

15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS



FINAL PROGRAM

CLAIMING CME CREDIT

To claim CME credit for your participation in the MDS 15th International Congress of Parkinson's Disease and Movement Disorders, International Congress participants must complete and submit an online CME Request Form. This form will be available beginning June 7, 2011.

INSTRUCTIONS FOR CLAIMING CREDIT:

- After June 7, visit www.movementdisorders.org/congress/congress11/cme
- Log in after reading the instructions on the page.
 You will need your International Congress File Number which is located on your name badge or e-mail congress@movementdisorders.org.
- Follow the on-screen instructions to claim CME Credit for the sessions you attended.
- You may print your certificate from your home or office, or save it as a PDF for your records.

CREDIT DESIGNATION

The *Movement* Disorder Society is "accredited with commendation" by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The *Movement* Disorder Society designates this educational activity for a maximum of 35.0 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Continuing Professional Development (CPD) events developed by accredited CPD physician organizations recognized by the ACCME are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.

The *Movement* Disorder Society has sought accreditation from the European Accreditation Council for Continuing Medical Education (EACCME) to provide CME credits for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS). For more information, visit the website: www.uems.net.



15th International Congress of Parkinson's disease and Movement disorders

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WELCOME

Dear Colleagues and Friends,

Welcome to Toronto for the 15th International Congress of Parkinson's Disease and Movement Disorders!

We would like to express our gratitude to the large number of our volunteer committees for designing this International Congress including Congress the Local Organizing Committee for their hard work in arranging the Congress social events that we are sure you will enjoy. We would especially like to thank the Congress Scientific Program Committee for their hard work and coordination of this superior Scientific Program. The 2011 Scientific Program will incorporate Therapeutic Plenary Sessions, Plenary and Parallel Sessions, Teaching Courses, Video Sessions, Skills Workshops, Scientific Discussions, Guided Poster Tours, and Blue Ribbon Highlights. This year's program features 69 sessions led by over 170 esteemed faculty from around the world.

While in Toronto we hope you not only allot time in your schedule to participate in our detailed program, visit the exhibit and poster areas, and attend the social events in the evenings, but also get a chance to see the sights and sounds of what makes Toronto such a culturally diverse destination.

Thank you for your support of The *Movement Disorder Society* and welcome to our 15th International Congress of Parkinson's Disease and Movement Disorders.

With kind regards,

Philip D. Thompson

President, The Movement Disorder Society, 2009-2011

Churchyher Street

Christopher G. Goetz Chair, Congress Scientific Program Committee, Congress Scientific Program Committee, 2009-2011

Susan Fox

Co-Chair, 2011

15^{TH} international congress of Parkinson's **DISEASE AND MOVEMENT DISORDERS**

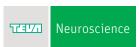
ACKNOWLEDGEMENTS

The International Congress Oversight Committee of the 15th International Congress of Parkinson's Disease and Movement Disorders wishes to acknowledge and thank the following companies for their support:

Platinum Plus Level









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^{*}These companies are confirmed as of April 15, 2011



ABOUT MDS

The *Movement* Disorder Society (MDS) is an international, 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. The spectrum of clinical disorders represented by the Society includes, but is not limited to:

Ataxia
Blepharospasm
Dysphonia
Dystonic disorders
Gait disorders
Huntington's disease
Myoclonus
Parkinson's disease
Restless legs syndrome
Spasticity
Tardive dyskinesia
Tics and Tourette syndrome
Tremor

The *Movement* Disorder Society (MDS) was founded in 1985 on the initiative of Professors Stanley Fahn and C. David Marsden, whose leadership and vision guided the expansion of clinical expertise and research in this field. The organization merged in 1988 with the International Medical Society for Motor Disturbances.

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 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

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ABOUT MDS MDS OFFICERS (2009-2011)



Australia



President-Elect Philip Thompson, Günther Deuschl, Matthew Stern, Germany



Secretary USA



Secretary-Elect USA



Treasurer Cynthia Comella, Oscar Gershanik, Nir Giladi, Argentina

Chair: Christopher Goetz, USA



Treasurer-Elect Israel



Past-President Anthony Lang, Canada

MDS INTERNATIONAL EXECUTIVE COMMITTEE

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INTERNATIONAL CONGRESS OVERSIGHT COMMITTEE

Chair: Andrew Lees, United Kingdom Günther Deuschl, Germany Susan Fox, Canada Oscar Gershanik, Argentina Christopher Goetz, USA Anthony Lang, Canada C. Warren Olanow, USA Philip Thompson, Australia

CONGRESS SCIENTIFIC PROGRAM COMMITTEE

Co-Chair: Susan Fox, Canada Roger Barker, United Kingdom Kailash Bhatia, United Kingdom David John Burn, United Kingdom Francisco Cardoso, Brazil Ted Dawson, USA Günther Deuschl, Germany Dennis Dickson, USA Giovanni Fabbrini, Italy Thomas Gasser, Germany Oscar Gershanik, Argentina Etienne Hirsch, France Christine Klein, Germany Joachim Krauss, Germany Andrew Lees, United Kingdom Irene Litvan, USA Pablo Martínez-Martín, Spain Marcelo Merello, Argentina Jose Obeso, Spain Per Odin, Germany Serge Przedborski, USA Robert Rodnitzky, USA Kapil Sethi, USA Louis Tan, Singapore Daniel Tarsy, USA Philip Thompson, Australia Marie Vidailhet, France



ABOUT MDS

CONGRESS LOCAL ORGANIZING COMMITTEE

Chair: Susan Fox Robert Chen Anthony Lang Andres Lozano Connie Marras Janis Miyasaki Elena Moro

Antonio Strafella

PAST-PRESIDENTS

1988-1991 Stanley Fahn, USA

2007-2009 Anthony Lang, Canada 2005-2006 Andrew Lees, United Kingdom 2003-2004 C. Warren Olanow, USA 2001-2002 Werner Poewe, Austria 1999-2000 Mark Hallett, USA 1997-1998 Eduardo Tolosa, Spain 1995-1996 Joseph Jankovic, USA 1991-1994 C. David Marsden, United Kingdom

INTERNATIONAL MEDICAL SOCIETY FOR MOTOR DISTURBANCES PAST-PRESIDENTS

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

MDS International Secretariat

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EDUCATION INFORMATION

MDS EDUCATIONAL PROGRAMMING

MDS is committed to advancing the field of Movement Disorders by continuing to expand its educational programming. MDS offers a variety of high caliber continuing medical education and continuing professional development programs in movement disorders including live courses, region-specific education, Internet education, support and endorsement opportunities, as well as educational materials for sale. MDS' Educational Programming falls under the auspices of the MDS Education Committee, chaired by Daniel Tarsy of Beth Israel Deaconess Medical Center in Boston, MA, USA, and co-chaired by Claudia Trenkwalder of Paracelsus-Elena Hospital in Kassel, Germany. The MDS Education Committee coordinates the development of these courses which originate under one of three different and dynamic regional sections: The European Section, the Asian and Oceanian Section, and the Pan American Section. Each section includes an Executive Committee and an Education Committee. These sections and their current programming follow.

MDS EUROPEAN SECTION

The MDS European Section (MDS-ES) covers the countries of the European continent as well as some countries in Africa and the Middle East. The ES Executive Committee of The Movement Disorder Society is chaired by Alfredo Berardelli of Sapienza—University of Rome. The ES Education Committee is chaired by Joaquim Ferreira of the Lisbon School of Medicine in Portugal. The following are upcoming programs originating under the purview of the European Section.

European Section Education Courses Dopamine Transporter Imaging in Neurological Practice (Athens, Greece; June 17, 2011)

This workshop is part of a series of four courses designed to introduce participants to the potential of dopamine transporter single photon emission computed tomography imaging in neurological practice and help to answer some of the questions posed by clinicians, researchers, managers, and patients about the appropriate use of dopamine transporter imaging. It aims to present a balanced view of dopamine transporter imaging. The scope of information to be presented and discussed has been chosen to identify the potential usefulness of dopamine transporter imaging in neurological practice.

4th Annual European Summer School for Young Neurologists (Naples, Italy; July 1-3, 2011)

Young neurologists who are interested in training in the field

of Movement Disorders, as well as those who already have some experience in movement disorders will be taught by an MDS-ES international faculty of senior movement disorders specialists. Day One will focus on Hypokinetic Disorders and will include examinations of patients with such disorders. Day Two will focus on Hyperkinetic Disorders and participants will be able to not only examine patients, but also share their own patient videos with their fellow participants. Day Three will cover simple and complex patient management issues, including administration of botulinum toxin and neuroimaging.

Diagnosis and Treatment of Dystonia Syndromes (Milan, Italy; September 22-23, 2011))

Several advances have occurred in the field of dystonia in research and clinical management. Despite increasingly widespread knowledge, the clinical diagnosis of dystonia is often delayed or missed. Diagnostic difficulties are grounded in the complex phenomenology and wide-ranging phenotypic spectrum of dystonia. Moreover, the growing treatment options, especially deep brain stimulation and the use of botulinum toxins, need to be tailored to the patients' needs and phenotypes.

Course Funding Options

ES Fund for Underserved Areas in the Region- MDS Members may apply for funding to host a one- to two-day courses devoted to movement disorders that may be standalone or in conjunction with a local meeting held in the region considered to be underserved by the field of Movement Disorders. As part of this program, ES funds regional and international speakers to be part of each course. Past courses have been held in Romania, Belarus, Latvia and Estonia. This application can be found at: www.movementdisorders. org/regional_sections/es/developing_regions/ or e-mail education@movementdisorders.org

Visiting Professor Program

The goal of the Visiting Professor Program is to educate physicians and other healthcare professionals in countries without adequate access to educational programs about movement disorders and the management of such disorders, as well as provide educational materials about their treatment. In 2011, a Visiting Professor Program took place in Johannesburg, South Africa, and an upcoming course will be held in Yerevan, Armenia. For more details and an application, visit www. movementdisorders.org/education/visiting/index.php/ or e-mail education@movementdisorders.org.



EDUCATION INFORMATION

Ambassador Program

This program is intended to provide international experts in the field of Movement Disorders to existing conferences around world. Past courses have been held in Bamako, Mali, and Moscow, Russia. For more details, visit www. movementdisorders.org/education/ambassador_program/index.php/ or e-mail education@movementdisorders.org.

Website

The official MDS-ES website can be found at www.movementdisorders.org/regional_sections/es/ and includes a wealth of programming and Section information, including details about MDS Regional Development initiatives as well as information on fellowships, EFNS collaboration and a calendar of events.

Contact

For further information on the MDS-ES and its educational activities, please write to education@movementdisorders.org.

MDS ASIAN AND OCEANIAN SECTION

The MDS Asian and Oceanian Section (MDS-AOS) covers the majority of the Asian continent, New Zealand and Oceania. The AOS Executive Committee of The *Movement* Disorder Society is chaired by Bhim Singhal of Bombay Hospital and Medical Research Center in Mumbai, India. The Co-Chairs of the AOS Education Committee are Louis Tan of the National Neuroscience Institute in Singapore and Ryosuke Takahashi of Kyoto University Graduate School of Medicine in Kyoto, Japan.

Since its founding, the AOS has developed a number of funded educational opportunities available to AOS membership.

Course Funding Options

AOS Fund for Underserved Areas in the Region – MDS members can apply for funding to host one- to two-day courses devoted to Movement Disorders that may be standalone or conjoined with a local meeting in areas considered to be underserved in Movement Disorders education. As part of this program, MDS-AOS funds regional and international speakers to be part of this course. Past courses have been held in Kerala and Guwahati, India. Further information and an application can be found at www.movementdisorders.org/regional_sections/aos/courses/ or e-mail education@movementdisorders.org.

Visiting Professor Program

The goal of the Visiting Professor Program is to educate physicians and other healthcare professionals in countries

without adequate access to educational programs about movement disorders and the management of such disorders, as well as provide educational materials about their treatment. Past Visiting Professor Programs in the MDS-AOS have been held in India, Thailand, and China. For more details and an application, visit www.movementdisorders.org/education/visiting/index.php/or e-mail education@movementdisorders.org.

Ambassador Program

This program is intended to provide international experts in the field of Movement Disorders to existing conferences around world. Past Ambassador Programs in the MDS-AOS have occurred in Dhaka, Bangladesh, Cebu City, Philippines, and Kota Kinabalu, Malaysia. For more details and an application, visit www.movementdisorders.org/education/ambassador_program/index.php/ or e-mail education@movementdisorders.org.

Website

Section information, including details about AOS Regional Partners, Leadership, and a calendar of events can be found on the official MDS-AOS page at www.movementdisorders.org/regional_sections/aos/. The MDS-AOS Education Portal can be found at www.movementdisorders.org/regional_sections/aos/education.php/. On this page, a wealth of past, present, and future programming can be found.

AOS E-Newsletter – To join the AOS E-Newsletter mailing list and get up to date information on future AOS activities, please email education@movementdisorders.org.

Contact

For more information on the MDS-AOS and its educational opportunities, please write to education@movementdisorders.org.

MDS PAN AMERICAN SECTION

The Western Hemisphere serves as the territory for the MDS Pan American Section (MDS-PAS). The PAS Executive Committee is chaired by Jorge Juncos of Emory University in Atlanta, GA, USA. The PAS Education Committee is chaired by Irene Litvan of the University of Louisville Medical School in Louisville, KY, USA. The following exemplifies programming originating with the MDS-PAS.

Dopamine Transporter Imaging Course (New Haven, CT, USA, July 23, 2011; Chicago, IL, USA September 10, 2011; Houston, TX, USA, December 3, 2011; and Phoenix, AZ, USA date TBA).

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This workshop is designed to introduce participants to the potential of dopamine transporter single photon emission computed tomography imaging in neurological practice and help to answer some of the questions posed by clinicians, researchers, managers, and patients about the appropriate use of dopamine transporter imaging. It aims to present a balanced view of dopamine transporter imaging.

Surgical Management of Movement Disorders: **DBS** and Beyond

(Buenos Aires, Argentina; November 4-5, 2011) This course will address the surgical treatment of Parkinson's disease (PD) and Dystonia. It will discuss the basics of surgical treatment for PD and Dystonia, examine clear guidelines for patient selection, and outline the process of establishing a surgical center. This comprehensive approach will provide the participant with the tools to develop a realistic idea of the best course of action for his or her region.

Course Funding Options

PAS Fund for Underserved Areas in the Region – MDS members can apply for funding to host one- to two-day courses devoted to Movement Disorders that may be standalone or held alongside a local meeting in areas considered to be underserved in Movement Disorders education. Additionally, MDS-PAS funds regional and international speakers to be part of this course. Further information, e-mail education@movementdisorders.org.

Visiting Professor Program

The goal of the Visiting Professor Program is to educate physicians and other healthcare professionals in countries without adequate access to educational programs about movement disorders and the management of such disorders, as well as provide educational materials about their treatment. For more details and an application, visit www. movementdisorders.org/education/visiting/index.php/ or e-mail education@movementdisorders.org.

Ambassador Program

This program is intended to provide international experts in the field of Movement Disorders to existing conferences around world. Past programs have occurred in San José, Costa Rica, and Puebla, Mexico. For more details and an application, visit www.movementdisorders.org/education/ambassador_program/ index.php/ or e-mail education@movementdisorders.org.

Contact

For more information on the MDS-PAS and its educational activities, please email education@movementdisorders.org.

Website

The official MDS-PAS website can be found at www.movementdisorders.org/regional_sections/pas/ and includes a wealth of programming and Section information, including details about the Regional Needs Assessment Survey, MDS Conference Calendar and PAS calendar of events.

MDS EDUCATIONAL RESOURCES

Webcasts

The following webcast activities help expand the outreach of existing educational offerings. The following online activities are now available on the MDS website at www. movementdisorders.org/education/cme_activities.php/

Edward I. Rudman Parkinson's Disease Patient and Caregiver Symposium: Non Motor Aspects of Parkinson's Disease

This webcast was created from the Edward I. Rudman Parkinson's Disease Patient and Caregiver Symposium: Non Motor Aspects of Parkinson's Disease, which took place on October 31, 2009 at The Conference Center at Harvard Medical Center in Boston. Topics covered include important non-motor aspects of Parkinson's disease such as depression, anxiety, sleep disorders, autonomic disturbances, and cognitive deficits which often impact the quality of life of patients with Parkinson's disease as much as or even more than motor symptoms. Intended for patients and caregivers.

De Novo Parkinson's Disease: Diagnosis and Treatment Webcast

MDS sponsored a course entitled De Novo Parkinson's Disease: Diagnosis and Treatment at the University of Lisbon Faculty of Medicine in Lisbon, Portugal, April 26, 2010, and was attended by over 100 neurologists. The resulting webcast covers a wide variety of topics, including the natural history of Parkinson's disease, diagnosing Parkinson's disease, disease modifying strategies in Parkinson's disease, and management of non-motor problems in early Parkinson's disease. This course is available for Society Members only. Intended for general neurologists, geriatricians and general practitioners.

KUMC 4th Annual Parkinson's Disease Symposium Webcast

The University of Kansas Medical Center's Parkinson's Disease and Movement Disorder Center hosted the 4th Annual Parkinson's Disease Symposium on August 21, 2010 in Kansas City, KS, USA and was attended by over 800 people. The webcast created from this event features basic information on the diagnosis, symptoms and treatment of Parkinson's disease, novel interventions, potential benefits of deep brain stimulation, sleep problems in Parkinson's disease, benefits of



EDUCATION INFORMATION

exercise, and understanding the concept of slowing progression of Parkinson's disease. *Intended for patients and caregivers*.

14th International Congress on Parkinson's Disease and Movement Disorders: Update on Dystonia Webcast

This webcast, captured during the 14th International Congress, June 14, 2010, covers the spectrum of dystonias, providing insight into their diagnosis and treatment. The course begins with the classification into primary and secondary dystonias, followed by further examination into genetic, heredodegenerative and paroxysmal dystonias. This program has a special emphasis on the various phenotypes of genetic forms of dystonia, including the recently discovered forms associated with DYT6. Secondary dystonia is described with detailed clinical syndromic associations.

Online Journal CME

Visit the Educational Resources page on the MDS website to view a list of *Movement* Disorders Journal articles available for CME credit. MDS is accredited by the Accreditation Council for Continuing Medical Education to provide certified continuing medical education for physicians. MDS designates these educational activities for a maximum of 1.0 *AMA PRA Category 1 Credit*™ each. Physicians should only claim credit commensurate with the extent of their participation in the activity. For further information, visit www.movementdisorders.org/education/.

DVD-ROMS

As part of its educational mission to expand the availability of educational content, MDS produces enduring materials of selected programming. The following DVD-ROMs exemplify MDS' current offerings.

14th International Congress - Teaching Course DVD-ROM

MDS is pleased to offer the opportunity to order a DVD-ROM of the Teaching Courses from the 14th International Congress in Buenos Aires, Argentina. Each DVD-ROM includes slides, audio and video of all eight teaching courses and the accompanying syllabi. Teaching Course titles include:

- Neuroimaging techniques and applications
- Differential diagnosis of parkinsonism
- Genetics of movement disorders
- Music and movement disorders
- Pediatric movement disorders
- Neuropharmacology of Parkinson's disease
- Update on tremor

This DVD-ROM can be ordered online at: www.movementdisorders.org/congress/congress10/teaching_courses/index.php/ or by e-mailing education@movementdisorders.org for more information.

The webcast recording of the Teaching Course "Update on dystonia" is available on the MDS website at no cost; supported by an unrestricted educational grant from Ipsen, at www.movementdisorders.org/education/cme_activities.php/.

New Therapies for Advanced Parkinson's Disease—Course DVD

MDS is pleased to announce the availability of a DVD-ROM featuring the entire MDS-produced course "New Therapies for Advanced Parkinson's Disease," captured at Duke University in Durham, NC, USA, in October 2010. The DVD contains the following presentations:

- Current Treatments for Motor Complications in Advanced Parkinson's Disease
- Parkinson's Disease: Future Medications for Fluctuations and Dyskinesias
- Surgical Interventions
- Depression and Anxiety in Parkinson's Disease
- Dementia in Parkinson's Disease
- Psychosis in Parkinson's Disease
- Sleep/Wake Disorders in Parkinson's Disease

For information pertaining to the live course including learning objectives and intended audience, please visit www. movementdisorders.org/education/new_therapies/.

Please e-mail education@movementdisorders.org for further information and to order a copy of the DVD.

15th International Congress Teaching Courses DVD-ROM

MDS is pleased to offer you the opportunity to pre-order a DVD-ROM of the eight Teaching Courses presented at the 15th International Congress in Toronto, Canada. Each DVD-ROM includes slides, audio and video and the accompanying syllabi. Teaching Course titles are:

- Update on myoclonus
- Non-motor features of Parkinson's disease cognition
- Impulse control disorders (ICDs)
- From bench top to bedside: Current topics in translation research in movement disorders
- Neurodegeneration: The role of environmental factors
- New Unified Parkinson's Disease Rating Scale: MDS-UPDRS
- Chorea, athetosis, and ballism
- Update on gait disorders

15th International Congress of Parkinson's Disease and Movement Disorders

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- MDS Members: Regularly priced at \$100.00 Special pre-order offer of \$50.00
- Non-Members: Regularly priced at \$200.00 Special pre-order offer of \$100.00

To pre-order the Teaching Course DVD for the 15th International Congress, please visit www.movementdisorders. org/congress/congress11/teaching_courses/.

15th International Congress Themed Courses DVD-ROM: Behavioral and Motor Interfaces of Movement Disorders: From Laboratory to Patient Care

MDS is pleased to offer you the opportunity to pre-order a DVD-ROM of the 12 Themed Courses presented at the 15th International Congress in Toronto, Canada. Each DVD-ROM includes slides and audio and video. Themed Course titles include:

- Cognitive decline in movement disorders
- Gilles de la Tourette syndrome
- Psychiatric features of genetic movement disorders
- Bedside evaluation of cognition in movement disorders
- Impulsivity, addiction and reward mechanisms in movement disorders
- An update on psychogenic movement disorders
- Hallucinations and psychosis in Parkinson's disease
- Impulse control disorders (ICDs)
- Psychogenic movement disorders: Video demonstrations and evaluation techniques
- The non-dementia associated cognitive and behavioral features of PD
- Startle, stereotypies and mannerisms; video cases
- Mood changes in Parkinson's disease: Depression, anxiety and apathy
- MDS Members: Regularly priced at \$125.00 Special pre-order offer of \$62.00
- Non-Members: Regularly priced at \$250.00 Special pre-order offer of \$125.00

To pre-order the Themed Courses DVD for the 15th International Congress, please visit www.movementdisorders. org/congress/congress11/themed_courses/.

