishes to acknowledge and thank the following companies for their support:

Platinum Level

abbvie



Gold Level



Boston
Scientific

Medtronic



Silver Level



Bronze Level



Education Grant Supporters:

MDS acknowledges the supporters of the following PAS Congress activities through educational grants:

Themed Plenary Session 1101:

Parkinson's Disease Across the Americas, supported by Roche

Parallel Session 1204:

Dopaminergic and Cholinergic Imaging in Parkinson's Disease, supported by GE Healthcare

Parallel Session 2205:

Parkinson's Disease Across the PAS: Cross- Cultural Influences on its Neuropsychiatric Issues, supported ACADIA Pharmaceuticals

Above companies are confirmed as of December 21, 2016

Corporate Therapeutic Symposium

Hosted by ACADIA Pharmaceuticals

Saturday, February 25, 2017

12:15 - 13:15

Treating Hallucinations and Delusions Associated With Parkinson's Disease Psychosis



Alberto J. Espay, MD, MSc, FAAN

Associate Professor of Neurology
Director and Endowed Chair
James J. and Joan A. Gardner Center
for Parkinson's Disease and Movement
Disorders
University of Cincinnati Academic
Health Center



Tanya Simuni, MD

Arthur C. Nielsen, Jr., Professor of Neurology
Director, Parkinson's Disease and Movement
Disorders Center
Northwestern University Feinberg School
of Medicine

LOCATION

InterContinental Hotel Miami
100 Chopin Plaza, Miami, FL 33131
Brickell Room

LEARNING OBJECTIVES

- Understand the symptoms, diagnosis, and impact of Parkinson's disease psychosis (PDP)
- Explore the proposed mechanism of action of NUPLAZID (pimavanserin)
- Discuss the efficacy, safety, and administration of NUPLAZID for the treatment of hallucinations and delusions associated with PDP

Sponsored by



SEATING IS AVAILABLE ON A FIRST-COME, FIRST-SERVED BASIS; NO PRE-REGISTRATION REQUIRED

Important Safety Information for NUPLAZID (pimavanserin) 17-mg Tablets

WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. NUPLAZID is not approved for the treatment of patients with dementia-related psychosis unrelated to the hallucinations and delusions associated with Parkinson's disease psychosis.

QT Interval Prolongation: NUPLAZID prolongs the QT interval. The use of NUPLAZID should be avoided in patients with known QT prolongation or in combination with other drugs known to prolong QT interval including Class 1A antiarrhythmics or Class 3 antiarrhythmics, certain antipsychotic medications, and certain antibiotics. NUPLAZID should also be avoided in patients with a history of cardiac arrhythmias, as well as other circumstances that may increase the risk of the occurrence of torsade de pointes and/or sudden death, including symptomatic bradycardia, hypokalemia or hypomagnesemia, and presence of congenital prolongation of the QT interval.

Adverse Reactions: The most common adverse reactions ($\geq 2\%$ for NUPLAZID and greater than placebo) were peripheral edema (7% vs 2%), nausea (7% vs 4%), confusional state (6% vs 3%), hallucination (5% vs 3%), constipation (4% vs 3%), and gait disturbance (2% vs <1%).

Drug Interactions: Strong CYP3A4 inhibitors (eg, ketoconazole) increase NUPLAZID concentrations. Reduce the NUPLAZID dose by one-half. Strong CYP3A4 inducers may reduce NUPLAZID exposure, monitor for reduced efficacy. Increase in NUPLAZID dosage may be needed.

Renal Impairment: No dosage adjustment for NUPLAZID is needed in patients with mild to moderate renal impairment. Use of NUPLAZID is not recommended in patients with severe renal impairment.

Hepatic Impairment: Use of NUPLAZID is not recommended in patients with hepatic impairment. NUPLAZID has not been evaluated in this patient population.

Pregnancy: Use of NUPLAZID in pregnant women has not been evaluated and should therefore be used in pregnancy only if the potential benefit justifies the potential risk to the mother and fetus.

Pediatric Use: Safety and efficacy have not been established in pediatric patients.