DVDs will be shipped to the address you provide on the International Congress registration form. Distribution of DVDs will begin in October 2011.

MEMBERS-ONLY EDUCATIONAL RESOURCES Case of the Month

Case of the Month is the MDS interactive online feature that presents unique and challenging movement disorders cases. MDS members are invited to answer questions after analyzing the video and case history, and are provided with the expert analysis. Please visit the MDS website to view this month's case.

MDS accepts submissions for Case of the Month on a rolling basis. Case of the Month provides an opportunity for members to share interesting cases for educational purposes in a forum dedicated to movement disorders experts. For information about submission requirements, including video format and patient consent forms, please visit the MDS website at www.movementdisorders.org/membersonly/com/submit.php.

Slide Sets

This Members-Only service enables learners to become familiar with the differential diagnosis and clinical features that define various common involuntary movements as well as the course of treatment and complications of Movement Disorders. Slide sets are available at www.movementdisorders.org/membersonly/slidesets/.

Current Slide Sets

- Ataxia (PPT)
 - Jennifer G. Goldman, MD
- Chorea (PPT)
 - Kathleen M. Shannon, MD
- The Diagnosis and Management of Dystonia (PPT)
 - Steven J. Frucht, MD
- Myoclonus: Diagnosis and Treatment (PPT)
 - Steven J. Frucht, MD
- Parkinsonism (PPT)
 - Kathleen M. Shannon, MD *Now available in Spanish.
- Restless Legs Syndrome (PPT)
 - Charles H. Adler, MD, PhD
- Tics and Tourette Syndrome (PPT)
 - Jennifer G. Goldman, MD

VIDEO LIBRARY

This Members-Only library consists of video supplements from the *Movement* Disorders journal since 1986. You may search the Video Library by keyword, author, volume and issue, or a combination of these fields. The Video Library is available at www.movementdisorders.org/membersonly/videolibrary/.



AUDIO-VISUALS

The *Movement* Disorder Society publishes several audiovisuals available for sale from the MDS International Secretariat.

The titles that are currently available for purchase include:

Instructional Video for Motor Fluctuation Diaries in Parkinson's Disease

Authored by C.G. Goetz, M. Grobman, L. Blasucci, and G.T. Stebbins, this instructional video demonstrates the three states of Parkinson's disease, off, on, and on with dyskinesia, with the intent to assist patients in completion of their motor fluctuation diaries. This video is 15 minutes.

Toronto-Western Spasmodic Torticollis Rating Scale TWSTRS Training Video

Authored by C. Comella, S. Bressman, C.G. Goetz, and A. Lang, this instructional video demonstrates the 10 categories in the TWSTRS scale with verbal and visual examples of scoring in each category. This video is approximately 1 hour and 25 minutes.

Unified Dyskinesia Rating Scale Teaching Program (UDysRS)

Authored by C.G. Goetz, John G. Nutt and G.T. Stebbins. This teaching program provides guidelines and rating examples of the Unified Dyskinesia Rating Scale, a new scale used for evaluating Parkinson's disease. This video is approximately 52 minutes.

Utility of an Objective Dyskinesia Rating Scale for Parkinson's Disease: (Rush Dyskinesia Rating Scale)

Authored by Goetz, et al. *Movement* Disorders Volume 9, Video Supplement 2. This video provides guidelines and rating examples of the Rush Dyskinesia Rating Scale, a scale widely used for evaluating dyskinesias in Parkinson's disease. This video is approximately 17 minutes.

Unified Parkinson's Disease Rating Scale Training Video (1995) Authored by C. G. Goetz, G.T. Stebbins, T. Chmura, S. Fahn, H. Klawans, and C. D. Marsden, this video demonstrates the different categories of the motor section of the UPDRS, with verbal and visual examples of scoring in each category. This video is approximately 1 hour.

Standardized Training Tools for the UPDRS Activities of Daily Living Scale (UPDRS Part II)

(2003) Authored by C.G. Goetz, P.A. Lewitt, and M. Weidenman. *Movement* Disorders Volume 18, Video Supplement 2. This video provides suggestions on the application and interview techniques for Part II of the UPDRS with patient examples and guidelines for raters. This video is approximately 1 hour and 15 minutes.

The *Movement* Disorder Society's Unified Parkinson's Disease Rating Scale (MDS-UPDRS) Training Video

(2010) The *Movement* Disorder Society (MDS)-sponsored new version of the UPDRS is founded on the critique that was formulated by the Task Force for Rating Scales in Parkinson's disease (*Mov Disord* 2003;18:738-750). The MDS-UPDRS has four parts: Part I (non-motor experiences of daily living), Part II (motor experiences of daily living), Part III (motor examination) and Part IV (motor complications). This video is approximately 2 hours and 5 minutes.

All materials are available in DVD or VHS format. Special reduced rates are available to MDS members. For more information or to place an order, go to www.movementdisorders.org/publications/audiovisuals.php

15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS

MEMBERSHIP INFORMATION

MEMBERSHIP BENEFITS

- A subscription to the print and online journal,
 Movement Disorders, including supplemental publications,
 such as Levodopa Treatment and Motor Complications
 in Parkinson's Disease: Scientific Basis and Therapeutic
 Approaches.
- A unique selection of educational opportunities, including live and online CME/CPD activities and reference material on topics in Movement Disorders.
- Reduced fees for participation in the Society's educational programs. Educational Programs include the annual International Congress of Parkinson's Disease and Movement Disorders, and regional programs, courses and workshops held each year.
- Searchable mobile and online directories listing mailing addresses, telephone and fax numbers, and e-mail addresses for members.
- A Members-Only Section of the MDS website including a searchable Video Library, Case of the Month, teaching slide sets, and one-time login access to full text articles in the Movement Disorders Journal.
- A quarterly newsletter entitled, Moving Along, highlighting current news and views in the field of Movement Disorders.
- Participation in the election of international and regional section leadership representatives.

FREE MEMBERSHIP!

NON-MEMBERS APPLYING FOR MEMBERSHIP

Non-Members will have the opportunity to apply for MDS membership at the International Congress for no additional fee with limited benefits through 2011, and full membership status, receiving the print journal, in January 2012. Membership applications will be provided to all Non-Member attendees onsite in their registration packet and must be returned to the MDS booth prior to the conclusion of the International Congress. No applications will be accepted by the Secretariat after June 9, 2011. *Only those paying the Non-Member registration fee will be eligible to apply for membership at no additional cost. This option is not available to those registering as a Junior or Health Professional participant or anyone who registered as part of a group.

2011-2012 will be another exciting year for MDS and we look forward to bringing you news of these and other new initiatives through the *Movement* Disorders journal, *Moving Along* newsletter and the MDS website.

For further information, please contact: The *Movement* Disorder Society 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 Website: www.movementdisorders.org



The Movement Disorder Society Unified Parkinson's Disease Rating Scale (MDS-UPDRS)

Now available at the 15th International Congress: the MDS-Unified Parkinson's Disease Rating Scale Training Program & Exercise.

- · See examples of a rater administering the test to patients
- · View examples of the rating items for the Motor Examination (Part III)
- · Take an exercise at the end of the Training Program

Testing room will be open 7 a.m. – 6 p.m. Sunday, June 5 – Wednesday, June 8 and 7 a.m. – 4 p.m. Thursday, June 9. Doctors will be available for questions on-site. Location: South Building, Level 800, Room 803A

For more information or to take the MDS-UPDRS Training & Exercise Program, please visit:

www.movementdisorders.org/updrs



The Movement Disorder Society





Connect with MDS! Stay connected with colleagues and friends when you visit the Society's Facebook or LinkedIn pages. View videos from past Congresses on our YouTube Channel or follow MDS @ movedisorder on Twitter to get regular updates about news and activities from the Society.

MDS Website: Your 'Communications Hub' at Congress and all year-round

On behalf of the MDS Co-Medical Web Editors, Hubert Fernandez and Marcelo Merello, we invite you to visit the MDS website — your Society's "Communications Hub" for education, news and resources about the field of Movement Disorders. Log on to *www.movementdisorders.org* to access Members-Only features such as the MDS Journal, Case of the Month, Quick Opinion Please, Video Library, and the Online Membership Directory.

Learn about CME and professional development opportunities which are offered throughout the year from locales around the globe. Congresses, workshops, conferences and seminars are listed and updated regularly on the website. Be sure to visit the Regional Sections of the website (European, Asian and Oceanian, and Pan American) to find news and activities happening in your part of the world.

Twitter at the Congress: Stay on top of the 15th International Congress by following tweets that have this hashtag: #MDSCongress. Be sure to use this hashtag every time you tweet at Congress!

MoveNet, a free online directory for members and nonmembers alike, is a new way for you to meet others who work in the field of Movement Disorders. When you join MoveNet, you will receive updates from MDS delivered right to your inbox. In addition, you will be able to connect with other members of MoveNet to share information and resources related to field of Movement Disorders.

Other website features and tools include:

- Editor's Choice Article (Select Movement Disorders Journal papers reviewed by an expert in the field)
- · MDS-owned Rating Scales
- MDS-UPDRS Training Program & Exercise
- EBM Reviews and Position Papers
- Health Professionals section
- Video Library (Complete archives of movement disorders videos)
- · Links to international groups and organizations
- Moving Along newsletter archives
- F-Newsletter archives



Win an iPad[®]!



Take the website survey during the International Congress and enter to win one of three Apple® iPads®!

Go to www.surveymonkey.com/ congresssurvey2011 to take the survey!

Apple® and iPad® are registered trademarks of Apple Inc.

Details at MDS Information Booth, South Building, Level 600

Save The Date

16th International Congress of Parkinson's Disease and Movement Disorders

Dublin, Ireland June 17-21, 2012

IMPORTANT DATES

Abstract submission opens: October 3, 2011 Registration opens: December 1, 2011

Abstract Submission deadline: January 6, 2012 Early registration deadline: April 20, 2012 Final registration deadline: May 18, 2012

A great place to practice

Stereotactic Neurosurgery

Gundersen Lutheran Health System, based in La Crosse, Wis., is seeking a fellowship-trained stereotactic and functional neurosurgeon to join our Parkinson's and Movement Disorder Center. There will also be opportunity for a general neurosurgery practice.

With five other board-certified neurosurgeons, an endovascular neurologist, and seven mid-level providers on staff, you can enjoy a collegial, full-spectrum practice and balanced lifestyle with no outreach requirements.

Neurosurgery is a specialty within our comprehensive Neurosciences program, offering teaching and research opportunities, too.

A physician-led organization, Gundersen Lutheran Health System offers one of the best work environments in the nation, loan forgiveness, competitive salary and great benefits package.

Contact: Cathy Mooney, Physician Recruitment, (608) 775-3637, or email camooney@gundluth.org

About Gundersen Lutheran...

We serve residents of western Wisconsin, southeastern Minnesota and northeastern Iowa. Our healthcare system is anchored by one of the largest multi-specialty group practices and a teaching hospital with Level II Trauma Center.

La Crosse is a historic, vibrant city nestled between bluffs and the legendary Mississippi River. La Crosse boasts some of the best outdoor recreation, excellent schools including three universities, affordable housing in safe neighborhoods, an endless variety of live entertainment and breathtaking beauty, making this a great place to call home.

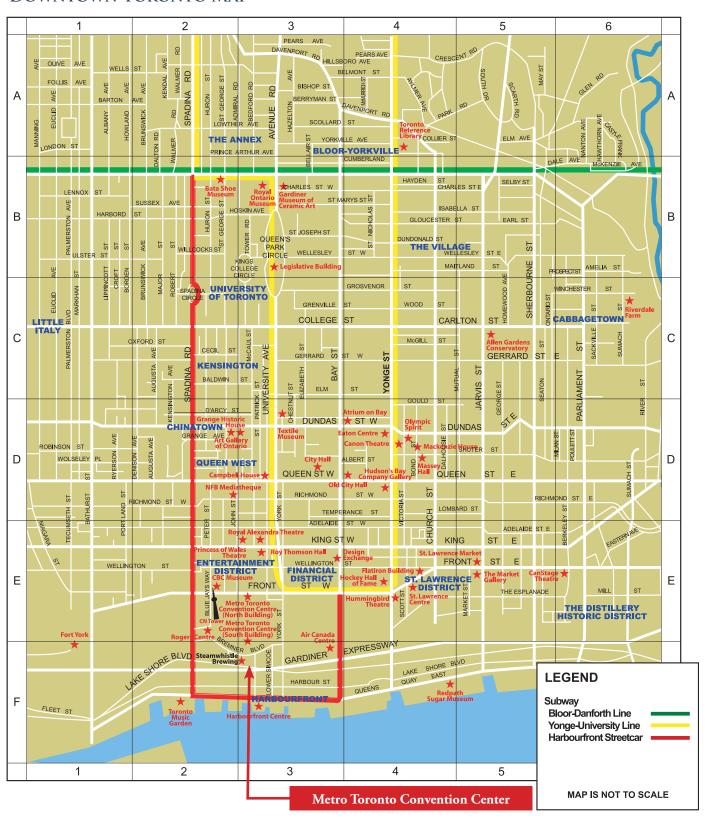


gundluth.org

EOE/AA/LEP



DOWNTOWN TORONTO MAP



15th International Congress of Parkinson's Disease and Movement Disorders

TOP ATTRACTIONS IN TORONTO

CN Tower



For a magnificent view of the city, take the elevator up the 181 floors to top. If the weather is clear, you may be able to see Niagara Falls. While up there, feel free to take in a bite at the restaurant, 360°.

Hockey Hall of Fame



Just because the hockey season will not be running in June doesn't mean you have to miss out on Canada's favorite past time. Enjoy all things hockey in the shrine dedicated to a sport that defines Canadian sporting culture.

Royal Ontario Museum



Canada's largest natural history museum is sure to provide anything a visitor could want to see. From dinosaurs and mummies to an active beehive, this museum has it all.

Toronto Blue Jays Game



While you may not be able to enjoy a game of hockey, you can enjoy another North American pastime: baseball.

Tickets for home games can be purchased right at the stadium.

Casa Loma



The modern version of a medieval castle with 98 grand rooms and a beautiful garden provide a glimpse into the turn-of-the-19th-century luxury life.

Eaton Centre



Looking for the perfect souvenir from Toronto to take back home? You'll probably find it here in one of the 300 stores, restaurants, or cafes.



TOP ATTRACTIONS IN TORONTO

Toronto Islands



This stretch of islands shelters Toronto's harbor and provides a car-free retreat from the bustling city.

Art Gallery of Ontario

Roam the halls filled with masterpieces from some of the world's greatest artists.

Distillery Historic District

Step back in time by walking the pedestrian-only cobblestone streets of this historic district. Shops, restaurants, and entertainment venues now fill the spaces of the world's oncelargest distillery.

Niagara Falls



Only an 90 minute drive from Toronto is one of Mother Nature's most famous creations that will leave you breathless... and maybe a little drenched, too.

Ontario Place

Unleash your inner child at this internationally acclaimed cultural, leisure, and entertainment complex.

For more information on things to see and do, please visit www.SeeTorontoNow.com



15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS

INTERNATIONAL CONGRESS INFORMATION

DATES

Sunday, June 5 through Thursday, June 9, 2011

OFFICIAL LANGUAGE

The official language of the International Congress is English.

VENUE

The Metro Toronto Convention Centre South Building 222 Bremner Boulevard Toronto, ON M5V 3L9 Canada

BADGES

All International Congress attendees will receive a name badge with their registration materials. Badges should be worn at all times as they will be used to control access into all International Congress sessions and activities. Individuals will be identified as follows:

Blue = Delegate Yellow = Exhibitor Purple = Press Black = Staff

REGISTRATION DESK HOURS

Location: South Building, Level 600

Name badges, scientific session tickets, purchased Welcome Reception Passes and International Congress bags can be collected at the International Congress Registration.

Registration Desk hours are as follows:

Saturday, June 4	16:00 - 20:00
Sunday, June 5	7:00 - 18:00
Monday, June 6	7:00 - 18:00
Tuesday, June 7	7:00 - 18:00
Wednesday, June 8	7:00 - 18:00
Thursday, June 9	7:00 – 16:00

**Please note that these hours are subject to change.

Location: South Building, Level 700, Room 711

All speakers must check in at the Speaker Ready Room with presentation materials on the day prior to their scheduled presentation. Equipment is available to allow faculty to review their presentations. Audio/Visual personnel will be available for assistance.

The Speaker Ready Room hours are as follows:				
Saturday, June 4	16:00 – 20:00			
Sunday, June 5	7:00 – 18:00			
Monday, June 6	7:00 – 18:00			
Tuesday, June 7	7:00 – 18:00			
Wednesday, June 8	7:00 – 18:00			
Thursday, June 9	7:00 - 16:00			

INTERNET CAFÉ

Location: South Building, Level 800, Hall E

Internet access is available to meeting attendees in the Exhibit Hall. Please limit your Internet use to 15 minutes to allow other attendees use of this service.

MDS-Unified Parkinson's Disease Rating Scale Training Program & Exercise

Location: South Building, Level 800, Room 803A

- See examples of a rater administering the test to patients
- View examples of the rating items for the Motor Examination (Part III)
- Take an exercise at the end of the Training Program

The MDS-UPDRS Training Room	hours are as follows:
Sunday, June 5	7:00 - 18:00
Monday, June 6	7:00 - 18:00
Tuesday, June 7	7:00 - 18:00
Wednesday, June 8	7:00 – 18:00
Thursday, June 9	7:00 – 16:00

SPEAKER READY ROOM HOURS



INTERNATIONAL CONGRESS INFORMATION

MDS Information Booth

Location: South Building, Level 600

The *Movement* Disorder Society (MDS) is an international society of healthcare professionals committed to research and patient care in the fields of Parkinson's disease and other disorders of movement and motor control.

MDS supports and promotes a wide range of educational programming and other initiatives to advance scientific understanding and standards of care as they pertain to Movement Disorders. For this, MDS provides forums such as a high-ranking journal, scientific symposia and International Congresses.

Attendees are invited to take advantage of MDS member benefits by applying to the Society. Learn more about MDS initiatives and speak with a representative at the MDS Booth.

The MDS Booth hours are as follows:

Sunday, June 5	. 7:00 – 18:00
Monday, June 6	. 7:00 – 18:00
Tuesday, June 7	. 7:00 – 18:00
Wednesday, June 8	. 7:00 – 18:00
Thursday, June 9	

PRESS ROOM

Location: South Building, Level 700, Room 705

Members of the working media receive waived registration fees for the 15th International Congress. Journalists and writers should report to the Press Room with their credentials to register for the International Congress and wear their name badge for admittance into MDS sessions.

The Press Room will be open during the following hours:

Sunday, June 5	9:00 –	17:00
Monday, June 6	9:00 –	17:00
Tuesday, June 7	9:00 –	17:00
Wednesday, June 8	9:00 –	17:00
Thursday, June 9		

NO CAMERAS

Cameras are not permitted in any 15th International Congress educational sessions or in the poster areas.

ABSTRACTS-ON-CD-ROM

All abstracts published in the supplement to the MDS Journal are available by Abstracts-On-CD-ROM sponsored by MDS and supported by an unrestricted educational grant from Medtronic. To obtain a copy, please visit the Medtronic Booth 213.

CONTINUING MEDICAL EDUCATION

Please refer to page 32 for Continuing Medical Education information.

EVALUATIONS

Please take time to complete the evaluation forms provided for each session you attend. Your input and comments are essential in planning future educational programs for MDS.

When completed, evaluations may be returned to your meeting room attendants, the Speaker Ready Room (South Building, Level 700, Room 711) or to the MDS Registration Desk.

SUB SAHARAN AFRICA INTEREST GROUP (SSAIG) INFORMATION SESSION

Thursday, June 9, 2011
13.30 – 14.30
Location: South Building, Level 800, Room 801A
All attendees are welcome.

15th International Congress of Parkinson's Disease and Movement Disorders

INTERNATIONAL CONGRESS INFORMATION

SCIENTIFIC SESSIONS

The 2011 Scientific Program will incorporate Therapeutic Plenary Sessions, Plenary and Parallel Sessions, Teaching Courses, Video Sessions, Skills Workshops, Scientific Discussions, Guided Poster Tours and Blue Ribbon Highlights.

Sessions will focus on the latest developments in:

- Behavioral and motor interfaces of movement disorders: From laboratory to patient care
- Movement Disorder topics, including, but not limited to, ataxia, chorea, dystonia, myoclonus, Parkinson's disease, restless legs syndrome, spasticity, stereotypies, tics and tremors
- Basic Science issues, including, but not limited to, genetics, neuroimaging, neuropharmacology, surgical therapy and transplantation
- Other less common clinical conditions

Tickets are required for admission into all Parallel Sessions, Teaching Courses, Video Sessions, Skills Workshops, and Scientific Discussions. There is no additional fee for tickets to these sessions. Please check the Registration Desk for availability of these tickets.



ABSTRACT POSTER SESSIONS

Delegate feedback from past International Congresses has indicated great interest in Poster Sessions. Poster Sessions are featured each day based upon the following schedule:

Poster Session 1

Abstracts: 1 - 291 Monday, June 6

Poster Viewing: 9:00 - 18:00 Authors Present: 14:00 - 15:30

Location: South Building, Level 800, Hall E

Poster Session 2

Abstracts: 292 - 599 Tuesday, June 7

Poster Viewing: 9:00 - 18:00 Authors Present: 13:30 - 15:00

Location: South Building, Level 800, Hall E

Poster Session 3

Abstracts: 600 - 907 Wednesday, June 8

Poster Viewing: 9:00 - 18:00 Authors Present: 13:30 - 15:00

Location: South Building, Level 800, Hall E

Poster Session 4

Abstracts: 908 - 1155 Thursday, June 9

Poster Viewing: 9:00 - 16:00 Authors Present: 13:30 - 15:00

Location: South Building, Level 800, Hall E



INTERNATIONAL CONGRESS INFORMATION

GUIDED POSTER TOURS

Attendees may sign up for the Guided Poster Tours beginning on Monday, June 6 from 7:00 –18:00 at the MDS Booth located in the South Building, Level 600.

The Guided Poster Tours will be led by members of the MDS faculty and the authors will be present to discuss the abstracts. There will be 16 Guided Poster Tours and each tour will feature abstracts on a specific topic.

There will be four tours per day from Monday, June 6 through Thursday, June 9 which will run simultaneously. Tours will meet each day in the South Building, Level 800, outside of Room 808.

Monday, June 6

14:00 - 15:30

Guided Poster Tour 1 – Dystonia

Guided Poster Tour 2 – Parkinson's disease:

Neuropharmacology

Guided Poster Tour 3 – Parkinson's disease: Behavioral disorders

Guided Poster Tour 4 - Rating scales and assessment tools

For a complete listing of abstracts in each tour, please see pages 77 - 84.

Tuesday, June 7

13:30 -15:00

Guided Poster Tour 5 - Basic science

Guided Poster Tour 6 - Sleep disorders and RLS

Guided Poster Tour 7 – Parkinsonisms (Parkinson plus and secondary)

Guided Poster Tour 8 - Tremor

For a complete listing of abstracts in each tour, please see pages 77 - 84.

Wednesday, June 8

13:30 -15:00

Guided Poster Tour 9 – Surgical therapy of movement disorders other than Parkinson's disease

Guided Poster Tour 10 - Genetics

Guided Poster Tour 11 – Parkinson's disease: Phenomenology Guided Poster Tour 12 – Lewy body dementia and other dementias in movement disorders

For a complete listing of abstracts in each tour, please see pages 77 - 84.

Thursday, June 9

13:30 -15:00

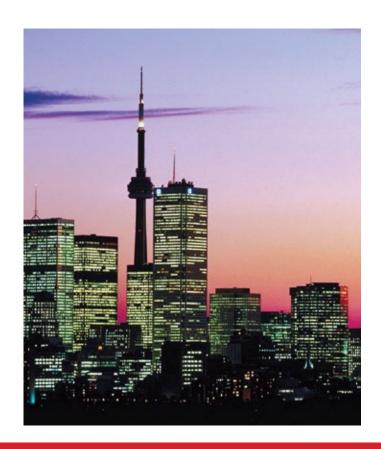
Guided Poster Tour 13 – Parkinson's disease: Clinical trials

Guided Poster Tour 14 – Huntington's disease

Guided Poster Tour 15 – Surgical therapy: Parkinson's disease

Guided Poster Tour 16 – Parkinson's disease: Cognition

For a complete listing of abstracts in each tour, please see pages 77 - 84.



15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS

SOCIAL EVENTS

Sunday, June 5, 2011

Opening Ceremony and Welcome Reception

Opening Ceremony: 19:00 to 19:30

Location: South Building, Level 800, Hall FG

Welcome Reception:

19:30 - 21:00

Location: South Building, Level 800, Hall D

All International Congress attendees are warmly invited to meet friends and colleagues during the traditional International Congress Opening Ceremony at The Metro Toronto Convention Centre. A Welcome Reception will directly follow the Opening Ceremony. These events are open to all registered delegates. Guests are able to purchase a Welcome Reception Pass that will allow them admission to the Opening Ceremony and Welcome Reception. Please check at the registration desk for availability.

Fun Run - June 7

New!

MDS will be hosting a scenic 5k Fun Run during the 15th International Congress in Toronto.

The Fun Run will begin on Tuesday, June 7th at 6:30 with check-in starting at 6:00. The run will start at the Westin Park Square and head west along Queen's Quay, leading to the stunning Toronto Music Garden.

Registration is \$25 per person. Please check at the registration desk for availability.

Wednesday, June 8, 2011

VO Games

Reception with hors d'oeuvres and drinks:

19:00 - 20:00

Location: South Building, Level 800

VO Games:

20:00 - 23:00

Location: South Building, Level 800, Hall FG

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

This social event is open to all registered delegates.

The two teams of Experts are:

TEAM 1:

Carlo Colosimo, *Rome, Italy* Steven Frucht, *New York, NY, USA* Jose Obeso, *Pamplona, Spain* Marie Vidailhet, *Paris, France*

VS.

TEAM 2:

Roongroj Bhidayasiri, *Bangkok, Thailand* Stewart Factor, *Atlanta, GA, USA* Timothy Lynch, *Dublin, Ireland* Kathleen Shannon, *Chicago, IL, USA*

Following the International Congress, the cases presented could be developed further for publication in the Journal or presentation on the Society's website.



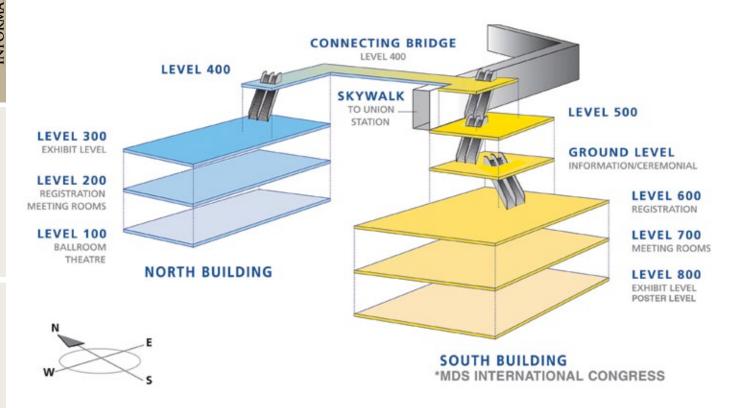
THE METRO TORONTO CONVENTION CENTRE FLOOR PLANS

The 15th International Congress will take place in the South Building of the Metro Toronto Convention Centre.

GENERAL CONGRESS LAYOUT



METRO TORONTO CONVENTION CENTRE | OVERVIEW | ALL LEVELS



15th International Congress of Parkinson's Disease and Movement Disorders

THE METRO TORONTO CONVENTION CENTRE FLOOR PLANS METRO TORONTO CONVENTION CENTRE - 700 LEVEL



METRO TORONTO CONVENTION CENTRE | SOUTH BUILDING | LEVEL 700





THE METRO TORONTO CONVENTION CENTRE FLOOR PLANS

METRO TORONTO CONVENTION CENTRE - 800 LEVEL



METRO TORONTO CONVENTION CENTRE | SOUTH BUILDING | LEVEL 800



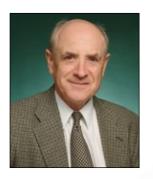
15th International Congress of Parkinson's Disease and Movement Disorders

AWARDS INFORMATION

The following awards will be presented during the Opening Ceremony on Sunday, June 5 at 19:00 in the South Building, Level 800, Hall FG:

HONORARY MEMBERSHIP AWARDS

The Honorary Membership Awards recognize individuals who have made extraordinary contributions to the field of Movement Disorders or otherwise to The *Movement* Disorder Society.







Masaya Segawa, MD, PhD *Tokyo, Japan*

PRESIDENT'S DISTINGUISHED SERVICE AWARD

The President's Distinguished Service Award is given in recognition of long and distinguished service to The *Movement* Disorder Society. The recipient may only receive this award once in their lifetime.

PUBLIC SERVICE AWARD

The *Movement* Disorder Society (MDS) established the Public Service Award in 2010 to honor individuals who have made outstanding contributions to the field of Movement Disorders through distinguished service. The Public Service Award recognizes individuals who exhibit the highest standard of excellence, dedication, and accomplishment over a sustained period of time. These contributions may be in a wide variety of areas, including but not limited to increasing public awareness of the mission of the Society and the promotion of research, education and training in Movement Disorders and related neurological sciences.

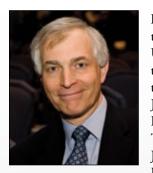
STANLEY FAHN AWARD LECTURE

This award will be presented on Wednesday, June 8 as part of 4103: Plenary Session IX: Presidential Lectureships from 8:00 - 8:30. South Building, Level 800, Hall FG.

The **Stanley Fahn Award Lecture** was created to recognize an outstanding scholar and role-model clinician in the field of Movement Disorders. The selected lecturer must show evidence of exceptional contributions which have resulted in better understanding of the cause, diagnosis, or treatment of Movement Disorders, and have translated into meaningful improvements in the standard of clinical practice. The selected lecturer must demonstrate evidence of consistent dedication to Movement Disorders education and research.

It's time to fix the broken system of genetic locus symbols -Parkinson's disease (PARK) and Dystonia (DYT) as examples

Stanley Fahn Lecturer – Anthony E. Lang, OC, MD, FRCPC FAAN



Dr. Lang is Professor and Director of the Division of Neurology at the University of Toronto, Director of the Movement Disorders Center at the Toronto Western Hospital, the Jack Clark Chair for Parkinson's Disease Research at the University of Toronto and Director of the Edmond J. Safra Program in Parkinson's Disease at the University Health

Network and the University of Toronto.

Dr. Lang trained in Internal Medicine and Neurology at the University of Toronto. He then undertook postgraduate training in Movement Disorders at Kings College Hospital and the Institute of Psychiatry in London, England under the late Professor C. David Marsden. Dr. Lang's research has included clinical studies of poorly recognized neurological disorders, clinical trials of new therapeutic modalities and collaborative basic and clinical studies involving molecular biology, neurophysiology, neuropsychology and imaging. He has published over 450 peer reviewed papers, many in important medical journals including the New England Journal of Medicine, Nature Medicine, the Lancet and Lancet Neurology, the Annals of Neurology, Brain, and Movement Disorders. Dr. Lang has served on The Movement Disorder Society (MDS) International Executive Committee and as Treasurer from 1988-1992 and Secretary from 1996-1998. He served as the MDS President from January 2007- June 2009 and is the current Past-President. He served as Co-Editor-in-Chief of the international journal Movement Disorders between 1996 and 2003 inclusive. He has given many named lectures, and won a number of awards for his research efforts. In 2010 he was appointed as an Officer in the Order of Canada, the centrepiece of Canada's honors system recognizing a lifetime of outstanding achievement, dedication to the community and service to the nation.



AWARDS INFORMATION

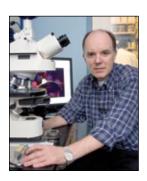
C. DAVID MARSDEN AWARD LECTURE

This award will be presented on Wednesday, June 8 as part of 4103: Plenary Session IX: Presidential Lectureships from 9:30 - 10:00. South Building, Level 800, Hall FG.

The **C. David Marsden Lecture** was created to recognize an outstanding scholar and inspiring neuroscientist in the field of Movement Disorders. The selected lecturer must show evidence of exceptional contributions which have resulted in better understanding of the neurobiology of Movement Disorders, and have translated into tangible improvements in clinical therapy and/or providing insight into normal brain function in the control of movement. The selected lecturer must demonstrate evidence of consistent dedication to Movement Disorder education and research.

Parkinson's disease: Models and mechanisms

C. David Marsden Lecturer - Serge Przedborski, MD, PhD



Serge Przedborski is the Page and William Black Professor of Neurology, Columbia University, New York, USA. He holds a joint appointment in the Departments of Neurology, Pathology and Cell Biology and is the Co-Director of the Center for Motor Neuron Biology and Disease and a faculty member of the Center for

Parkinson's disease (PD) and Other Movement Disorders and of the graduate program of Neurobiology and Behavior at Columbia University.

Dr. Przedborski attended medical school at the Université Libre de Bruxelles (ULB), Belgium, and did his internship and residency in Neurology and Psychiatry at the ULB-Erasme Academic Medical Center, Belgium. He then did a fellowship in movement disorders with Dr. Stanley Fahn at Columbia University, where he became Assistant Professor of Neurology in 1991 and then Professor of Neurology, Pathology and Cell Biology, with Tenure, in 2002. The research conducted in Dr. Przedborski's laboratory is geared toward unraveling the molecular and cellular basis of neurodegeneration and devising therapeutic strategies to hamper the processes that cause neuronal death, the source of many debilitating disorders. In keeping with this goal, to what extent and by which mechanisms do cell-autonomous, such as apoptosis and mitochondrial defects, and non-cell autonomous deleterious

processes, such as neuroinflammation, contribute to the demise of specific subpopulation of neurons in PD, represent a main line of research in his laboratory. These research efforts are supported by federal grants from both the USA National Institute of Health and the Department of Defense and by private agencies including the Parkinson's Disease Foundation, the Thomas Hartman Foundation for Parkinson Research, and MDA's Wings Over Wall Street. Dr. Przedborski is a Senior Editor for the Journal of Neuroscience and an Associate Editor of *Movement* Disorders.

JUNIOR AWARDS

Two Junior Award recipients have been selected based on their significant contribution to clinical and basic science research in the field of Movement Disorders. One award will be presented for excellence in clinical research, and another for excellence in basic science research.

Wednesday, June 8 8:30 to 9:30

Location: South Building, Level 800, Hall FG 4103: Plenary Session IX: Presidential Lectureships **Chairs:** Philip Thompson, Günther Deuschl

<u>Clinical Research</u> Alexander Schmidt, MD, MA

Lübeck, Germany

Phenotypic spectrum of musician's dystonia: A taskspecific disorder?

Alexander Schmidt, MD, MA¹, Hans-Christian Jabusch, MD², Eckart Altenmüller, MD, MA³, Leonie Enders, MD³, Rachel Saunders-Pullman, MD, MPH⁴, Susan B Bressman, MD⁴, Alexander Münchau, MD⁵, Johann Hagenah, MD¹ and Christine Klein, MD¹.¹Section of Clinical and Molecular Neurogenetics, University of Luebeck, Luebeck, Germany, 23538; ²Institute of Musicians' Medicine, Dresden University of Music, Dresden, Germany; ³Institute of Music Physiology and Musicians' Medicine, Hanover University of Music and Drama, Hanover, Germany; ⁴Department of Neurology, Beth Israel Medical Center, New York, New York, United States and ⁵Department of Neurology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany.

Objective: To study the phenotypic spectrum of musician's dystonia (MD).

Background: MD is traditionally considered a sporadic and focal task-specific form of dystonia. However, we have recently observed an aggregation of different types of movement

15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS

AWARDS INFORMATION

disorders in MD patients followed at the Hanover Institute of Music Physiology and Musicians' Medicine challenging the notion of MD as a purely task-specific disorder.

Methods: MD patients underwent a detailed videotaped neurological examination and were categorized into two different groups on clinical grounds: (i) patients with isolated task-specific MD that is only present when playing the instrument, (ii) patients with MD and one or more additional features of primary dystonia independent of MD (other types of dystonia or tremor in the same or other body parts) (complex MD). Multivariate logistic regression analysis adjusting for gender, age of onset, family history and type of MD was performed to identify significant risk factors for the development of complex MD using SPSS.

Results: 116 MD patients (81 men, 35 women; age: 43.26 ±12.04[18-75] years; age of onset: 33.77 ±10.92[15-66] years) were included in the study. Of these, 94 (81.0%) were affected with upper limb dystonia and 22 (19.0%) with embouchure dystonia. A positive family history of movement disorders was reported by 38 patients (32.8%). The GAG deletion in the *DYT1* gene and mutations in *THAP1* (*DYT6*) were absent in all probands. Isolated MD was present in 65/116 patients (56.0%), complex MD in 51/116 patients (44.0%). Logistic regression analysis revealed an increased risk to develop complex MD for patients with a positive family history of movement disorders [odds ratio (OR)=4.80; 95% confidence interval (CI): 1.94-11.92; p=0.001] and patients with upper limb dystonia [OR=3.57; 95%CI: 1.12-11.39; p=0.031].

Conclusions: In conjunction with our recent identification of 22 relatives with different types of movement disorders in the families of 28 MD patients, our results further support a genetic contribution to MD with a broad individual and familial phenotypic spectrum consisting of MD, other dystonias and rarely even other, non-dystonic movement disorders.

Basic Science
George K. Tofaris, MD, PhD
Oxford, United Kingdom

Nedd4 ubiquitinates α -synuclein and promotes its degradation by the endosomal-lysosomal pathway; Implications for Lewy body disorders.

George K Tofaris, MD PhD^{1,2}, Hyoung Tae Kim, PhD², Raphael Hourez, MD PhD² and Alfred L Goldberg, PhD². ¹Nuffield Department of Clinical Neurosciences, University of

Oxford, Oxford, United Kingdom and ²Department of Cell Biology, Harvard Medical School, Boston, United States.

Objective: To understand how cells regulate α -synuclein, a critical protein for the onset of neurodegeneration.

Background: In Parkinson's disease, α-synuclein accumulates in intraneuronal inclusions often linked to ubiquitin chains. Studies of familial cases with α-synuclein gene multiplications and expression in transgenic mice indicate that the level of this protein in neurons is critical in determining the onset of neurodegeneration. The mechanisms for degradation of α-synuclein have been controversial. Multiple proteolytic systems, including proteasomes, macroautophagy and chaperone-mediated autophagy, and several ubiquitin ligases have been reported to influence levels of overexpressed α-synuclein.

Methods: Ubiquitination of recombinant full-length and truncated α -synuclein was reconstituted in vitro and assayed by immunoblotting and mass spectrometry. The cellular interaction between Nedd4 and α -synuclein was investigated using yeast genetics and transient transfection of mammalian cells with plasmids or RNAi. Localisation of Nedd4 was studied by imminohistochemistry on sections from control and Lewy body disease brains.

Results: In vitro, the ubiquitin ligase, Nedd4 ubiquitinates robustly α-synuclein, unlike all other ligases previously implicated in this process. The purified enzyme recognizes specifically the carboxyl terminus of α-synuclein (residues 120-133), and attaches on α-synuclein K63linked ubiquitin chains. In yeast expressing α-synuclein, disruption of the Nedd4 orthologue, Rsp5p, decreased α-synuclein degradation and enhanced inclusion formation and α-synuclein toxicity. In human cells, endogeneous α-synuclein is degraded by both autophagic/lysosomal and proteasomal pathways, but Nedd4 overexpression enhanced α-synuclein clearance via the endosomallysosomal pathway, while Nedd4 down-regulation increased α-synuclein content. Consistent with a role in disease, Nedd4 is strongly expressed in cells containing Lewy bodies.

Conclusions: Ubiquitination by Nedd4 targets endogenous α -synuclein to the endosomal-lysosomal pathway, and by reducing α -synuclein content may help protect against the pathogenesis of Parkinson's disease and other α -synucleinopathies.

AWARDS INFORMATION

2011 TRAVEL GRANTS

Marjolein Aerts
Nijmegen, Netherlands

Melissa Armstrong Toronto, ON, Canada

Iciar Aviles-Olmos London, United Kingdom

Krzysztof Banaszkiewicz Krakow, Poland

Amit Batla Ghaziabad, India

Kelly Bertram
Melbourne, Australia

Pedro Braga-Neto São Paulo, Brazil

Lissa Brod
Portland, OR, USA

Norbert Brüggemann Lübeck, Germany

Lena Burbulla Tübingen, Germany

Miryam Carecchio Santhia, Italy

Santhia, Italy

Anna Castrioto

Ozlem Celebi Ankara, Turkey

Perugia, Italy

Lama Chahine *Philadelphia, PA, USA*

Nora Chan Los Angeles, CA, USA

Tyler Cheung *New York, NY, USA*

Tania Cruz Mariño Holguin, Cuba Huashun Cui Boston, MA, USA

Kathrin Czarnecki Boston, MA, USA

Patricia Araujo Dare Curitiba, Brazil

Aloysius Domingo Manila, Philippines

Darius Ebrahimi Fakhari Geissen, Germany

Robert Fekete Houston, TX, USA

Soumya Ghosh *Toronto, ON, Canada*

Kathryn Gaines Charleston, SC, USA

Anna Gamaleya *Moscow, Russia*

Ziv Gan-Or *Tel Aviv, Israel*

Gaia Giannicola Milan, Italy

Criscely Go
Manila, Philippines

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Jifeng Guo Changsha, China

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Muralidhar Hegde Galveston, TX, USA

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Paris, France

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Philippe Huot
Toronto, ON, Canada

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Anna Hussl Innsbruck, Austria

Alicia Jensen Minneapolis, MN, USA

Ketaki Jhavar Bangalore, India

Harikesh Kalonia Chandigarh, India

Rukmini Kandadai Hyderabad, India

Sachin Kapur Chicago, IL, USA

Panagiotis Kassavetis London, United Kingdom

Surasa Khongprasert
Patumwan, Thailand

Annie Killoran Rochester, NY, USA Young Eun Kim Seoul, Korea

Hee Jin Kim Seoul, Korea

Katsuo Kimura Yokohama, Japan

Ji Hyun Ko *Toronto, ON, Canada*

Brianada Koentjoro Sydney, Australia

Maja Kojovic London, United Kingdom

Naomi Kouri Jacksonville, FL, USA

Nikola Kresojevic Belgrade, Serbia

Puneet Kumar Bansal Barnala, India

Do Young Kwon *Ansan-city, Korea*

Travis Larsh
Cincinnati, OH, USA

Johannes Levin Munich, Germany

Natlada Limotai Nonthaburi, Thailand

Ellen Lirani-Silva São Paulo, Brazil

Arpan Maiti Kalyani, India

Vladana Markovic *Belgrade, Serbia*

Ignacio MataSeattle, WA, USA

Tiago Mestre

Toronto, ON, Canada

Patricio Millar-Vernetti Buenos Aires, Argentina

Nathaniel Miller Ann Arbor, MI, USA

James Morely *Philadelphia, PA, USA*

Inder Singh Mudila New Delhi, India

Somnath Mukherjee New Delhi, India

Julie Nantel Stanford, CA, USA

Ivana Novakovic
Belgrade, Serbia

Oluwadamilola Ojo Lagos, Nigeria

David Okai *London, United Kingdom*

Sandipan Pati Phoenix, AZ, USA

Kathryn Peall
South Wales, United Kingdom

José Luiz Pedroso São Paulo, Brazil

Zhongxing Peng Chen Gainesville, FL, USA

Mariya Petrova Sofia, Bulgaria

Nicolas Phielipp Toronto, ON, Canada

Ilse Pienaar

Oxford, United Kingdom

15th International Congress of Parkinson's disease and Movement disorders

AWARDS INFORMATION

Jost-Julian Rumpf

Chiswick, United Kingdom

Leipzig, Germany

Tabish Saifee

Binit B. Shah

Toronto, ON, Canada

2011 TRAVEL GRAN	TS			
Margarita Pondal Toronto, ON, Canada	David Salat Foix <i>Calgary, AB, Canada</i>	Alexander Shtilbans New York, NY, USA	George Tofaris Oxford, United Kingdom	Daniel Weiss <i>Tübingen, Germany</i>
Cynthia Poon Chicago, IL, USA	Paulo Sales Fortaleza, Brazil	Arun Singh Munich, Germany	Juan Toledo <i>Philadelphia, PA, USA</i>	Diane Whitmer Stanford, CA, USA
Markos Poulopoulos New York, NY, USA	Naomi Salins Phoenix, AZ, USA	Paolo Solla <i>Cagliari, Italy</i>	Christopher Tolleson Nashville, TN, USA	Ari Wilkenfeld Somerville, MA, USA
Nirendra Rai	Cristina Sanchez-	Wei Song	Aleksandra Tomic	Marc Wolf
New Delhi, India	Castaneda	Chengdu, China	Belgrade, Serbia	Mannheim, Germany
Laila Raissouni	Rome, Italy	Carolina Souza	Yevgen Trufanov	Olga Yacuts
Rabat, Morocco	Jasper Santos	São Paulo, Brazil	Lugansk, Ukraine	Minsk, Belarus
Prashanth Reddy	São Paulo, Brazil	Meredith Spindler	Ryosuke Tsutsumi	Lihua Yu
London, United Kingdom	Kaveh Saremi	Philadelphia, PA, USA	Tokyo, Japan	Chengdu, China
Martin Reich	Torrance, CA, USA	Rebecca St. George	Diana van Rooijen	Ji Y Yun
Kiel, Germany	Justyna Sarna	Beaverton, OR, USA	Leiden, Netherlands	Seongnam, Korea
Andrew Resnick	Calgary, AB, Canada	Maria Stamelou	Okeanis Vaou	Alessandra Zanon
Tampa, FL, USA	Rodolfo Savica	London, United Kingdom	Dedham, MA, USA	Bolzano, Italy
•	Rochester, MN, USA	o de la companya de		
Gesine Respondek	14.11.0	Tanja Stojkovic	Christina Vaughan	Jinxia Zhou
Marburg, Germany	Mohit Saxena New Delhi, India	Belgrade, Serbia	Chicago, IL, USA	Sydney, Australia
Luigi Romito	new Deini, Inaia	Matthis Synofzik	Frances Velez-Lago	Evelien Zoons
Milan, Italy	Julia Schicks	Tübingen, Germany	Guaynabo, Puerto Rico	Amsterdam, Netherlands
Manuela Rosa	Tübingen, Germany	Zi-Kheng Tan	Rodrigo Vitorio	
Milan, Italy	Alexander Schmidt	Johor, Malaysia	São Paulo, Brazil	
	Lübeck, Germany			
Diane Ruge		Arben Taravari	Richard Walsh	
London, United Kingdom	Daniel Schneider	Skopje, Macedonia	Toronto, ON, Canada	
Last Indian Down	New York, NY, USA	Marra Arra Thomasaratt	Vice Dine Wene	

The 2011 Travel Grant Program was partially supported by an unrestricted educational grant from Merz Pharmaceuticals, LLC.