Dosage and Administration

Recommended dose: 34 mg per day, taken orally as two 17-mg tablets once daily, without titration.

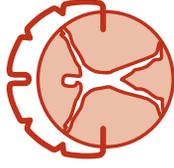
Indication

NUPLAZID is an atypical antipsychotic indicated for the treatment of hallucinations and delusions associated with Parkinson's disease psychosis.

NUPLAZID™
(pimavanserin) tablets

For full Prescribing Information, please visit www.NUPLAZIDhcp.com.

©2016 ACADIA Pharmaceuticals Inc. All rights reserved. NU-0429 12/16



International Parkinson and
Movement Disorder Society

Certifies that

has attended the 1st Pan American Parkinson's Disease and Movement Disorders Congress
in Miami, FL, USA on February 24-26-2017.

Oferowicz

Oscar Gershanik
President,
International Parkinson and Movement Disorder
Society
2015-2017

Cynthia Comella

Cynthia Comella
Chair,
PAS Congress Scientific Program Committee

Francisco Cardoso

Francisco Cardoso
Chair,
MDS Pan American Section

International Parkinson and Movement Disorder Society Pan American Section (MDS-PAS)

Symposium: February 25, 2017

12:15 to 1:15 PM

Faculty: Chuck Adler, MD, PhD, Scottsdale, AZ (Chair)
Stewart Factor, DO, Atlanta, GA
Anthony Lang, OC, MD, Toronto, ON, Canada

Title: A Practical Approach to OFF Episodes in Parkinson's Disease

Abstract:

The reemergence of Parkinson's disease (PD) symptoms (motor and non-motor) in treated patients is referred to as an OFF episode. OFF episodes are thought to occur when brain dopamine levels fall below a critical threshold to sustain relatively normal function, known as ON time. It is important to note that patients may still experience OFF periods despite optimized medical treatment. However, to date, there has been little consensus regarding the definition of OFF or how to measure it. Physicians and patients need to communicate more effectively about OFF episodes. OFF episodes negatively impact the quality of life in patients with PD and increase the burden of illness. This symposium will focus on the identification and treatment of OFF episodes and current unmet needs.

Phenomenology, clinical significance and risk factors for the development of OFF episodes in PD—**Anthony Lang, OC, MD**

Current and novel approaches to the treatment of OFF episodes in PD—**Stewart Factor, DO**

Panel Discussion—**Chuck Adler, MD, PhD, Stewart Factor, DO, Anthony Lang, OC, MD**

This non-CME program is sponsored by Sunovion CNS Development Canada



SUNOVION and  are registered trademarks of Sumitomo Dainippon Pharma Co., Ltd.
Sunovion Pharmaceuticals Inc. is a U.S. subsidiary of Sumitomo Dainippon Pharma Co., Ltd.
©2016 Sunovion Pharmaceuticals Inc. All rights reserved.
84 Waterford Drive, Marlborough, MA 01752

Advance.
Improve.
Educate.
Collaborate.



International Parkinson and
Movement Disorder Society

Become a Member of MDS

Meet & Collaborate with over 6,000 colleagues across the globe and become a part of a Medical and Educational community dedicated to disseminating knowledge and promoting research to advance the field of Movement Disorders



MDS Members receive the following benefits:

Peer Reviewed Journals: *Movement Disorders* and *Movement Disorders – Clinical Practice*

Quarterly Newsletter: *Moving Along*

Reduced Course Registration Rates

Online Resources: CME Activities; Streaming Content; Training Videos; And a Video Library with over 1,800 searchable videos

NON-MEMBER OPPORTUNITIES

Free One-Year Trial Membership
Open to Eligible PAS Congress Delegates

ASSOCIATE MEMBERSHIP

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

Learn more at www.movementdisorders.org/associate-membership.htm or contact the International Secretariat:

MDS International Secretariat
555 East Wells Street, Suite 1100
Milwaukee, WI 53202 USA
Tel: +1 414-276-2145
Fax: +1 414-276-3349
E-mail: info@movementdisorders.org