Mary Ann Thenganatt

New York, NY, USA

Amanda Thompson Gainesville, FL, USA Xiao-Ping Wang

Shanghai, China

Leipzig, Germany

David Weise



CME INFORMATION

PURPOSE

The purpose of the MDS International Congress 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.

CONTINUING MEDICAL EDUCATION

The *Movement* Disorder Society is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

ACCREDITATION STATEMENT:

CME/CPD: The *Movement* Disorder Society is "accredited with commendation" by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The *Movement* Disorder Society designates this educational activity for a maximum of *35.0 AMA PRA Category 1 Credits*™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Continuing Professional Development (CPD) events developed by accredited CPD physician organizations recognized by the ACCME are deemed to be Accredited Group Learning Activities (Section1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.

TARGET AUDIENCE

The target audience of the 15th 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.

FACULTY FINANCIAL DISCLOSURE INFORMATION

It is the policy of The *Movement* Disorder Society (MDS) to ensure balance, independence, objectivity and scientific rigor in all sponsored educational activities. All faculty 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 whose products or services are related to the subject matter of the 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.

Faculty financial disclosure information will be provided to participants onsite in Toronto.

CLAIMING CME CREDIT

Physicians may claim their CME certificates from their home or office upon the completion of the MDS 15th International Congress. Visit www.movementdisorders.org/congress/congress11/cme after June 7, 2011 and use your file number located on your name badge to log in and claim your credits. You will be able to print or save a PDF of your credit award from your own computer.

15th International Congress of Parkinson's disease and Movement disorders

PROGRAM AT A GLANCE

Time	Sunday, June 5, 2011	Monday, June 6, 2011	Tuesday, June 7, 2011		Wednesday, June 8, 2011	Thursday, June 9, 2011	
7:00	Committee Meetings 7:00 - 8:00	Committee Meetings 7:00 - 8:00		ee Meetings	Committee Meetings 7:00 - 8:00	Committee Meetings 7:00 - 8:00	
7:30	/:00 - 8:00	7:00 - 8:00	7:00 - 8:00		7:00 - 8:00	7:00 - 8:00	
8:00	Therapeutic	Plenary Session V 8:00 - 10:00	Plenary Session VII		Plenary Session IX (Presidential Lectures)	Plenary Session XI 8:00 - 9:30	
8:30	Plenary Session I 8:00 - 10:00	8.00 - 10.00	8:00 - 10:00		8:00 - 10:00	8.00 - 7.50	
9:00							
9:30						Break 9:30 - 10:00	
10:00	Break 10:00 - 10:30	Break 10:00 - 10:30	Break 10:00 - 10:30		Break 10:00 - 10:30	Plenary Session XII (Controversies)	
10:30	Therapeutic	Plenary Session VI	Plenary Session VIII		Plenary Session X	10:00 - 11:00	
11:00	Plenary Session II 10:30 - 12:30	10:30 - 12:30	10:30	- 12:00	10:30 - 12:00	Plenary Session XIII	
11:30						(Blue Ribbon Highlights) 11:00 - 12:00	
12:00				eak - 12:30	Break 12:00 - 12:30	Break 12:00 - 12:30	
12:30	Break	Break		Therapeutic	Corporate Therapeutic	Corporate Therapeutic	
	12:30 - 14:00	12:30 - 13:00 Corporate Therapeutic		posia - 13:30	Symposia 12:30 - 13:30	Symposia 12:30 - 13:30	
13:00		Symposia	Break/	MDS Business	Break/	Break/	
13:30	Therapeutic	13:00 - 14:00 Break/ General	Guided	Meeting	Guided Poster Tours/	Guided Poster Tours/	
-	Plenary Session III	Guided Poster Assemblies	Poster Tours/ Posters	13:30 -14:30	Posters 13:30 - 15:00	Posters 13:30 - 15:00	
14:30	14:00 - 16:00	Tours/ Posters 14:00 -15:00	13:30 - 15:00	c ·	D IIIC :	D HIC .	
15:00		14:00 - 15:30 Parallel Sessions		Sessions - 17:00	Parallel Sessions 15:00 - 17:00	Parallel Sessions 15:00 - 17:00	
15:30	Break	15:30 - 17:30					
16:00	16:00 - 16:30						
16:30	Therapeutic Plenary Session IV						
17:00	16:30 - 18:30			eak - 17:30	Break 17:00 - 17:30	END	
17:30		Break	Skills W	orkshops/	Skills Workshops/	A	
18:00		17:30 - 18:00 Skills Workshops/		Sessions/ Discussions	Video Sessions/ Scientific Discussions		
	Break	Video Sessions/	17:30 - 19:00		Video Sessions/ 17:30 - 19:00 Scientific Discussions	17:30 - 19:00	
18:30	18:30 - 19:00	18:00 - 19:30			NO C P		
19:00	Opening Ceremony and Welcome Reception				VO Games Reception 19:00 – 20 :00		
19:30	19:00 - 21:00				VO.C		
20:00					VO Games 20:00 – 23:00		
20:30							
21:00							
21:30							
22:00							
22:30							
23:00							



SESSION DEFINITIONS

Blue Ribbon Session:

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 the delegates.

Controversies:

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

Corporate Therapeutic Sessions:

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

Guided Poster Tours:

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

Parallel Sessions:

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

Plenary Sessions:

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

Poster Sessions:

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

Scientific Discussions:

These interactive sessions focusing on an important set of scientific questions will bring two world experts together for a dialog that will also incorporate discussion from the participants. Like Video and Skills Workshops, these are designed without formal talks, but are meant to share with the audience the equipose of important laboratory or scientific issues and the approaches that experts are using to reach answers.

Skills Workshops:

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

Teaching Courses:

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

Therapeutic Plenary Sessions:

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

Video Sessions:

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

> = Ticket required for entry. Please check the Registration Desk for ticket availability. There is no extra charge for session tickets.

Special Meeting Theme:

Behavioral and motor interfaces of movement disorders: From laboratory to patient care

At each annual International Congress, the Congress Scientific Program Committee selects a theme that is highlighted throughout the meeting. This year's theme, "Behavioral and motor interfaces of movement disorders: From laboratory to patient care," will be showcased on two Plenary Sessions, six Parallel Sessions, one Skills Workshop, one Teaching Course, and two Video Sessions. International experts will serve as faculty, and the presentations will run the gamut of the field, from new research to practical applications. Meeting participants can elect to attend any or all of the sessions.

These sessions are designated with a .



SUNDAY, JUNE 5, 2011

1105 Therapeutic Plenary Session I

Evidence based medicine and practice parameters: How to treat Mr. Jones

8:00 - 10:00

Location: South Building, Level 800, Hall FG

Chairs: Cristina Sampaio

Lisbon, Portugal William Weiner Baltimore, MD, USA

8:00 The principles of evidence based medicine and the Cochrane collaboration: How to use evidence to treat an individual patient

Cristina Sampaio Lisbon, Portugal

8:40 An update from the MDS EBM Task Force 2011: Review of treatments for movement disorders Shen-Yang Lim

Kuala Lumpur, Malaysia

9:20 Practice parameters in movement disorders: Principles and an update for 2011

Theresa Zesiewicz *Tampa, FL, USA*

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

- Understand the differences between Evidence Based Medicine (EBM) and Practice Parameters
- 2. Discuss the latest EBM reviews of treatments for movement disorders
- 3. Review the latest Practice Parameters as related to management of movement disorders

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

1106 Therapeutic Plenary Session II

Parkinson's disease therapy for the advanced patient: What are the options when conventional treatments have failed?

10:30 - 12:30

Location: South Building, Level 800, Hall FG

Chairs: Angelo Antonini

Venice, Italy

K. Ray Chaudhuri

London, United Kingdom

10:30 The preclinical evidence supporting continuous drug delivery in patients with advanced Parkinson's disease

M. Maral Mouradian Piscataway, NJ, USA

1106 Therapeutic Plenary Session II continued

11:10 Comparative effects on motor symptoms with advanced therapies, including LCIG, Apomorphine or Deep Brain Stimulation

Carl Clarke

Birmingham, United Kingdom

11:50 Effects on non-motor symptoms and quality of life with advanced Parkinson's disease therapies

Lisa Shulman

Baltimore, MD, USA

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

- 1. Understand the rationale supporting the use of continuous drug delivery strategies in patients with advanced Parkinson's disease
- 2. Identify the technical challenges and side effects with these therapy options and how the choice of therapy can be made in a rational way
- 3. Describe the motor, non-motor and health related quality of life effects of treatments with Levodopa-Carbidopa Intestinal Gel (LCIG), apomorphine and Deep Brain Stimulation

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

Supported by an unrestricted educational grant from Impax Pharmaceuticals.

1107 Therapeutic Plenary Session III

Deep Brain Stimulation: New developments

14:00 - 16:00

Location: South Building, Level 800, Hall FG

Chairs: Joachim Krauss

Hannover, Germany

Andres Lozano

Toronto, ON, Canada

14:00 New technology: Hardware and stimulation algorithms

Peter Tass

Jülich, Germany

14:40 Multiple target strategies

Joachim Krauss

Hannover, Germany

15:20 MR imaging: Preoperative and postoperative issues Philip Starr

San Francisco, CA, USA

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

- 1. Identify new technology developments and programming options in Deep Brain Stimulation
- 2. Discuss indications and techniques to approach multiple targets



SUNDAY, JUNE 5 2011

1107 Therapeutic Plenary Session III continued

3. Interpret advantages and caveats of MR imaging techniques in the procedural and postoperative assessment of Deep Brain Stimulation

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

Supported by an unrestricted educational grant from Medtronic, Inc.

1108 Therapeutic Plenary Session IV

Hot topics in experimental therapeutics in Parkinson's disease

16:30 - 18:30

Location: South Building, Level 800, Hall FG

Chairs: Olle Lindvall

Lund, Sweden

C. Warren Olanow

New York, NY, USA

16:30 Neuropharmacological treatment: Present and future Heinz Reichmann

Dresden, Germany

17:10 Options for modifying the disease process

Anthony Schapira

London, United Kingdom

Gene and cell therapy: How far are we from a clinical treatment and which are the critical issues for future trials?

Roger Barker

Cambridge, United Kingdom

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

- 1. Discuss novel pharmacological approaches to treating Parkinson's disease
- 2. Review potential mechanisms of modifying Parkinson's disease by interfering with the disease
- 3. Discuss the possibilities of using cell and gene therapy to treat Parkinson's disease

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

Supported by an unrestricted educational grant from Elan.

Opening Ceremony

19:00 - 19:30

Location: South Building, Level 800, Hall FG

Welcome Reception

19:30 - 21:00

Location: South Building, Level 800, Hall D

MONDAY, JUNE 6, 2011

2103 Plenary Session V

The mysterious motor function of the basal ganglia: Reconsidering David Marsden's Robert Wartenberg Lecture of 1981

8:00 - 10:00

Location: South Building, Level 800, Hall FG

Chairs: Mark Hallett

Bethesda, MD, USA

Anthony Lang

Toronto, ON, Canada

8:00 The mysterious motor function of the basal ganglia revisited

Jose Obeso

Pamplona, Spain

8:40 The influence of David Marsden's Wartenberg lecture on models of basal ganglia function

Peter Redgrave

Sheffield, United Kingdom

9:20 The role of oscillations in normal and abnormal basal ganglia function

Peter Brown

Oxford, United Kingdom

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

- 1. Document the evolution of views of basal ganglia function from 1981-2011
- 2. Recognize basal ganglia roles in motor, sensory associative and limbic functions
- 3. Understand basal ganglia physiology in normal and pathological states

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

2104 Plenary Session VI

Cognitive decline in movement disorders

10:30 - 12:30

Location: South Building, Level 800, Hall FG

Chairs: David Burn

Newcastle upon Tyne, United Kingdom

Dennis Dickson

Jacksonville, FL, USA

10:30 Anatomical substrate of cognitive decline in parkinsonian disorders

Kenji Kosaka

Yokohama, Japan

11:10 The clinical spectrum of dementia in parkinsonian disorders

Bruno Dubois

Paris, France

MONDAY, JUNE 6, 2011

2104 Plenary Session VI continued

11:50 Current and future treatment of cognitive deficits in Lewy body dementias

Murat Emre

Capa Istanbul, Turkey

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

- Describe the neuropathology of parkinsonian disorders in which cognitive dysfunction is an important clinical components
- Describe the clinical features, differential diagnosis and investigations of dementia in parkinsonian disorders
- 3. Discuss the current and future treatment of Lewy body dementias

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

Corporate Therapeutic Symposia

13:00 -14:00

Please see pages 62 -63 for more information

AOS General Assembly

14:00 -15:00

Location: South Building, Level 700, Room 715AB All delegates from Asia and Oceania are encouraged to attend.

ES General Assembly

14:00 -15:00

Location: South Building, Level 800, Room 801B All delegates from Europe and North Africa are encouraged to attend.

PAS General Assembly

14:00 -15:00

Location: South Building, Level 800, Room 801A All delegates from Pan America are encouraged to attend.

Poster Session

Poster Session 1

Location: South Building, Level 800, Hall E

Abstracts: 1 - 291

Poster Viewing: 9:00 - 18:00Author Presentation: 14:00 - 15:30

Guided Poster Tours

14:00 - 15:30

Location: South Building, Level 800, Room 808

Guided Poster Tour 1 – Dystonia

Guided Poster Tour 2 – Parkinson's disease:

Neuropharmacology

Guided Poster Tour 3 – Parkinson's disease: Behavioral disorders

Guided Poster Tour 4 – Rating scales and assessment tools

For complete listing of abstracts in each tour, please see pages 77 - 84.

2206 Parallel Session

TICKET

Cell and gene therapies for Parkinson's disease

15:30 - 17:30

Location: South Building, Level 700, Room 701AB

Chairs: Jeffrey Kordower

Chicago, IL, USA

Anders Björklund

Lund, Sweden

15:30 Gene delivery of trophic factors: Strategies for future clinical trials

Jeffrey Kordower

Chicago, IL, USA

16:10 Other gene therapies for Parkinson's disease

Stephane Palfi

Créteil, France

16:50 Stem-cell based therapy: Will it work?

Olle Lindvall

Lund, Sweden

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

- 1. Discuss the relevance of trophic factors for influencing Parkinson's disease
- 2. Describe the principles for the putative use of gene therapy in Parkinson's disease
- Describe present status of the development of cell replacement as a possible therapy for Parkinson's disease

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

2207 Parallel Session

TICKET

Movement disorders emergencies

15:30 - 17:30

Location: South Building, Level 700, Room 716AB

Chairs: Helio Teive

Curitiba, Brazil

Steven Frucht

New York, NY, USA



MONDAY, JUNE 6, 2011



Motoric emergencies in parkinsonism Marco Onofrj Chieti, Italy

16:10 Dystonic and ballistic emergencies Helio Teive Curitiba, Brazil

16:50 Acute psychosis and delirium in movement disorders Kelvin Chou

Ann Arbor, MI, USA

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

- 1. Develop an approach to the management of motoric emergencies that occur in parkinsonism, including acute akinesia and severe dyskinesias
- 2. Identify and learn to manage acute or severe manifestations of dystonia and ballism
- 3. Discuss the causes and treatment of acute psychosis or delirium in movement disorders patients

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

2208 Parallel Session



Non dopaminergic systems in Parkinson's disease: From bench to bedside

15:30 - 17:30

Location: South Building, Level 700, Room 714AB

Chairs: Stephen Kish

Toronto, ON, Canada

Etienne Hirsch

Paris, France

15:30 Do non-dopaminergic neurons degenerate in Parkinson's disease? Lessons from postmortem studies Glenda Halliday Randwick, Australia

16:10 Animal models for the understanding of dopaminergic resistant symptoms in Parkinson's disease David Grabli

Paris, France

16:50 L-Dopa resistant symptoms in Parkinson's disease patients: The needs of the clinicians

Andrew Hughes Melbourne, Australia

2208 Parallel Session



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

- 1. Describe the non-dopaminergic lesions in Parkinson's
- 2. List the animal models for studying dopaminergic resistant symptoms
- 3. Discuss the difficulties in alleviating dopaminergic resistant symptoms in Parkinson's disease

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

2209 Parallel Session



Seminal topics in movement disorders as identified by the late David Marsden

15:30 - 17:30

Location: South Building, Level 700, Room 715AB

Chairs: Stanley Fahn

New York, NY, USA

Yves Agid

Paris, France

15:30 The role of neuromelanin

Andrew Lees

London, United Kingdom

16:10 Neuroplasticity and dystonia

Angelo Quartarone

Messina, Italy

16:50 Descending pathways and motor control

Roger Lemon

London, United Kingdom

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

- 1. Describe the significance of neuromelanin in movement disorders
- 2. Identify the role of aberrant plasticity in dystonia
- 3. Discuss modern concepts of motor pathways and motor control

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

2210 Parallel Session





Gilles de la Tourette syndrome

15:30 - 17:30

Location: South Building, Level 700, Room 717AB

Chairs: Jonathan Mink

Rochester, NY, USA

Paul Sandor

Toronto, ON, Canada

15th International Congress of Parkinson's disease and Movement disorders

MONDAY, JUNE 6, 2011

2210 Parallel Session



15:30 The circuitry of behavioral disorders: From animal models to Tourette syndrome

Yulia Worbe Paris, France

16:10 Clinical features of Tourette syndrome

Mary Robertson

London, United Kingdom

16:50 Update on treatments in Tourette syndrome

Jonathan Mink Rochester, NY, USA

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

- 1. Describe the neural networks involving Tourette syndrome: Evidence from animal models to neuroimaging
- 2. Describe the clinical features of Tourette syndrome, the role of genetics or environmental factors
- 3. Describe the treatments for Tourette syndrome

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

2211 Parallel Session



Psychiatric features of genetic movement disorders

15:30 - 17:30

Location: South Building, Level 700, Room 713AB

Chairs: Valerie Voon

Cambridge, United Kingdom

Sylvain Chouinard

Montreal, QC, Canada

15:30 Huntington's disease

Michael Orth Ulm, Germany

16:10 Genetic parkinsonisms

Meike Kasten

Lübeck, Germany

16:50 Genetic dystonias

Mateusz Zurowski

Toronto, ON, Canada

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

- 1. Recognize the importance of psychiatric features in three genetic movement disorders: Huntington's disease, genetic parkinsonisms, and genetic dystonias.
- 2. Define the clinical spectrum of psychiatric features in these genetic movement disorders
- 3. Discuss the diagnostic and management strategies of psychiatric features in these genetic movement disorders

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

2308 Teaching Course



Update on myoclonus

15:30 - 17:30

Location: South Building, Level 800, Room 801A

Chairs: Robert Chen

Toronto, ON, Canada

Marina AJ de Koning-Tijssen

Amsterdam, Netherlands

15:30 The clinical features of myoclonus

Philip Thompson

Adelaide, Australia

16:10 The neurophysiology of myoclonus: Asking the right question

Robert Chen

Toronto, ON, Canada

16:50 How to treat myoclonus and hyperekplexias

Marina de Koning-Tijssen

Amsterdam, Netherlands

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

- Recognize the clinical features of different forms of myoclonus including hyperekplexias
- 2. Understand the basic neurophysiology of myoclonus
- 3. Discuss strategies for treating myoclonus

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

2309 Teaching Course



Non-motor features of Parkinson's disease cognition

15:30 - 17:30

Location: South Building, Level 800, Room 801B

Chairs: Bob van Hilten

Leiden, Netherlands

Pablo Martínez-Martín

Madrid, Spain

15:30 The spectrum of non-motor symptoms in Parkinson's disease

Charles Adler

Scottsdale, AZ, USA

16:10 Sleep, sleepiness and nocturnal complaints in

Parkinson's disease

Isabelle Arnulf

Paris, France

16:50 Pain, constipation and orthostatic hypotension in Parkinson's disease: Basic strategies for therapy

K. Ray Chaudhuri

London, United Kingdom



MONDAY, JUNE 6, 2011

2309 Teaching Course



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

- 1. Understand the frequency and relevance of non-motor symptoms in Parkinson's disease and their impact on quality of life
- 2. Learn the diagnostic tools available for detecting and quantifying non-motor symptoms in Parkinson's disease
- 3. List the available treatments for sleep, pain and autonomic dysfunction in Parkinson's disease

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

2403 Skills Workshop





Bedside evaluation of cognition in movement disorders

18:00 - 19:30

Location: South Building, Level 700, Room 713AB In this interactive session, we will make the transition from theory to clinical practice and demonstrate strategies to evaluate cognition in different movement disorders. The administration and interpretation of bedside tests will be reviewed and demonstrated. Participants are encouraged to interact with the faculty and to share their approaches for group discussion and commentary.

Thomas Bak

Edinburgh, United Kingdom

Karen Marder

New York, NY, USA

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

- 1. Recognize the range of cognitive deficits in patients with dementia and Parkinson's disease
- 2. Elicit key cognitive deficits in Parkinson's disease patients through simple bedside tests
- 3. Interpret neuropsychometric reports on patients with Parkinson's disease and related disorders

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

2404 Skills Workshop



Pumps for Parkinson's disease

18:00 - 19:30

Location: South Building, Level 800, Room 801A In this interactive session, the speakers will review the efficacy and limitations of the established and new forms of injective therapy in advanced Parkinson's disease.

Fabrizio Stocchi *Rome, Italy* Per Odin

Bremerhaven, Germany

2404 Skills Workshop



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

- 1. Identify parkinsonian patients who can benefit most from pump therapies
- 2. Describe the different technical equipments needed for infusional therapy in Parkinson's disease
- 3. Compare the possible benefits and side effects of the various infusional therapies in Parkinson's disease

Recommended Audience: Clinical Academicians; Students/Residents/Trainees

Supported by an unrestricted educational grant from Ipsen.

2405 Skills Workshop



Assessment and management of swallowing dysfunction in movement disorders patients

18:00 - 19:30

Location: South Building, Level 700, Room 715AB In this interactive session, techniques that allow accurate identification and assessment of swallowing dysfunction will be discussed and demonstrated as a foundation for instituting appropriate management.

Norman Leopold *Upland, PA, USA* Yael Manor *Tel Aviv, Israel*

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

- 1. Identify the common disturbances of swallowing that occur in movement disorders patients
- 2. Become familiar with the diagnostic tools used in the assessment of swallowing dysfunction
- 3. Discuss the management of swallowing dysfunction in movement disorders patients

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

2406 Skills Workshop



Meet the expert: Problematic DBS cases

18:00 - 19:30

Location: South Building, Level 700, Room 716AB In this interactive session, problematic DBS cases submitted by the audience and by the faculty consisting of a neurologist and a neurosurgeon will be discussed and algorithms to improve outcome will be reviewed.

Jens Volkmann Würzburg, Germany Andres Lozano Toronto, ON, Canada

MONDAY, JUNE 6, 2011

2406 Skills Workshop TICKET



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

- 1. Define suboptimal outcome after DBS for movement disorders
- 2. Identify factors associated with side effects or restricted benefit
- 3. Debate strategies to optimize results in patients with chronic DBS

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

Supported by an unrestricted educational grant from St. Jude Neuromodulation Division.

2507 Video Session



The phenomenology of movement disorders: An approach using the Fahn-Marsden video assessment methodology

18:00 - 19:30

Location: South Building, Level 700, Room 701AB In this interactive session, the faculty will review an approach to movement disorders by phenomenology using the principles suggested in the teaching video done by the late Prof. David Marsden with Dr. Stanley Fahn. The faculty will present their own cases and also videos of cases of Prof. Marsden.

Stanley Fahn
New York, NY, USA
Kailash Bhatia
London, United Kingdon

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

- 1. Learn an approach to distinguish between different movement disorders by phenomenology of different video cases
- 2. Plan a differential diagnosis of underlying etiology
- Form an investigative strategy to reach a diagnosis in such cases

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

2508 Video Session



Gait and cognition

18:00 - 19:30

Location: South Building, Level 700, Room 714AB In this interactive session, participants will be able to describe the different alterations of parkinsonian gait and understand the relationship between freezing of gait, cognition and anxiety.

Jeffrey Hausdorff Tel Aviv, Israel Robert Iansek Elsternwick, Australia

2508 Video Session



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

- Describe the different types of gait in Parkinson's disease
- 2. Understand the relationship between freezing of gait and cognition
- 3. Recognize the effect of external and emotional factors on parkinsonian gait

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

2509 Video Session



Lessons from my patients

18:00 - 19:30

Location: South Building, Level 700, Room 717AB In this interactive session, the participants can learn from and engage with the speakers regarding some of their memorable cases with movement disorders where diagnosis becomes apparent in hindsight.

Yves Agid Paris, France Daniel Tarsy Boston, MA, USA

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

- 1. Recognize important perhaps subtle features on exam or history that enable diagnostic revisions
- Learn the value of increasing scrutiny and periodic reassessment of patients with a variety of movement disorders to redress prior oversights, correct errors, and redirect a patient's management
- 3. Make appropriate investigative strategies to arrive at diagnosis in difficult or unusual cases

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

2610 Scientific Discussion



What is meant by the synaptic pathology of Parkinson's disease?

18:00 - 19:30

Location: South Building, Level 800, Room 801B In this interactive discussion, two leading scientists will focus on the synaptic function and dysfunction pivotal to the pathophysiology of Parkinson's disease with allusions to their implications for developing new therapies. The dopaminergic and non-dopaminergic systems will be discussed and participants are encouraged to enter into the discussion with their views and questions.

Maria Grazia Spillantini Cambridge, United Kingdom Anders Björklund Lund, Sweden



Monday, June 6, and Tuesday, June 7, 2011

2610 Scientific Discussion continued



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

- 1. Understand the role of dopaminergic synaptic dysfunction in early Parkinson's disease
- 2. Understand the role of dopaminergic synaptic dysregulation in advancing Parkinson's disease and
- 3. Understand the role of non-dopaminergic synaptic pathology in Parkinson's disease

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

TUESDAY, JUNE 7, 2011

3103 Plenary Session VII

Impulsivity, addiction and reward mechanisms in movement disorders

8:00 - 10:00

Location: South Building, Level 800, Hall FG

Chairs: Andrew Lees

London, United Kingdom

Marie Vidailhet

Paris, France

- 8:00 Neurochemistry and circuitry involved in reward mechanisms
 - T. Celeste Napier Chicago, IL, USA
- Genetic factors in ICD and addiction disorders 8:40 James Kennedy Toronto, ON, Canada

9:20 Clinical manifestations of ICDs and dopamine dysregulation syndrome in Parkinson's disease Andrew Siderowf

Philadelphia, PA, USA

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

- 1. Identify the networks involved in reward mechanisms
- 2. Discuss the role of genetic factors in vulnerability to impulse control disorders (ICD) and addiction
- 3. Describe the clinical features of impulse control disorders and addiction to dopaminergic agents

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

3104 Plenary Session VIII

Clinical trials in movement disorders: Lessons learned from the past and a glimpse into the

10:30 - 12:00

Location: South Building, Level 800, Hall FG

Chairs: Olivier Rascol

Toulouse, France

Karl Kieburtz

Rochester, NY, USA

10:30 Trial design issues in neurodegenerative disorders: What have we learned?

Steven Piantadosi

Los Angeles, CA, USA

11:15 Important clinical trials in Movement Disorders of 2010-2011 and ongoing trials

Olivier Rascol

Toulouse, France

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

- 1. Discuss traditional and novel trial designs in the field of movement disorders
- 2. Identify important ongoing trials in movement disorders
- 3. Integrate clinical trial results into clinical practice

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

Corporate Therapeutic Symposia

12:30 -13:30

Please see pages 62 -63 for more information

MDS Business Meeting

13:30 - 14:30

Location: South Building, Level 700, Room 714AB

Open to all delegates

Poster Session

Poster Session 2

Location: South Building, Level 800, Hall E

Abstracts: 292 - 599

Poster Viewing: 9:00 – 18:00 Author Presentation: 13:30 – 15:00

15^{th} international congress of Parkinson's **DISEASE AND MOVEMENT DISORDERS**

Tuesday, June 7, 2011

Guided Poster Tours

13:30 - 15:00

Location: South Building, Level 800, Room 808

Guided Poster Tour 5 - Basic science

Guided Poster Tour 6 - Sleep disorders and RLS

Guided Poster Tour 7 – Parkinsonisms (Parkinson plus

and secondary)

Guided Poster Tour 8 - Tremor

For complete listing of abstracts in each tour, please see pages 77 - 84.

3207 Parallel Session



Mechanisms of cell death in neurodegeneration

15:00 - 17:00

Location: South Building, Level 700, Room 714AB

Chairs: Serge Przedborski

New York, NY, USA

David Park

Ottawa, ON, Canada

15:00 Cell death mechanisms in neurodegenerative movement disorders

David Park

Ottawa, ON, Canada

15:40 Molecular imaging methods for monitoring cell death Steven Finkbeiner

San Francisco, CA, USA

16:20 Novel mediators of cell death

Valina Dawson

Baltimore, MD, USA

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

- 1. Discuss new concepts of neurodegeneration
- 2. Explain new methods for monitoring neurodegeneration
- 3. Identify new therapeutic targets

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

3208 Parallel Session



Phenotype, genotype and pathophysiology in hereditary dystonia

15:00 - 17:00

Location: South Building, Level 700, Room 713AB

Chairs: Susan Bressman

New York, NY, USA

David Grimes

Ottawa, ON, Canada

15:00 From phenotypes to genes: An overview of diagnostic approaches in hereditary dystonia

Emmanuel Roze

Paris, France

3208 Parallel Session



15:40 Monogenic primary dystonia: Is neuroimaging related to clinical features?

Bogdan Draganski

Lausanne, Switzerland

Molecular pathophysiology of hereditary primary dystonia

William Dauer

Ann Arbor, MI, USA

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

- 1. Identify the various forms of hereditary dystonia
- 2. Discuss the neuroimaging perspectives in hereditary dystonias
- 3. Understand the molecular mechanisms underlying hereditary primary dystonia

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

3209 Parallel Session



Clinical and translational aspects of atypical parkinsonian disorders

15:00 - 17:00

Location: South Building, Level 700, Room 701AB

Chairs: David Williams

Melbourne, Australia

Gregor Wenning

Innsbruck, Austria

Clinical features of multiple system atrophy (MSA), progressive supranuclear palsy (PSP) and frontotemporal dementia with parkinsonism (FTDP) David Williams

Melbourne, Australia

15:40 MSA, PSP and FTDP as models for the study of specific proteinopathies

Wassilios Meissner

Bordeaux, France

16:20 Current management of MSA, PSP and FTDP and future targets of therapeutic intervention

Gregor Wenning

Innsbruck, Austria

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

- 1. Distinguish the major atypical parkinsonian disorders
- 2. Identify the underpinnings and potential of using these disorders to understand and treat specific proteinopathies (i.e., alpha-synucleinopathies and tauopathies)
- 3. Describe current and future therapies for atypical parkinsonian disorders

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



TUESDAY, JUNE 7, 2011

3210 Parallel Session TICKET



Essential tremor: Challenges and future strategies

15:00 - 17:00

Location: South Building, Level 700, Room 715AB

Chairs: Rodger Elble

Springfield, IL, USA Günther Deuschl Kiel, Germany

Towards a working definition of essential tremor: 15:00 Promises and limitations

> Günther Deuschl Kiel, Germany

15:40 Hunting for genes in essential tremor: The challenges Eng-King Tan

Singapore

16:20 Is cognitive impairment a component of essential tremor?

Elan Louis

New York, NY, USA

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

- 1. Understand the diagnostic difficulty and limitations of the current definition of essential tremor
- 2. Identify the challenges in identifying susceptibility and causative genes in essential
- 3. Understand the current controversy related to cognitive function and essential tremor

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

3211 Parallel Session (



TICKET

An update on psychogenic movement disorders 15:00 - 17:00

Location: South Building, Level 700, Room 716AB

Chairs: Kapil Sethi

Augusta, GA, USA

Joseph Jankovic Houston, TX, USA

15:00 An update on clinical features and diagnostic criteria of psychogenic movement disorders

> Anthony Lang Toronto, ON, Canada

15:40 The pathophysiology of conversion disorders Valerie Voon

Cambridge, United Kingdom

Modern management of psychogenic movement disorders

Jon Stone

Edinburgh, United Kingdom

Parallel Session





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

- 1. Recognize the clinical spectrum of psychogenic movement disorders
- 2. Discuss possible causes and pathophysiology
- 3. Describe how to manage a patient with psychogenic movement disorder

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

3212 Parallel Session





Hallucinations and psychosis in Parkinson's disease

15:00 - 17:00

Location: South Building, Level 700, Room 717AB

Chairs: Gilles Fénelon

Créteil, France

Oscar Gershanik

Buenos Aires, Argentina

15:00 Epidemiology and phenomenology of psychosis in Parkinson's disease

> Gilles Fénelon Créteil, France

Is there something you aren't telling me? Detecting psychotic symptoms in Parkinson's disease

Nico Diederich

Luxembourg City, Luxembourg

Treatment of psychosis in Parkinson's disease: Current 16:20 agents and future directions

> Joseph Friedman Warwick, RI, USA

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

- 1. Describe the frequency and nature of psychotic symptoms in Parkinson's disease
- 2. Better able to identify psychotic symptoms
- 3. Discuss current treatments for the management of psychosis and appreciate their shortcomings

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

3309 Teaching Course





Impulse control disorders (ICDs)

15:00 - 17:00

Location: South Building, Level 800, Room 801A

Chairs: Janis Miyasaki

Toronto, ON, Canada

Daniel Weintraub

Philadelphia, PA, USA

Tuesday, June 7, 2011

3309 Teaching Course

TICKET continued

15:00 The clinical spectrum of ICDs and dopamine dysregulation syndrome (DDS)

Mark Stacy

Durham, NC, USA

15:40 How to detect ICDs in Parkinson's disease Daniel Weintraub
Philadelphia, PA, USA

16:20 How to manage ICDs in Parkinson's disease Andrew Evans

Parkville, Australia

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

- 1. Discuss the relationship between ICDs and dopamine dysregulation syndrome (DDS) in Parkinson's disease
- 2. Identify behaviors suggestive of ICD and DDS
- 3. Describe the management of ICD and DDS

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

3310 Teaching Course



From bench top to bedside: Current topics in translation research in movement disorders

15:00 - 17:00

Location: South Building, Level 800, Room 801B

Chairs: Charles Adler

Scottsdale, AZ, USA

Keith Josephs

Rochester, NY, USA

15:00 Understanding tau-protein dysfunction and pathways to curative

Rohan de Silva

London, United Kingdom

15:40 The anatomical source of the signs and symptoms of Parkinson's disease

Maria Rodriguez-Oroz

Pamplona, Spain

16:20 Current concepts of dyskinesias, and new therapeutic strategies

M. Angela Cenci Lund, Sweden

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

- 1. Understand the role of tau protein dysfunction in neurodegeneration and potential treatment strategies
- 2. Understand biological models of dyskinesias and insights they give to therapeutic options.
- 3. Discuss clinical and pathological correlations in Parkinson's disease through an understanding selective regional vulnerability to Lewy body pathology

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

3403 Skills Workshop



Dystonia and spasticity: What's the latest in botulinum toxin therapy?

17:30 - 19:00

Location: South Building, Level 700, Room 713AB In this interactive session, clinical vignettes and videos will be presented to illustrate new clinical indications for botulinum toxin therapy, effects of botulinum toxin therapy in early and late cases of dystonia and spasticity, and use of EMG, nerve stimulation, and ultrasound in administration of botulinum toxin therapy.

Dirk Dressler

Hannover, Germany

Raymond Rosales

Manila, Philippines

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

- 1. Understand the nature of muscle contractions in dystonia and spasticity in relation to botulinum toxin therapy
- 2. Understand the similarities and differences among the different available botulinum toxin preparations
- 3. Develop a framework to select for specific effects of botulinum toxin therapy for pain, abnormal posture, and unwanted movements in dystonia and spasticity

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

Supported by an unrestricted educational grant from Merz Pharmaceuticals, LLC.

3404 Skills Workshop



The many faces of Parkinson's disease

17:30 - 19:00

Location: South Building, Level 800, Room 801A In this interactive session, the speakers will review the differences in terms of risk factors, clinical features (motor and non-motor) and response to pharmacological therapy between the akinetic-rigid and tremor-dominant forms of Parkinson's disease.

Mario Zappia Catania, Italy Ruth Djaldetti Petah Tikva, Israel

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

- 1. Identify the main clinical-pathological subtypes of Parkinson's disease
- 2. Interpret whether the subtypes of Parkinson's disease differ in risk factors and prognosis
- 3. Compare the response to treatment between the clinical subtypes of Parkinson's disease

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



Tuesday, June 7, 2011

3405 Skills Workshop



Freezing of gait: Practical approaches

17:30 - 19:00

Location: South Building, Level 700, Room 714AB In this interactive skills workshop, the basic mechanisms of posture, gait, and balance will be discussed and how this knowledge may be applied to the management of freezing of gait.

Mariella Graziano

Esch-sur-Alzette, Luxembourg

Margarita Makoutonina

Melbourne, Australia

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

- 1. Understand the influence of posture and gait mechanisms on freezing of gait in Parkinson's disease
- 2. Describe the relevance of environmental factors as determinants of freezing of gait
- Identify how environmental adjustments and adaptations may be an adequate strategy to improve freezing of gait

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

3406 Skills Workshop



Sleep and fatigue in Parkinson's disease

17:30 - 19:00

Location: South Building, Level 700, Room 715AB In this interactive session, the faculty will focus on fatigue and sleep in Parkinson's disease and give useful clinical pearls to differentiate these from apathy and depression. Management issues will be discussed by showing illustrative examples.

Jau Shin Lou Portland, OR, USA Carlos Gaig Barcelona, Spain

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

- Identify the clinical and laboratory differentiation between fatigue and excessive daytime sleepiness and differentiate these from apathy and depression
- 2. Understand the burden of fatigue and sleep in Parkinson's disease patients
- 3. Discuss management options for fatigue and sleep problems in Parkinson's disease

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

3407 Skills Workshop



Non-motor problems in Parkinson's disease patients receiving Deep Brain Stimulation

17:30 - 19:00

Location: South Building, Level 700, Room 716AB In this interactive workshop, the focus will be on the non-motor problems, including behavioral and autonomic, that may be helped or exacerbated by DBS. The discussion will also focus on non-motor pre-surgical issues that may determine whether Parkinson's disease patients are good candidates for DBS. Participants are encouraged to bring cases or problematic issues to discuss with the faculty.

Karsten Witt

Kiel, Germany

Beom Jeon

Seoul, Korea

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

- Recognize and learn to manage affective and cognitive disorders
- 2. Learn to manage sensory and autonomic disturbances
- Understand how to improve patient selection in order to avoid non-motor problems after DBS

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

3508 Video Session



The spectrum of cranial movement disorders

17:30 - 19:00

Location: South Building, Level 700, Room 717AB In this interactive session, participants will learn to diagnose and differentiate the various cranial movement disorders, their underlying pathophysiology and treatment through video case presentations.

Marie Vidailhet

Paris, France

Susanne Schneider

Lübeck, Germany

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

- Diagnose and distinguish the various cranial movement disorders
- 2. Learn how to manage the various cranial movement disorders
- 3. Understand the underlying pathophysiology of various cranial movement disorders

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

Tuesday, June 7 and Wednesday, June 8, 2011

3509 Video Session



Psychogenic movement disorders: Video demonstrations and evaluation techniques

17:30 - 19:00

Location: South Building, Level 700, Room 701AB In this interactive session, the phenomenology and methods of examining subjects with psychogenic movement disorders will be presented using video case examples.

David Riley

South Euclid, OH, USA

Mark Edwards

London, United Kingdom

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

- 1. Identify the phenomenology of psychogenic movement disorders
- 2. Recognize the differences between organic and nonorganic movement disorders
- 3. Know how to examine a patient with a suspected psychogenic movement disorders

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

3610 Scientific Discussion



Motor learning and movement disorders

17:30 - 19:00

Location: South Building, Level 800, Room 801B In this interactive session, an overview of the principles and investigation of motor learning in normal subjects will be reviewed. The pathophysiology of movement disorders related to motor learning will be discussed.

M. Felice Ghilardi New York, NY, USA Alfredo Berardelli Rome, Italy

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

- 1. Understand the principles of motor learning
- 2. Describe methodology and techniques used to measure motor learning
- 3. Discuss motor learning in the pathophysiology of movement disorders

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

Wednesday, June 8, 2011

4103 Plenary Session IX

Presidential Lectures

8:00 - 10:00

Location: South Building, Level 800, Hall FG

Chairs: Philip Thompson Adelaide, Australia

Günther Deuschl

Kiel, Germany

8:00 Stanley Fahn Lecture: It's time to fix the broken system of genetic locus symbols - Parkinson's disease (PARK) and Dystonia (DYT) as examples

Anthony Lang

Anthony Lang

Toronto, ON, Canada

8:30 Junior Award Lecture: Clinical Science

Alexander Schmidt, MD MA

Lübeck, Germany

9:00 Junior Award Lecture: Basic Science

George K. Tofaris, MD PhD Oxford, United Kingdom

9:30 C. David Marsden Lecture: Parkinson's disease: Models and mechanisms

Serge Przedborski New York, NY, USA

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

- 1. Understand a number of important problems with the current use of the locus system that inhibit knowledge dissemination using Parkinson's disease (PARK) and Dystonia (DYT) as examples
- 2. Recognize possible solutions to the current problems
- 3. Discuss the experimental models of Parkinson's disease and key questions about its pathogenesis.
- 4. Explain the concepts of cell autonomous and non-cell autonomous degeneration.

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

4104 Plenary Session X

Mitochondrial biology on the move

10:30 - 12:30

Location: South Building, Level 800, Hall FG

Chairs: Mark Cookson

Bethesda, MD, USA Anurag Tandon

Toronto, ON, Canada

10:30 Mitochondria dynamics in health and disease

David Chan Pasadena, CA, USA



Wednesday, June 8, 2011

4104 Plenary Session X continued

11:30 Mitophagy and its importance to neurodegeneration Heidi McBride

Ottawa, ON, Canada

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

- Recognize the importance of the relatively new field of mitochondrial dynamics and mitophagy in Parkinson's disease
- 2. Understand how Parkinson's disease genes may function in mitochondrial dynamics and mitophagy
- 3. Understand how model systems have helped identify key pathways in Parkinson's disease pathogenesis and how they may point toward therapeutic targets

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

Corporate Therapeutic Symposia

12:30 -13:30

Please see pages 62 -63 for more information

Poster Session

Poster Session 3

Location: South Building, Level 800, Hall E

Abstracts: 600 - 907

Poster Viewing: 9:00 - 18:00Author Presentation: 13:30 - 15:00

Guided Poster Tours

13:30 - 15:00

Location: South Building, Level 800, Room 808

Guided Poster Tour 9 – Surgical therapy of movement

disorders other than Parkinson's disease

Guided Poster Tour 10 – Genetics Guided Poster Tour 11 – Parkinson's disease:

Phenomenology

Guided Poster Tour 12 - Lewy body dementia and

other dementias in movement disorders

For complete listing of abstracts in each tour, please see

pages 77 - 84.

4208 Parallel Session



Ataxia update

15:00 - 17:00

Location: South Building, Level 700, Room 701AB

Chairs: Thomas Gasser

Tübingen, Germany Nicholas Wood

London, United Kingdom

15:00 Hereditary ataxias: Relevant new genes

Nicholas Wood

London, United Kingdom

4208 Parallel Session



15:40 Movement disorders in ataxias

Bart van de Warrenburg

Nijmegen, Netherlands

16:20 Treatment of hereditary ataxias: From physiotherapy to drugs Ludger Schöls

Tübingen, Germany

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

- 1. Know which new genes have recently been discovered for hereditary ataxias
- 2. Understand that all types of non-ataxic movement disorders can also occur in hereditary ataxias
- 3. Learn about the latest developments and challenges in the treatment of hereditary ataxias, including (future) drugs and allied health care interventions

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

4209 Parallel Session



Autoimmunity, behavioral and movement disorders

15:00 - 17:00

Location: South Building, Level 700, Room 716AB

Chairs: Angela Vincent

Headington, United Kingdom

Francisco Cardoso

Belo Horizonte, Brazil

15:00 Stiff-person syndrome

Hans-Michael Meinck

Heidelberg, Germany

15:40 Sydenham's chorea

Francisco Cardoso

Belo Horizonte, Brazil

16:20 Anti-NMDA-receptor encephalitis

Angela Vincent

Headington, United Kingdom

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

- 1. Describe the pathogenesis of stiff-person syndrome, Sydenham's chorea and anti-NMDA receptor encephalitis
- 2. Recognize the behavioral and movement disorders associated with stiff-person syndrome, Sydenham's chorea and anti-NMDA receptor encephalitis
- Manage patients with stiff-person syndrome, Sydenham's chorea and anti-NMDA receptor encephalitis

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

15^{TH} international congress of Parkinson's **DISEASE AND MOVEMENT DISORDERS**

Wednesday, June 8, 2011

4210 Parallel Session TICKET



Autosomal recessive Parkinson's disease and emerging mitochondrial pathways

15:00 - 17:00

Location: South Building, Level 700, Room 713AB

Chairs: Edward Fon

Montreal, QC, Canada

David Chan

Pasadena, CA, USA

15:00 The role of Parkinson's in mitochondrial quality control Mark Cookson Bethesda, MD, USA

15:40 PINK1 modulation of mitochondrial function Charleen Chu Pittsburgh, PA, USA

16:20 Do we know what DJ-1 is and does?

Rejko Krüger

Tübingen, Germany

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

- 1. Understand the role of mitochondrial dysfunction in recessive forms of Parkinson's disease and recognize its impact for the common sporadic form of the disease
- 2. Assign different genes for autosomal recessive genes to converging pathways related to the clearance of dysfunctional mitochondria from the cell
- 3. Recognize the role of impaired autophagy as an important mechanism in neurodegeneration

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

4211 Parallel Session



New targets for Deep Brain Stimulation

15:00 - 17:00

Location: South Building, Level 700, Room 714AB

Chairs: Elena Moro

Toronto, ON, Canada

Alim Benabid

Grenoble, France

15:00 Functional anatomy of the basal ganglia: Rationality for new targets

Jerrold Vitek

Minneapolis, MN, USA

15:40 PPN and zona incerta as targets for Parkinson's disease Marwan Hariz

London, United Kingdom

16:20 New targets for dystonia: Is there still a place for other nuclei other than GPi?

> Pierre Pollak Grenoble, France

4211 Parallel Session



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

- 1. Describe the physiology and functional anatomy relevant to DBS
- 2. Recognize the possible new targets for DBS
- 3. Recognize the pros and cons and the level of evidence for the new targets

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

4212 Parallel Session



Movement disorder nurses: How to expand the delivery of care

15:00 - 17:00

Location: South Building, Level 700, Room 715AB

Chairs: Janine Long

Toronto, ON, Canada

Cathi Thomas

Boston, MA, USA

15:00 Education challenges in newly diagnosed patients with Parkinson's disease

Christine Hunter

Houston, TX, USA

Management challenges in the cognitively impaired 15:40 patient

Julie Carter

Portland, OR, USA

16:20 How to support the patient, family and caregiver Cathi Thomas

Boston, MA, USA

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

- 1. Discuss the best approach to education newly diagnosed patients with Parkinson's disease
- 2. Discuss the contribution of the nurse in helping patients and families manage the cognitively impaired patient
- 3. Describe the role played by nurses in assisting families to provide care while preserving the health and welfare of the caregivers

Recommended Audience: Practitioners; Non-Physician Health Professionals



Wednesday, June 8, 2011

4213 Parallel Session



The non-dementia associated cognitive and behavioral features of Parkinson's disease

15:00 - 17:00

Location: South Building, Level 700, Room 717AB

Chairs: Dag Aarsland

Stavanger, Norway

Roger Barker

Cambridge, United Kingdom

15:00 Dopamine and cognition: What have we learned from experimental studies?

Antonio Strafella

Toronto, ON, Canada

15:40 Mild Cognitive Impairment in Parkinson's disease: What does it mean?

Dag Aarsland

Stavanger, Norway

16:20 Cognitive and behavioral problems related to STN DBS in Parkinson's disease

Paul Krack

Grenoble, France

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

- 1. Describe the role of dopamine in normal cognitive processes
- 2. Recognize the entity and significance of Mild Cognitive Impairment (MCI) of Parkinson's disease
- 3. Identify the cognitive and behavioral problems related to surgery for Parkinson's disease

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

4307 Teaching Course



Neurodegeneration: The role of environmental factors

15:00 - 17:00

Location: South Building, Level 800, Room 801A

Chairs: Caroline Tanner

Sunnyvale, CA, USA

Louis Tan

Singapore

15:00 A frequent question: The role of smoking, caffeine and nutrition in Parkinson's disease

Louis Tan

Singapore

15:40 Toxin induced parkinsonism: The manganese cases

Pille Taba

Tartu, Estonia

16:20 Herbicides and pesticides in Parkinson's disease

Caroline Tanner

Sunnyvale, CA, USA

4307 Teaching Course



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

- 1. Understand the role of environmental factors in Parkinson's disease
- 2. Recognize the clinical features of toxin–induced parkinsonism
- 3. Describe the possible effects of pesticides in Parkinson's disease

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

4308 Teaching Course



New Unified Parkinson's Disease Rating Scale: MDS-UPDRS

15:00 - 17:00

Location: South Building, Level 800, Room 801B

Chairs: Anette Schrag

London, United Kingdom

Christopher Goetz

Chicago, IL, USA

15:00 Similarities and differences between the MDS-UPDRS and the original UPDRS

Anette Schrag

London, United Kingdom

15:40 Key characteristics of the MDS-UPDRS with emphasis on difficult items

Glenn Stebbins

Chicago, IL, USA

16:20 Application of the MDS-UPDRS

Pablo Martínez-Martín

Madrid, Spain

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

- Identify similarities and differences between the MDS-UPDRS and the original UPDRS
- 2. Evaluate key characteristics of the MDS-UPDRS with emphasis on difficult items
- 3. Develop the capability to apply the MDS-UPDRS

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

Wednesday, June 8, 2011

4403 Skills Workshop



Measuring the right things right: Use of assessment tools and interpretation of results

17:30 - 19:00

Location: South Building, Level 800, Room 801A In this interactive session, keys for selection of the appropriate rating scale and parameters for interpretation of change will be discussed.

Peter Hagell Lund, Sweden Barbara Tilley Houston, TX, USA

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

- 1. Identify the most appropriate measurement instrument in relation to a particular research question
- 2. Determine the relation between rating scale attributes (validity, reliability, responsiveness) and parameters of change ('smallest detectable difference' and 'minimally clinically important change')
- 3. Interpret the data analysis related to the outcomes of a study and the importance of the change

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

4404 Skills Workshop



Eye movements and ophthalmologic exams: A door for a precise diagnosis

17:30 - 19:00

Location: South Building, Level 700, Room 701AB In this interactive session, an approach to the use and application of eye examinations for diagnosis and management of movement disorders will be presented.

R. John Leigh
Cleveland, OH, USA
David Zee
Ellicott City, MD, USA

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

- Identify the most appropriate tests of ocular mobility and ophthalmologic examination for specific movement disorders
- 2. Determine what information can be obtained from eye movements and ophthalmologic exams and how to apply the results in daily practice
- 3. Integrate the knowledge relative to eye movement disorders and ophthalmologic manifestations with underlying pathology

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

4505 Video Session



Phenotypic clues to the correct diagnosis of genetic movement disorders

17:30 - 19:00

Location: South Building, Level 700, Room 716AB In this interactive session, the audience should be able to recognize the phenotypes of genetic movement disorders and interpret the clinical, biological or neuroimaging clues in order to identify the main etiologies of these diseases.

Christine Klein Lübeck, Germany Asha Kishore Trivandrum, India

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

- 1. Discuss the diagnostic process for hereditary movement disorders
- 2. Identify the particular clinical features associated with hereditary movement disorders
- 3. Distinguish the different types of abnormal eye movements associated with genetic movement disorders

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

4506 Video Session



Parkinson's disease: What animal models tell us

17:30 - 19:00

Location: South Building, Level 700, Room 714AB This interactive video session will focus on a variety of animal models used for different purposes in the study of Parkinson's disease. The faculty will demonstrate video examples of the animal behaviors and open the discussion to participants for their views on the strengths and weaknesses of these numerous models. Participants with new animal models may contact the faculty to include their models for presentation and group discussion.

Jonathan Brotchie Toronto, ON, Canada Maria Rosario Luquin Pamplona, Spain

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

- Recognize the various animal models of Parkinson's disease including rodents and non-human primates
- 2. Describe the features seen in the animal models of Parkinson's disease
- 3. Discuss the use of animal models of Parkinson's disease and their limitations

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



Wednesday, June 8, 2011

4507 Video Session



Huntington's disease and other chorea

17:30 - 19:00

Location: South Building, Level 800, Room 801B In this interactive video session, video cases of various forms of primary and secondary choreas will be shown, emphasizing key signs that may help in leading to a more precise diagnosis. The use of diagnostic tools and the interpretation of results that support or refute specific diagnoses will be included. Participants may contact the faculty to arrange to present specific problematic cases for group discussion.

Ralf Reilmann Münster, Germany Mohit Bhatt Mumbai, India

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

- 1. List primary and secondary forms of choreas
- 2. Distinguish key features that assist in arriving at a final diagnosis
- 3. Understand diagnostic tools available to diagnose specific forms of chorea

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

4508 Video Session



Pediatric movement disorders

17:30 - 19:00

Location: South Building, Level 700, Room 713AB This interactive video session, will demonstrate a variety of movement disorders in children and review an ordered diagnostic and examination approach to pediatric movement disorders. Treatment will also be discussed through video examples. Participants are encouraged to contact the faculty if they wish to present difficult cases or particularly interesting examples of disorders for group discussion.

Roser Pons
Athens, Greece
Lillian Lee
Quezon City, Philippines

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

- 1. Develop an approach to evaluate pediatric movement disorders
- 2. Identify the major categories of pediatric movement disorders
- 3. Understand the common causes of pediatric movement disorders

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

4509 Video Session



TICKET

Startle, stereotypies and mannerisms: Video cases

17:30 - 19:00

Location: South Building, Level 700, Room 715AB In this interactive session, the phenomenology, clinical features and neurophysiology of abnormal startle, stereotypies and mannerisms will be reviewed using video examples.

Marie Saint-Hilaire Boston, MA, USA Kapil Sethi Augusta, GA, USA

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

- List the classification of neuropsychiatric hyper-startles and their cross cultural variations
- 2. Discuss the neurophysiological mechanisms by which abnormalities of the startle response may occur
- 3. Describe the recent advances in understanding the clinical features, prevalence, and outcomes of motor stereotypy disorders

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

4610 Scientific Discussion



Role of innate and adaptive immunity in neurodegeneration

17:30 - 19:00

Location: South Building, Level 700, Room 717AB In this discussion, the faculty will discuss and present evidence on the deleterious and positive roles of neuroinflammation in neurodegenerative diseases.

V. Hugh Perry Southampton, United Kingdom Howard Gendelman Omaha, NE, USA

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

- 1. Describe neuroinflammatory processes in neurodegeneration
- 2. Discuss the neuroprotective aspects of inflammation in neurodegeneration
- 3. Explain the deleterious aspects of inflammation in neurodegeneration

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

15th International Congress of Parkinson's Disease and Movement Disorders

Wednesday, June 8 and Thursday, June 9, 2011

VO Games Reception with hors d'oeuvres and drinks

19:00 - 20:00

Location: South Building, Level 800

VO Games

20:00 - 23:00

Location: South Building, Level 800, Hall FG

Masters of Ceremony:

Anthony Lang Kapil Sethi

The two teams of Experts:

Team 1: Team 2:

Carlo Colosimo Roongroj Bhidayasiri Steven Frucht Stewart Factor Jose Obeso Timothy Lynch Marie Vidailhet Kathleen Shannon

THURSDAY, JUNE 9, 2011

5101 Plenary Session XI

Emerging pathways in genetic movement disorders

8:00 - 9:30

Location: South Building, Level 800, Hall FG

Chairs: Peter Todd

Ann Arbor, MI, USA Christine Klein

Lübeck, Germany

8:00 Molecular pathways in dominant parkinsonism
Darren Moore

Lausanne, Switzerland

8:30 Hereditary dystonias: Emergence of shared mechanisms Thomas Warner

London, United Kingdom

9:00 Repeat expansion disorders: RNA-mediated neurodegeneration

Peter Todd

Ann Arbor, MI, USA

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

- 1. Understand molecular genetic disease mechanisms of hereditary movement disorders with a specific focus on dominant parkinsonism, hereditary dystonias and repeat expansion disorders.
- Discuss recent advances in the genetics of movement disorders including new research perspectives with a specific focus on dominant parkinsonism, hereditary dystonias and repeat expansion disorders.

5101 Plenary Session XI continued

3. Explain promises and challenges of movement disorder genetics with a specific focus on dominant parkinsonism, hereditary dystonias and repeat expansion disorders.

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

5102 Controversies

The gloves come off: Two current controversies in Parkinson's disease

10:00 - 11:00

Location: South Building, Level 800, Hall FG

Chairs: Matthew Stern

Philadelphia, PA, USA

Werner Poewe Innsbruck, Austria

10:00 Camptocormia is a myopathic disorder

(YES)

Georg Ebersbach

Beelitz-Heilstatten, Germany

10:15 (NO)

Joseph Jankovic Houston, TX, USA

10:30 Continuous dopaminergic stimulation is a useful therapeutic strategy

(YES)

Angelo Antonini

Venice, Italy

10:45 (NO)

John Nutt

Portland, OR, USA

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

- 1. Summarize the phenomenology of camptocormia in people with Parkinson's disease and describe the arguments for and against it being a myopathic disorder
- 2. Describe the theoretical basis underpinning continuous dopaminergic stimulation treatment of Parkinson's disease
- 3. Debate the arguments for and against the utility of this approach in clinical practice

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

Supported by an unrestricted educational grant from Abbott Products Operations AG.



THURSDAY, JUNE 09, 2011

5103 Blue Ribbon Highlights

11:00 - 12:00

Location: South Building, Level 800, Hall FG

Chairs: David Burn

Newcastle upon Tyne, United Kingdom

Susan H. 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 the delegates.

Etienne Hirsch Paris, France

Marcelo Merello

Buenos Aires, Argentina

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

- 1. Understand the key new scientific findings from the poster presentations at the 2011 MDS International Congress
- 2. List the target areas of research focus for 2011-2012
- 3. Identify future primary areas of research in movement

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

Corporate Therapeutic Symposia

12:00 - 12:40

Please see pages 62 -63 for more information Lunch will be provided for session attendees.

Poster Session

Poster Session 4

Location: South Building, Level 800, Hall E

Abstracts: 908 - 1155 Poster Viewing: 9:00 - 18:00 Author Presentation: 13:30 – 15:00

Guided Poster Tours

13:30 - 15:00

Location: South Building, Level 800, Room 808 Guided Poster Tour 13 - Parkinson's disease:

Clinical trials

Guided Poster Tour 14 - Huntington's disease Guided Poster Tour 15 – Surgical therapy:

Parkinson's disease

Guided Poster Tour 16 - Parkinson's disease: Cognition For complete listing of abstracts in each tour, please see pages 76 -83.

5205 Parallel Session



Fragile X Associated Tremor/Ataxia Syndrome [FXTAS]

15:00 - 17:00

Location: South Building, Level 700, Room 717AB

Chairs: Deborah Hall

Chicago, IL, USA

David Rilev

South Euclid, OH, USA

Clinical features: Archetypes, formes frustes, and "gray zone" carriers, treatment strategies, and ongoing research perspectives Deborah Hall

Chicago, IL, USA

15:40 Molecular basis of FXTAS and other Fragile X associated disorders

> Paul Hagerman Davis, CA, USA

16:20 Epidemiology, other Fragile X associated disorders, diagnostic testing, and genetic counseling

Sébastien Jacquemont

Lausanne, Switzerland

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

- 1. Understand the molecular biological basis of FXTAS and the relationship between FXTAS and other Fragile X associated disorders
- 2. List the core clinical features of FXTAS, neurological findings that differ between genders, and the clinical features of "gray zone" gene carriers
- 3. Identify patients most suitable for FXTAS genetic testing and genetic counseling

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

5206 Parallel Session



Genetic testing in Movement Disorders: Approaches and controversies

15:00 - 17:00

Location: South Building, Level 700, Room 714AB

Chairs: Oksana Suchowersky Calgary, AB, Canada

Vincenzo Bonifati

Rotterdam, Netherlands

15:00 Approaches to genetic testing in movement disorders Andrea Nemeth

Oxford, United Kingdom

15:40 Controversies in genetic testing in movement disorders Vincenzo Bonifati

Rotterdam, Netherlands

Thursday, June 09, 2011

5206 Parallel Session



16:20 Genetic counseling in movement disorders

Susan Bressman

New York, NY, USA

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

- 1. Understand methods and approaches to genetic testing
- 2. Discuss controversial issues related to genetic testing
- 3. Understand the needs of patients receiving genetic testing

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

5207 Parallel Session



Human-derived cell lines to study pathogenesis of Parkinson's disease

15:00 - 17:00

Location: South Building, Level 700, Room 713AB

Chairs: Ted Dawson

Baltimore, MD, USA

Carolyn Sue

Sydney, Australia

15:00 The value of human-derived cell lines in studying Parkinson's disease

Carolyn Sue Sydney, Australia

15:40 The use of skin fibroblasts to study pathogenesis of Parkinson's disease

Aleksandar Rakovic

Lübeck, Germany

16:20 The use of induced pluripotent stem cells (iPS) as a Parkinson's disease cell model

Ole Isacson

Belmont, MA, USA

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

- 1. Describe the use of cybrids, fibroblasts, and iPS cells as Parkinson's disease cell models
- Explain the differences, advantages and disadvantages of different human cellular disease models used to investigate Parkinson's disease
- 3. Understand pathogenic mechanisms identified by new human cellular disease models of Parkinson's disease

Recommended Audience: Basic Scientists; Clinical Academicians

5208 Parallel Session



Pain and sensory disturbance in dystonia

15:00 - 17:00

Location: South Building, Level 700, Room 715AB

Chairs: Kailash Bhatia

London, United Kingdom

Ruth Djaldetti

Petah Tikva, Israel

15:00 Sensory abnormalities in dystonia: What we have learned from basic science

Yoshikazu Ugawa

Fukushima, Japan

15:40 Are sensory abnormalities relevant to the pathogenesis of dystonia?

Michele Tinazzi Milan, Italy

16:20 Pain and dystonia: A clinical perspective

Bob van Hilten

Leiden, Netherlands

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

- 1. Describe the basic science evidence of sensory abnormalities in dystonia
- 2. Recognize the role played by sensory abnormalities in the pathogenesis of dystonia
- 3. Assess and manage patients with dystonia and pain

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

Supported by an unrestricted educational grant from Ipsen.

5209 Parallel Session



To sleep, perchance to dream: REM sleep behavior disorder and movement disorders

15:00 - 17:00

Location: South Building, Level 700, Room 716AB

Chairs: Ali Rajput

Saskatoon, SK, Canada

Ron Postuma

Montreal, QC, Canada

15:00 Pathophysiology of RBD: Is the "what" or the "where" that counts?

Jean-François Gagnon

Montreal, QC, Canada

15:40 What does RBD tell us about the Parkinson's disease phenotype?

Ron Postuma

Montreal, QC, Canada

16:20 Advances in diagnosis and treatment of RBD

Paul Reading

Middlesbroug, United Kingdom



THURSDAY, JUNE 09, 2011

5209 Parallel Session



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

- 1. Summarize the pathophysiological basis of RBD
- 2. Describe the phenotypic associations of RBD in Parkinson's disease and explain their potential significance
- 3. Specify the optimal way of diagnosing and treating RBD

Recommended Audience: Basic Scientists; Clinical Academicians; Practitioners

5210 Parallel Session



Mood changes in Parkinson's disease: Depression, anxiety and apathy

15:00 - 17:00

Location: South Building, Level 700, Room 701AB

Chairs: Jaime Kulisevsky

Barcelona, Spain

Paolo Barone

Naples, Italy

15:00 Depression in Parkinson's disease

Paolo Barone Naples, Italy

15:40 Anxiety in Parkinson's disease

Jaime Kulisevsky

Barcelona, Spain

16:20 Apathy in Parkinson's disease

Sergio Starkstein

Crawley, Australia

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

- 1. Recognize that neuropsychiatric symptoms are common in Parkinson's disease, even at the earliest stages, and have important consequences for quality of life and daily functioning
- 2. Compare the epidemiology, diagnostic criteria, and clinical course of depression, anxiety and apathy in Parkinson's disease
- 3. Discuss the evidence for management of these neuropsychiatric symptoms in Parkinson's disease

Recommended Audience: Practitioners; Non-Physician Health Professionals; Students/Residents/Trainees

5307 Teaching Course



Chorea, athetosis, and ballism

15:00 - 17:00

Location: South Building, Level 800, Room 801A

Chairs: Daniel Tarsy

Boston, MA, USA

Kathleen Shannon

Chicago, IL, USA



15:00 Approach to chorea, athetosis and ballism

Kathleen Shannon

Chicago, IL, USA

15:40 Management of Huntington's disease

Roberto Weiser

Caracas, Venezuela

16:20 Updates on Huntington's disease-like diseases (HDL-1, HDL2, DRPLA, SCA 17, etc.)

Vitor Tumas

Ribeirão Preto, Brazil

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

- 1. Understand how to approach patients with chorea, athetosis and ballism
- 2. Be able to manage patients with Huntington's disease
- 3. Learn the latest in the field of HD-like diseases

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

5308 Teaching Course



Update on gait disorders

15:00 - 17:00

Location: South Building, Level 800, Room 801B

Chairs: Bastiaan Bloem

Nijmegen, Netherlands

Nir Giladi

Tel Aviv, Israel

15:00 Gait disorders: Features and differential diagnosis

Bastiaan Bloem

Nijmegen, Netherlands

15:40 Gait issues in normal pressure hydrocephalus and vascular parkinsonism: Diagnosis, neuroimaging, and management

Amos Korczyn

Ramat Aviv, Israel

16:20 Physical therapy in gait disorders –evidence based? Ouincy Almeida

Waterloo, ON, Canada

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

- 1. Understand how to approach, classify and evaluate gait disorders
- 2. Comprehend what frontal gait disorders are
- 3. Be able to manage patients with gait disorders through medical and rehabilitation strategies

Recommended Audience: Practitioners Non-Physician Health Professionals; Students/Residents/Trainees

Welcome to The Movement Disorder Society's Congress in Toronto!



Discover Impax Pharmaceuticals' commitment to developing innovative treatments in Parkinson's disease.

We are proud to provide an unrestricted educational grant to support a plenary session here at the 15th International Congress of Parkinson's Disease and Movement Disorders.



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For Parkinson's Disease

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FP Pharmaceutical Corp. is pleased to be a supporter of the 15th International Congress of Parkinson's Disease and Movement Disorders.

Toronto, Canada June 5-9, 2011

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CORPORATE THERAPEUTIC SYMPOSIA

MONDAY, JUNE 6, 2011

EMD Serono

13:00 - 14:00

Location: South Building, Level 700, Room 718

Safinamide – targeting both dopaminergic and non-dopaminergic pathways

Chair: Anthony Lang

Toronto, ON, Canada

Introduction

Targeting dopaminergic and non-dopaminergic pathways; future treatments in Parkinson's disease

A long-term placebo controlled study in moderate to severe Parkinson's disease patients with safinamide

Challenges and learnings from long-term studies in Parkinson's disease

Closing Remarks

Ipsen

13:00 - 14:00

Location: South Building, Level 700, Room 701

New perspectives for Cervical Dystonia management with Botulinum Toxin

Chairs: Raymond Rosales

Manila, Philippines

Tae Mo Chung

São Paulo, Brazil

Impact of CD on patients and treatment outcomes

Kapil Sethi

Augusta, GA, USA

Real life assessement of Botulinum toxin in Cervical Dystonia: Results from Interest-CD, an international, observational study to define in real life practice response to Botulinum toxin type A (BoNT-A) injection in subjects with idiopathic cervical dystonia Peter Misra

London, United Kingdom

Treatment algorythm of Cervical Dystonia with Botulinum Toxin A: Results of a German study on efficacy and safety of 500U Dysport in 516 naïve patients suffering from latero or torticollis, using a treatment algorythm

Harald Hefter

Duesseldorf, Germany

Tuesday, June 7, 2011

Abbott

12:30 - 13:30

Location: South Building, Level 700, Room 701

Unmet needs in advancing Parkinson's disease: What are we learning to help us meet the challenge?

Chair: A. Jon Stoessl

Vancouver, BC, Canada

Introduction

A. Jon Stoessl

Vancouver, BC, Canada

Milestones in advanced Parkinson's disease management: Learnings from two decades of continuous dopaminergic stimulation (CDS)

Maral Mouradian

Piscataway, NJ, USA

New insights in CDS: An overview of the latest evidence to inform decision making:

Subcutaneous apomorphine pump

Regina Katzenschlager

Vienna, Austria

Intraduodenal levodopa/carbidopa gel infusion

Angelo Antonini

Venice, Italy

Summary

A. Jon Stoessl

Vancouver, BC, Canada

Teva Pharmaceutical Industries Ltd., Teva Neuroscience Inc., and H. Lundbeck A/S

12:30 - 13:30

Location: South Building, Level 700, Room 718

The progression of Parkinson's disease: A new look at preclinical and clinical stages

Chair: C. Warren Olanow

New York, NY, USA

Will diagnosing and treating Parkinson's disease in the premotor stage become a reality?

Matthew Stern

Philadelphia, PA, USA

Do progression rates change over the course of the disease?

A 1 T

Andrew Lees

London, United Kingdom

How can we best measure changes to the clinical progression of Parkinson's disease?

Olivier Rascol

Toulouse, France

Panel discussion and Q&A

15^{th} international congress of Parkinson's **DISEASE AND MOVEMENT DISORDERS**

Wednesday, June 8, 2011

GlaxoSmithKline

12:30 - 13:30

Location: South Building, Level 700, Room 718

The challenges of wearing off - recognition and treatment

Chair: Anthony Schapira

London, United Kingdom

Welcome and introduction

Anthony Schapira

London, United Kingdom

Identification of wearing off - state of the art

Mark Stacy

Durham, NC, USA

Treatment solutions - current evidence

Werner Poewe

Innsbruck, Austria

Thursday, June 9, 2011

Chelsea Therapeutics

12:00 - 12:40

Location: South Building, Level 700, Room 718

Droxidopa: Clinical trial results

Treatment of Neurogenic Orthostatic

Hypotension (NOH) in PD, MSA and PAF

Chair: Joseph Jankovic

Houston, TX, USA

The role of norepinephrine in primary autonomic failure associated with Parkinson's disease, MSA and PAF

- Focus on NOH and autonomic failure in Parkinson's disease

Peter LeWitt

Southfield, MI, USA

Droxidopa; Ph. III clinical data

- Clinical trial considerations for NOH
- 301 data results
- Orthostatic Hypotension Questionnaire (OHQ)
- Symptoms; activities of daily living
- Preliminary patient falls data

Gregor Wenning

Innsbruck, Austria

Droxidopa; 306A clinical data

- OHQ and Falls
- MDSUPDRS scores
- Hoehn & Yahr scores
- Prospective study in 306B

Robert Hauser

Tampa, FL, USA

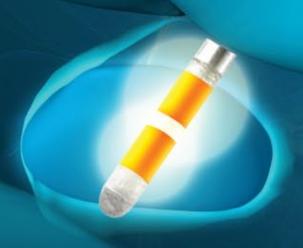
Lunch will be provided for session attendees





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Medtronic is proud to be a gold level sponsor of the 15th International Conference of Parkinson's Disease and Movement Disorders.

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This therapy is not for everyone. DBS Therapy requires brain surgery which could have serious or even fatal complications. Other complications can occur and may require additional surgery. Medtronic DBS Therapy may cause worsening of some symptoms. For additional safety information, please refer to Indications, Safety and Warnings at professional.medtronic.com.

 $\label{lem:median} Med tronic DBS The rapy for Parkinson's Disease, Tremor, and Dystonia: Product technical manual must be reviewed prior to use for detailed disclosure.$

Indications:

Medtronic DBS Therapy for Parkinson's Disease: Bilateral stimulation of the internal globus pallidus (GPi) or the subthalamic nucleus (STN) using Medtronic DBS Therapy for Parkinson's Disease is indicated for adjunctive therapy in reducing some of the symptoms of advanced, levodopa-responsive Parkinson's disease that are not adequately controlled with medication.

Medtronic DBS Therapy for Tremor: Unilateral thalamic stimulation using Medtronic DBS Therapy for Tremor is indicated for the suppression of tremor in the upper extremity. The system is intended for use in patients who are diagnosed with Essential Tremor or Parkinsonian tremor not adequately controlled by medications and where the tremor constitutes a significant functional disability. The safety or effectiveness of this therapy has not been established for bilateral stimulation.

Medtronic DBS Therapy for Dystonia: Unilateral or bilateral stimulation of the internal globus pallidus (GPi) or the subthalamic nucleus (STN) using Medtronic DBS Therapy for Dystonia is indicated as an aid in the management of chronic, intractable (drug refractory) primary dystonia, including generalized and segmental dystonia, hemidystonia, and cervical dystonia (torticollis), for individuals 7 years of age and older.

Contraindications: Contraindications include patients who will be exposed to MRI using a full body radio-frequency (RF) coil or a head transmit coil that extends over the chest area, patients who are unable to properly operate the neurostimulator, or for Parkinson's disease and Essential Tremor, patients for whom test stimulation is unsuccessful. Also, diathermy (e.g., shortwave diathermy, microwave diathermy or therapeutic ultrasound diathermy) is contraindicated because diathermy's energy can be transferred through the implanted system (or any of the separate implanted components), which can cause neurostimulation system or tissue damage and can result in severe injury or death. Transcranial Magnetic Stimulation (TMS) is contraindicated for patients with an implanted DBS System.

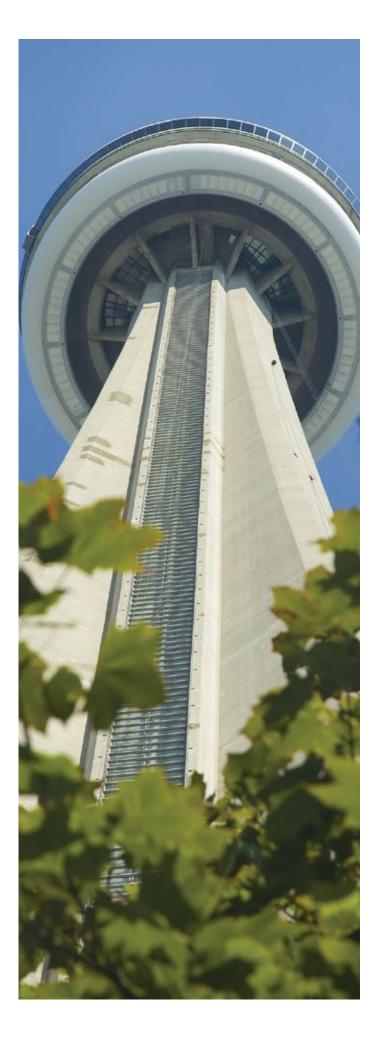
Warnings/ Precautions/Adverse Events: There is a potential risk of tissue damage using stimulation parameter settings of high amplitudes and wide pulse widths. Extreme care should be used with lead implantation in patients with a heightened risk of intracranial hemorrhage. The lead-extension connector should not be placed in the soft tissues of the neck due to an increased incidence of lead fracture. Theft detectors and security screening devices may cause stimulation to switch ON or OFF, and may cause some patients to experience a momentary increase in perceived stimulation. Although some MRI procedures can be performed safely with an implanted DBS System, clinicians should carefully weigh the decision to use MRI in patients with an implanted DBS System. MRI can cause induced voltages in the neurostimulator and/or lead possibly causing uncomfortable, jolting, or shocking levels of stimulation.

The DBS System may be affected by or adversely affect medical equipment such as cardiac pacemakers or therapies, cardioverter/ defibrillators, external defibrillators, ultrasonic equipment, electrocautery, or radiation therapy. Safety and effectiveness has not been established for patients with neurological disease other than Parkinson's disease or Essential Tremor, previous surgical ablation procedures, dementia, coagulopathies, or moderate to severe depression; or for patients who are pregnant, under 18 years, over 75 years of age (Parkinson's Control Therapy) or over 80 years of age (Tremor Control Therapy). For patients with Dystonia, age of implant is suggested to be that at which brain growth is approximately 90% complete or above. Depression, suicidal ideations and suicide have been reported in patients receiving Medtronic DBS Therapy for Movement Disorders, although no direct cause and effect relationship has been established.

Abrupt cessation of stimulation should be avoided as it may cause a return of disease symptoms, in some cases with an intensity greater than was experienced prior to system implant ("rebound" effect). Adverse events related to the therapy, device, or procedure can include: stimulation not effective, cognitive disorders, pain, dyskinesia, dystonia, speech disorders including dysarthria, infection, paresthesia, intracranial hemorrhage, electromagnetic interference, cardiovascular events, visual disturbances, sensory disturbances, device migration, paresis/asthenia, abnormal gait, incoordination, headaches, lead repositioning, thinking abnormal, device explant, hemiplegia, lead fracture, seizures, respiratory events, and shocking or jolting stimulation.

Humanitarian Device (Dystonia): Authorized by Federal Law for the use as an aid in the management of chronic, intractable (drug refractory) primary dystonia, including generalized and segmental dystonia, hemidystonia, and cervical dystonia (torticollis), for individuals 7 years of age and older. The effectiveness of this device for this use has not been demonstrated.





15th International Congress of Parkinson's disease and Movement disorders

EXHIBITOR INFORMATION

EXHIBIT HALL

Location: South Building, Level 800, Hall E

Please allow adequate time in your daily schedule to visit the Exhibit Hall. The exhibition is an integral component of your International Congress experience, offering you the opportunity to speak with representatives of companies providing services or marketing products directly related to Movement Disorders.

Exhibi	it Hall	hours	are as	foll	ows:

Monday, June 6	9:00 -	- 18:00
Tuesday, June7	9:00 -	18:00
Wednesday, June 8	9:00 -	- 18:00
Thursday, June 9	9:00 -	- 16:00

EXHIBITOR REGISTRATION

Location: South Building, Level 600

Exhibitors must register and pick up their badge at the Exhibitor Registration Desk.

Exhibitor Registration Desk hours are as follows:				
Saturday, June 4	16:00 – 20:00			
Sunday, June 5	7:00 – 18:00			
Monday, June 6	7:00 – 18:00			
Tuesday, June 7	7:00 – 18:00			
Wednesday, June 8	7:00 – 18:00			
Thursday, June 9	7:00 – 16:00			

EXHIBITOR BADGE POLICY

Admission to the Exhibit Hall will be by name badge only. Security guards will monitor Exhibit Hall entrances for proper identification. Exhibit stand personnel must show an official MDS exhibitor name badge in order to gain access to the Exhibit Hall during installation, show, or dismantlement hours.

Exhibitor Personnel Badge (Yellow): Allows admittance to the Exhibit Hall only.

ENDORSEMENT DISCLAIMER

Products and services displayed in the Exhibit Hall or advertised in the program occur by contractual business arrangements between MDS and participating companies and organizations. These arrangements do not constitute nor imply an endorsement by MDS of these products and services.





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Telephone: +1 714-246-4500

Fax: +1 714-246-4971 Website: www.allergan.com

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BENIGN ESSENTIAL BLEPHAROSPASM RESEARCH FOUNDATION

P.O. Box 12468 Beaumont, TX United States

Telephone: +1 409-832-0788

Fax: +1 409-832-0890

Website: www.blepharospasm.org

Table #: T4

The Benign Essential Blepharospasm Research Foundation, founded in 1981, is the only organization dedicated solely to finding the cause and cure for Blepharospasm, Meige and related disorders. BEBRF, a volunteer directed, nonprofit organization, has support groups nationwide, promotes awareness and research, distributes educational material to patients and physicians and serves as a referral clearly house.

BRITANNIA PHARMACEUTICALS INTERNATIONAL LTD

Park View House 65 London Road Newbury, Berkshire RG14 1JN United Kingdom

Telephone: +44 1635 568400 Fax: +44 1635 568401

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Website: www.britannia-pharm.com

Booth #: 222

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EXHIBITOR DIRECTORY

CUREPSP

30 Padonia Rd., Suite 201 Timonium, MD 21093 United States

Telephone: +1 800-457-4777

Table #: T9

CurePSP is a non-profit organization dedicated to increasing awareness of progressive supranuclear palsey, cortico-basal degeneration, multiple systems atrophy and related brain diseases; advancing research toward a cure and prevention; educating healthcare professionals; and providing support, education and hope for affected persons and their families.

DYSTONIA MEDICAL RESEARCH FOUNDATION

1 E. Wacker Drive, Suite 2810 Chicago, IL 60601 United States Telephone: +1 312-755-0198

Fax: +1 312-803-0138

Website: www.dystonia-foundation.org

Table #: T6

DMRF's mission is to advance research for more treatments and ultimately a cure for all dystonias, promote education, and support the needs of affected individuals and families. Since its inception in 1976, DMRF has funding over \$26 million in dystonia research.

DYSTONIA MEDICAL RESEARCH FOUNDATION CANADA

909-100 Adelaide St. W. Toronto, ON M5H 1S3 Canada

Telephone: +1 416-488-6974 Fax: +1 416-488-5878

Website: www.dystoniacanada.org

Booth #: T7

The Mission of the Dystonia Medical Research Foundation is to advance research for more treatments and ultimately a cure; to promote awareness and education; and to support the needs and well being of affected individuals and families.

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1201 Main Street Bowdoin, ME 04287 United States Telephone: +1 207-666-8190

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Booth #: 422

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EXHIBITOR DIRECTORY

GE HEALTHCARE

101 Carnegie Center Princeton, NJ 08540 United States

Telephone: +1 609-514-6000

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Website: www.gehealthcare.com

Booth #: 423

GE is making a new commitment to health.

Healthymagination will change the way we approach healthcare, with more than 100 innovations all focused on addressing three critical needs: lowering costs, touching more lives and improving quality.

GLAXOSMITHKLINE

980 Great West Road Brentford, Middlesex TW8 9GS United Kingdom Telephone: +44 20 8047 5000 Website: www.gsk.co.uk

Booth #: 113

GlaxoSmithKline – one of the world's leading research-based pharmaceutical and healthcare companies – is committed to improving the quality of human life by enabling people to do more, feel better and live longer.

GSK makes medicines, vaccines and consumer healthcare products. Its business accounts for 4.8% of the world's pharmaceutical market.

GSK provides products, money, time and equipment to nonprofit organizations to help improve health and education in under-served communities. It focuses on programs that are innovative, sustainable, and bring real benefits to those most in need.

GREAT LAKES NEUROTECH

4415 Euclid Avenue, Suite 443 Cleveland, OH 44103 United States

Telephone: +1 855-456-3876 Fax: +1 216-361-5420

Website: www.GLNeurotech.com

Booth #: 523

Kinesia HomeView™ is a compact, web-based motor assessment system that captures Parkinson's symptoms at home: 1. Clinicians use a web interface to define an evaluation. 2. The patient takes home a tablet-based kit to record diary information and follow video guided assessments. 3. The clinician views online reports and videos.

GUNDERSEN LUTHERAN

1900 South Avenue La Crosse, WI 54601 United States Telephone: +1 608-775-3637 Fax: +1 608-775-8345 Website: www.gundluth.org

Table #: T12

Gundersen Lutheran Health System, based in La Crosse, Wis., offers you the opportunity to practice state-of-the-art medicine. But we also believe that medicine is about people and that's why our medical outcomes are among the nation's best.

IMPAX PHARMACEUTICALS

31047 Genstar Rd. Hayward, CA 94544 United States

Telephone: +1 510-240-6000

Fax: +1 510-471-3200

Website: www.impaxpharma.com

Booth #: 507

Impax Pharmaceuticals is an emerging leader in the development and marketing of specialty CNS products utilizing our formulation expertise, unique drug delivery technologies and drug development and commercialization expertise.

15 TH INTERNATIONAL CONGRESS OF PARKINSON'S **DISEASE AND MOVEMENT DISORDERS**

EXHIBITOR DIRECTORY

INTERNATIONAL ESSENTIAL TREMOR **FOUNDATION**

P.O. Box 14005 Lenexa, KS 66285-4005 United States

Telephone: +1 913-341-3880 Fax: +1 913-341-1296

Website: www.essentialtremor.org

Table #: T3

The International Essential Tremor Foundation, 501(c)(3) nonprofit organization founded in 1988, is guided by an executive board of directors, medical advisory board and executive director. The mission of the IETF is to provide educational information, services and support to those affected by ET and healthcare providers, while funding ET research.

IPSEN

65 Quai Georges Gorse Boulogne Billancourt 92650

France

Telephone: +33 1 58 33 5000 Fax: +33 1 58 33 5001

Website: www.ipsen.com

Booth #: 105

Ipsen is an innovation-driven international specialty pharmaceutical group with over 20 products on the market and a total worldwide staff of nearly 4,200. Its development strategy is based on its activities in specialty medicine, growth drivers in targeted therapeutic areas (oncology, endocrinology, neurology and haematology) combined with primary care products.

KINETICS FOUNDATION

P.O. Box 645

Los Altos, CA 94023-0645

United States

Telephone: +1 650-523-1310

Website: www.kineticsfoundation.org

Table #: T11

The Kinetics Foundation is a Philanthropic foundation endeavoring to accelerate treatments and cures for Parkinson's Disease. Our main areas of focus are: brain infusion techniques for neurotropic factors and the Objective Parkinson's Disease Measurement (OPDM) system. OPDM is comprised of both Dexterity and Mobility measurement devices and a centralized server.

LOGIN CANADA

300 Saulteaux Crescent Winnipeg, MB R3J 3T2

Canada

Telephone: +1 204 837 2987 Fax: +1 204 837 3116

Booth #: 323

Login Canada has become the premier book distributor of health sciences, scientific/technical, and trade books and electronic products. We currently stock over 22,965 titles from more than 625 publishers with access to over 642,850 available titles in medicine, nursing, pharmacy, dentistry, veterinary medicine, allied health, psychology.

LUNDBECK INC.

Four Parkway North Deerfield, IL 60015

United States

Telephone: +1 847-282-1000 Fax: +1 847-282-1001

Website: www.lundbeckinc.com

Booth #: 511, 515

Headquartered in Deerfield, Illinois, with a portfolio of 17 specialty therapies and a pipeline of promising central nervous system (CNS) drugs, Lundbeck Inc. is committed to providing innovative therapies that fulfill unmet medical needs of people with CNS disorders and rare diseases for which few, if any, effective treatments are available.

MEDTRONIC, INC.

710 Medtronic Parkway Minneapolis, MN 55432

United States

Telephone: +1 800-328-2518

Fax: +1 763-505-1000

Website: www.medtronic.com

Booth #: 213

At Medtronic, we're committed to Innovating for life by pushing the boundaries of medical technology and changing the way the world treats chronic disease. Each year, 6 million patients benefit from our technology. Medtronic DBS Therapy has been used in more than 80,000 patients for the treatment of Parkinson's disease, essential tremor and dystonia.



EXHIBITOR DIRECTORY

MERCK SERONO SA, AN AFFILIATE OF MERCK KGAA, DARMSTADT, GERMANY

9, Chemin des Mines

Geneva 1202 Switzerland

Telephone: +41 22 414 3000

Fax: +41 22 414 2179

Website: www.merckserono.com

Booth #: 405

Merck Serono has a long-term commitment to the development of innovative treatments to help manage neurological disorders such as Multiple Sclerosis and Parkinson's disease. Through groundbreaking science and patient-friendly drug delivery systems, we help patients with neurodegenerative diseases to live fuller and more satisfying lives. Merck Serono conducts extensive research in the area of neurodegenerative diseases in order to offer new therapeutic options to patients with serious unmet medical needs. In the United States and Canada, EMD Serono operates through separately incorporated affiliates.

MERZ PHARMACEUTICALS GMBH

Eckenheimer Landstrasse 100 Frankfurt 60318

Germany

Telephone: +49 69 1503-0 Website: www.merz.com

Booth #: 529

Merz Pharmaceuticals is a research based pharmaceutical company, headquartered in Frankfurt, Germany, with key competences in neuroreceptor biology. Merz has developed memantine for moderate to severe Alzheimer disease and Xeomin*, a botulinum toxin A free from complexing proteins.

NATIONAL SPASMODIC TORTICOLLIS ASSOCIATION

9920 Talbert Ave.

Fountain Valley, CA 92708

United States

Telephone: +1 714-378-9837 Website: www.torticollis.org

Table #: T5

The National Spasmodic Torticollis Association is a non profit organization supporting the needs and well being of individuals and families affected by spasmodic torticollis/ cervical dystonia. We provide a support hotline; magazines; symposiums; network of support groups & contact people; website and email support; message forum; neurologists directory; and information packets.

NOVARTIS PHARMA AG

Forum 1, Novartis Campus Basel 4056

Switzerland

Telephone: +41 61 324 1111

Fax: +41 61 324 8001 Website: www.novartis.com

Booth #: 313

Novartis provides healthcare solutions that address the evolving needs of patients and societies. Focused solely on healthcare, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, cost-saving generic pharmaceuticals, preventive vaccines, diagnostic tools and consumer health products. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 100,000 full-time-equivalent associates and operate in over 140 countries around the world.

15^{th} international congress of Parkinson's **DISEASE AND MOVEMENT DISORDERS**

EXHIBITOR DIRECTORY

ORION CORPORATION ORION PHARMA

Orionintie 1 Espoo 02101 Finland

Telephone: +358 10 4261 Website: www.orion.fi

Booth #: 313

Orion Corporation is a Finnish listed company which is dedicated to treating and preventing disease by discovery and developing innovative medicinal treatments. Orion is the originator of Stalevo" (levodopa, carbidopa, entacapone) for Parkinson's disease.

PARKINSON SOCIETY CANADA, & CENTRAL + NORTHERN ONTARIO REGION

4211 Yonge St., Suite 316 Toronto, ON M2P 3A9 Canada

Telephone: +1 416-227-9700 Fax: +1 416-227-9600

Website: www.parkinson.ca

Table #: T8

Parkinson Society Canada, with our regional partners, is the only Canadian charitable organization dedicated to research, education, support and advocacy on behalf of over 100,000 Canadians living with Parkinson's.

RENISHAW MAYFIELD

66, Route du Stand Nyon, VD 1260 Switzerland

Telephone: +41 22 362 6974 Fax: +41 22 362 6973

Website: www.renishaw.com/neuro

Booth #: 325

Renishaw is committed to delivering precision with advanced engineering technology in stereotactic neurosurgery.

The NeuroMate * stereotactic robotic system is proven in many years and thousands of procedures, providing accuracy, stability and repeatability to neurosurgeons performing procedures like DBS, SEEG, stereotactic biopsy and neuroendoscopy as well as other indications.

SOLSTICE NEUROSCIENCES. A US WORLDMEDS COMPANY

4010 Dupont Circle, Suite L-7 Louisville, KY 40207 United States

Telephone: +1 502-714-7800

Booth #: 424

US WorldMeds, LLC:

We are a specialty pharmaceutical company, located in Louisville, Kentucky, whose mission is to develop, license and commercialize unique and significant pharmaceuticals that address unmet medical needs or overcome the limitations of existing products.

ST. JUDE MEDICAL NEUROMODULATION **DIVISION HEADQUARTERS**

6901 Preston Road Plano, Texas 75024 United States

Telephone: +1 972-309-8000 Fax: +1 972-309-8150 Website: www.sjm.com

Booth #: 517

St. Jude Medical develops medical technology designed to put more control into the hands of those who treat neurological, cardiac and chronc pain patients worldwide. SJM has provided leading, neurostimulation therapy innovations for 30 years. The company is dedicated to advancing the practice of medicine by reducing risk wherever possible and contributing to successful patient outcomes.



EXHIBITOR DIRECTORY

TEVA PHARMACEUTICAL INDUSTRIES LTD.

5 Basel Street Petah Tikva 49131 Israel

Telephone: +972 3 926 7607 Fax: +972 3 926 7878

Website: www.tevapharm.com

Booth #: 205

Teva (NASDAQ:Teva) is a leading global pharmaceutical company and the world's largest generic drug maker committed to increasing access to high-quality healthcare. Teva has a global product portfolio of nearly 1500 molecules and a direct presence in about 60 countries. Teva's branded businesses focus on neurological, respiratory and women's health therapeutic areas as well as biologics.

H. LUNDBECK A/S

Ottiliavej 7-9 Valby 2500 Denmark

Website: www.lundbeck.com

Booth #: 205

H. Lundbeck A/S is an international pharmaceutical company dedicated in research and development of new drugs for treatment of CNS disorders including depression, schizophrenia, Alzheimer's disease and Parkinson's disease. Research has been the foundation of Lundbeck activities for more than 50 years, and the company's mission is to improve the quality of life for people suffering from psychiatric and neurological disorders.

TEVA NEUROSCIENCE

901 E. 104th Street, Suite 900 Kansas City, MO 64131 USA

Website: www.tevaneuroscience.com

Booth #: 205

Teva Neuroscience is dedicated to the investigation, development and commercialization of innovative products and services that address patient needs in the areas of multiple sclerosis, Parkinson's disease and other neurological disorders. Both Copaxone for MS, and Azilect for PD, have established leadership positions in their respective markets. Our vision is to be the North American leader in neurology through the quality of our people, the quality of our products and our focus on the patient.

About Azilect

AZILECT® tablets (rasagiline) is appropriate throughout the progression of PD and indicated for the treatment of the signs and symptoms of Parkinson's disease both as initial monotherapy and as adjunct to levodopa.

UCB PHARMA SA

Allée de la Recherche 60 1070 Brussels Belgium

Telephone: +32 2 559 9999 Fax: +32 2 559 9900 Website: www.ucb.com

Booth #: 229

UCB, headquartered in Brussels, Belgium, is a global biopharmaceutical company dedicated to the research, development and commercialization of innovative medicines with a focus on the fields of central nervous system and immunology disorders. Employing approximately 8 000 people in over 40 countries, UCB generated revenue of EUR 3.2 billion in revenue in 2010. UCB is listed on Euronext Brussels (symbol: UCB).

15th International Congress of Parkinson's Disease and Movement Disorders

EXHIBITOR DIRECTORY

VALEANT CANADA

4787 Levy Street Montréal, QC H4R 2P9 Canada

Telephone: +1 800-361-4261 Fax: +1 800-361-4266

Website: www.valeantcanada.com

Booth #: 329

Valeant Canada is a specialty pharmaceutical company and a subsidiary of Valeant Pharmaceuticals International, Inc. Valeant Canada manufactures, markets, and/or distributes pharmaceutical products to both primary care and specialist physicians in Canada. The Company focuses its efforts primarily in the areas of Pain Management, Cardiovascular Disease, Neurology and Dermatology.

WILEY-BLACKWELL

350 Main Street Malden, MA 02148 USA

Telephone: +1 800-532-5954 Fax: +1 781-338-8552 Website: www.wiley.com

Table #: T10

Wiley-Blackwell is the international scientific, technical, medical and scholarly publishing business of John Wiley & Sons, with strengths in every major academic and professional field and partnerships with many of the world's leading societies. We are honored to have been the Publisher of *Movement Disorders* since 2001. For more information, please visit www.wileyblackwell.com or www.wileyonlinelibrary.com.

WORLD PARKINSON CONGRESS

1359 Broadway, Suite 1509 New York, NY 10018 United States

Telephone: +1 212-923-4700 Fax: +1 212-923-4778

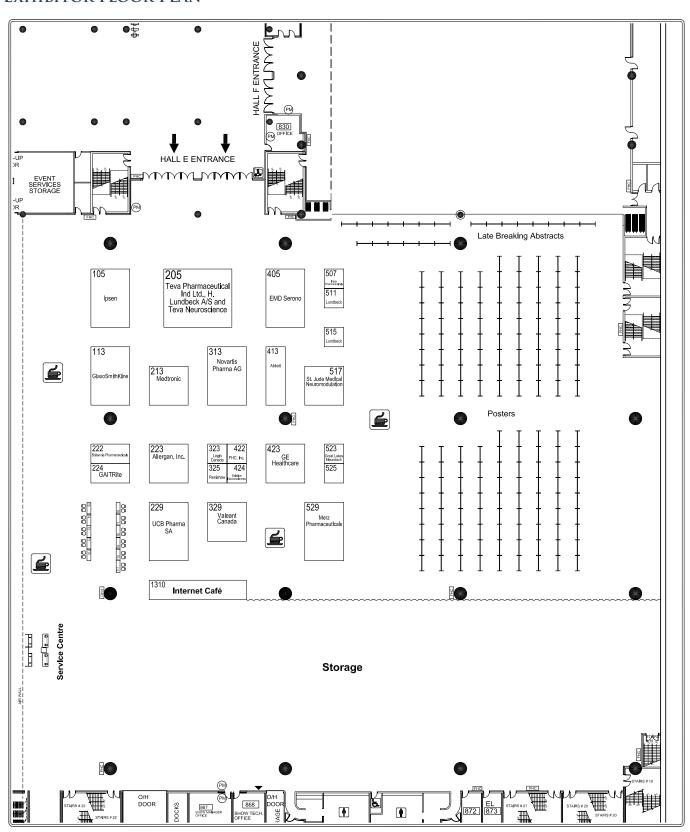
Website: www.worldpdcongress.org

Table #: T1

The 3rd World Parkinson Congress | **WPC 2013** will take place from October 1-3, 2013 in Montreal, Canada. Physicians, neuroscientists, nurses, rehabilitation specialists, people with PD, care partners and government officials will come together to learn about the latest scientific discoveries, medical practices and care initiatives for Parkinson's disease.



EXHIBITOR FLOOR PLAN



15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS

GUIDED POSTER TOURS

Guided Poster Tour 1 – Dystonia

South Building, Level 800, Room 808 14:00 - 15:30 Monday, June 6, 2011

Tour Leaders: Kailash Bhatia, *London, United Kingdom;* Marie Vidailhet, *Paris, France*

- 692 Clinical profile of children with dystonia in tertiary rehabilitation centre
 - K. Kothur, R.C. Dale, M.-C. Waugh (Westmead, NSW, Australia)
- Phenotypic spectrum of musician's dystonia: A task-specific disorder?
 A. Schmidt, H.-C. Jabusch, E. Altenmüller, L. Enders, R. Saunders-Pullman, S.B. Bressman, A. Münchau, J. Hagenah, C. Klein (Luebeck,
- 693 Hypoactivation of the putamen bilaterally during a temporal discrimination task in adult onset primary torsion dystonia R. Whelan, D. Bradley, O. Kimmich, S. O'Riordan, R.B. Reilly, M. Hutchinson (Dublin, Ireland)
- 608 The temporal discrimination threshold in sporadic AOPTD: Utility in the investigation of patients and their first degree relatives
 D. Bradley, O. Kimmich, R. Whelan, R. Walsh, P. Brady,
 N. Mulrooney, R. Reilly, S. Hutchinson, F. Molloy, M. Hutchinson (Dublin, Ireland)
- Pool-based genome-wide association study of late-onset primary dystonia
 M.S. LeDoux, J. Xiao, R.W. Bastian, J.S. Perlmutter, B.A. Racette, S.D. Tabbal, M. Karimi, R.C. Paniello, Z.K. Wszolek, R.J. Uitti, J.A. Van Gerpen, D.K. Simon, D. Tarsy, P. Hedera, D.D. Truong, K.P. Frei, A. Blitzer, Y. Zhao, R.F. Pfeiffer, M. Rudzinska (Memphis, Tennessee, USA)
- Parkin disease presenting as primary pure dystonia: A report of five cases

 A F. Elia F. Del Sorbo J. M. Romito B. Caravadia A. Albanese

A.E. Elia, F. Del Sorbo, L.M. Romito, B. Garavaglia, A. Albanese (Milan, Italy)

- IncobotulinumtoxinA (NT-201) injections are safe and effective in adult subjects with cervical dystonia across dosing intervals in a repeated dose-study
 - D. Truong, H.H. Fernandez, S.K. Grafe (Cleveland, Ohio, USA)
- 656 Pilot study of topical acetyl hexapeptide-8 (AH8) in treatment of blepharospasm

C. Lungu, E. Considine, S. Zahir, M. Hallett (Bethesda, Maryland, USA)

638 Improvement of childhood dystonia following pallidal deep brain stimulation (DBS) in relation to disease duration and severity at the time of surgery

M. Kaminska, K. Tustin, H. Gimeno, L. Baker, S. Perides, D.E. Lumsden, R. Selway, K. Ashkan, J.-P. Lin (London, United Kingdom)

665 The development of a non motor scale for cranio-cervical dystonia Y. Naidu, P. Martinez-Martin, A. Rizos, W. Jost, V. Metta, T. Warner, N. Hulse, K. Ashkan, K. Ray Chaudhuri (London, United Kingdom)

Guided Poster Tour 2 – Parkinson's disease: Neuropharmacology

South Building, Level 800, Room 808 14:00 - 15:30 Monday, June 6, 2011

Tour Leaders: Susan Fox, *Toronto, ON, Canada;* Per Odin, *Bremerhaven, Germany*

- Mixed dopamine (DAT) and serotonin (SERT) re-uptake inhibitors with equal DAT: SERT affinity increase quality and duration of anti-parkinsonian action of L-DOPA in the MPTP-lesioned primate
 P. Huot, T.H. Johnston, K.D. Lewis, J.B. Koprich, G. Reyes, S.H. Fox, M.J. Piggott, J.M. Brotchie (Toronto, Ontario, Canada)
- Neuroprotective effect of pegylated G-CSF in parkinsonian non-human primates
 R. Aron Badin, T. Frank, P. Hantraye, M. Bähr, N. Deglon, J. Weishaupt (Fontenay-aux-Roses, France)
- 829 Inhibition of striatal calcium dependent proteins display behavioural and neurochemical improvements in a rat model of L-Dopa induced dyskinesia

L. Chagniel, C. Robitaille, M. Cyr (Trois-Rivières, Quebec, Canada)

- 838 Prior treatment with PYM50028, an orally active neurotrophic factor modulator in development for Parkinson's disease, reduces L-Dopa induced dyskinesia in MPTP-lesioned macaques
 T.H. Johnston, S.H. Fox, P.A. Howson, J.M. Brotchie (Toronto, Ontario, Canada)
- Addiction-like manifestations and Parkinson's disease: Relationships between DAWS, DDS and ICDs
 N. Limotai, G. Oyama, C. Go, O. Bernal, T. Ong, R. Bhidayasiri, D. Bowers, H. Ward, M. Okun (Patumwan, Bangkok, Thailand)
- 837 The 5-HT2A partial agonist R-MDMA reduces psychosis-like behaviour in the MPTP-lesioned non-human primate model of Parkinson's disease

P. Huot, T.H. Johnston, K.D. Lewis, G. Reyes, S.H. Fox, M.J. Piggott, J.M. Brotchie (Toronto, Ontario, Canada)

- 848 Parkinson's disease patients treated with rasagiline and antidepressants: Assessing the occurrence of serotonin toxicity M. Panisset, J.J. Chen, S.H. Rhyhee (Montreal, Quebec, Canada)
- 832 The effect of high dose orally disintegrated tablet selegiline, a selective monoamine oxidase B inhibitor (MAO-B), on monoamine oxidase A (MAO-A), and compared to transdermal formulation of selegiline

S. Fahn, F. McCall-Perez, J. Hammond, F. Telang, J. Logan, G.-J. Want, J. Fowler (New York, New York, USA)

- 840 Actively-transported levodopa prodrug XP21279: A study in Parkinson's disease subjects experiencing motor fluctuations
 P. LeWitt, A. Ellenbogen, D. Chen, R. Lal, K. McGuire, K. Zomorodi, W. Luo, F.J. Huff (West Bloomfield, Michigan, USA)
- 847 Administration of continuous subcutaneous carbidopa improves levodopa pharmacokinetics
 O. Yacoby-Zeevi, S. Oren, P. LeWitt (Ness Ziona, Israel)



GUIDED POSTER TOURS

Guided Poster Tour 3 – Parkinson's disease: Behavioral disorders

South Building, Level 800, Room 808 14:00 - 15:30 Monday, June 6, 2011

Tour Leaders: David Burn, *Newcastle upon Tyne, United Kingdom;*Dag Aarsland, *Stavanger, Norway*

- 341 1H nuclear magnetic resonance spectroscopy findings in PD patients with psychosis
 M. Rodríguez-Violante, A. Cervantes-Arriaga, A. Villar-Velarde, C. De la Fuente, T. Corona (Mexico City, Mexico)
- 305 Dopaminergic modulation of the monitoring and resolution of emotional conflict in Parkinson's disease
 V. Fleury, E. Cousin, V. Czernecki, P. Pollak, P. Krack (Grenoble, France)
- 331 Psychiatric co-morbidities in Parkinson's disease patients with impulse control disorder referred to a neuropsychiatry clinic D. Okai, S. Askey-Jones, M. Samuel, R.S. Brown, A. David (London, Camberwell, United Kingdom)
- 336 Prefrontal dopaminergic changes associated with pathological gambling in Parkinson's disease
 N.J. Ray, F. Antonelli, J.M. Miyasaki, J.H. Ko, M. Zurowski, A.E. Lang,
 S. Houle, G. Pellecchia, A.P. Strafella (Toronto, Ontario, Canada)
- Personality traits of PD patients with hyperdopaminergic behaviors induced by dopamine agonists
 H. Hesekamp, F. Pineau, C. Welter, M. Schüpbach, V. Czernecki,
 A. Pelissolo, L. Mallet, A.-M. Bonnet, D. Grabli, M.-L. Welter,
- 292 Dopamine-agonists and impulsivity: The contribution of decision-making
 F. Antonelli, J.H. Ko, J. Myasaki, N. Ray, G. Pellecchia, F. Valzania,

S. Houle, A. Lang, A. Strafella (Toronto, Ontario, Canada)

M. Vidailhet, E. Roze, J.-C. Corvol (Paris, France)

- 333 Clinical features of dopamine agonist withdrawal syndrome (DAWS) in a movement disorders clinic
 M. Pondal, C. Marras, J.M. Miyasaki, E. Moro, M. Armstrong,
 A.P. Strafella, B.B. Shah, S.H. Fox, L.K. Prashanth, N. Phielipp,
 A.E. Lang (Toronto, Ontario, Canada)
- Quality of sexual life in Parkinson's disease: Perception of patients and spouses
 G. Bronner, O.S. Cohen, E. Kozlova, N. Molshatzki, H. Strauss, S. Hassin-Baer (Ramat-Gan, Israel)
- 324 Evaluation of depression in Parkinson's disease patients M. Lisak, Z. Trkanjec, V. Demarin (Zagreb, Croatia)

Guided Poster Tour 4 – Rating scales and assessment tools

South Building, Level 800, Room 808 14:00 - 15:30 Monday, June 6, 2011

Tour Leaders: Pablo Martínez-Martín, *Madrid, Spain* Anette Schrag, *London, United Kingdom*

- 1079 Assuring inter-rater reliability of the UPDRS in a large international clinical trial

 A Kett I Swartz (London United Kingdom)
 - A. Kott, J. Swartz (London, United Kingdom)
- 1077 Postural instability and gait difficulty scores from the MDS-UPDRS G.T. Stebbins, C.G. Goetz, D.J. Burn, J. Jankovic, B.C. Tilley (Chicago, Illinois, USA)
- Executive function correlates with axial signs as detected by the MDS-UPDRS
 C.L. Vaughan, G.T. Stebbins, C.G. Goetz, B.A. Bernard, J.G. Goldman (Chicago, Illinois, USA)
- 526 National Institute of Neurological Disorders and Stroke Parkinson's disease common data elements project W.R. Galpern, On Behalf of the NINDS PD CDE Working Group (Bethesda, Maryland, USA)
- 1080 Assessment of PD speech anomalies @ home T. Khan, J. Westin (Borlänge, Sweden)
- Predicting falls in patients with Parkinson's disease based on clinical balance measures
 L.R.S. Almeida, G.T. Valença, N.N. Negreiros (Salvador, Bahia, Brazil)
- 522 Comparison between Berg balance scale (BBS) and gait and balance scale (GABS): Properties of the two scales to evaluate postural instability in patients with Parkinson's disease
 J.O. Baggio, M.B. Curtarelli, G.R. Rodrigues, D. Sabino, C.S. Pinto, V. Tumas (Ribeirão Preto, Brazil)
- 1075 What is important in paediatric movement disorders Primary concerns of carers and children in daily life using the Canadian occupational performance measure (COPM)
 H. Gimeno, K. Tustin, A. Gordon, J.P. Lin (London, United Kingdom)
- 1076 Optimization of tremor assessment using the Apple iPhone 4 H. Rusk, J. Baran, L. Kumbier, K. Sillay (Madison, Wisconsin, USA)
- Short assessment of apraxia in patients with Parkinson's disease: The validity of the apraxia screen of TULIA (AST)
 T. Vanbellingen, B. Kersten, G. Lopez, C. Lungu, F. Baronti, R. Müri, M. Hallett, S. Bohlhalter (Luzern, Switzerland)

15TH INTERNATIONAL CONGRESS OF PARKINSON'S DISEASE AND MOVEMENT DISORDERS

GUIDED POSTER TOURS

Guided Poster Tour 5 – Basic science

South Building, Level 800, Room 808 13:30 - 15:00 Tuesday, June 7, 2011

Tour Leaders: Etienne Hirsch, *Paris, France* Serge Przedborski, *New York, NY, USA*

- A nonhuman primate model of Parkinson's disease associated with cortical and subcortical dopaminergic, noradrenergic and serotonergic neuronal degeneration
 - G. Masilamoni, A.P. Weinkle, J. Bogenpohl, O.A. Groover, T. Wichmann, Y. Smith (Atlanta, Georgia, USA)
- 94 Changes in the solubility and phosphorylation of α-synuclein over the course of Parkinson's disease
 LX, Zhou, Y. Huang, LP, Anderson, W.P. Gai, X.M. Wang.
 - J.X. Zhou, Y. Huang, J.P. Anderson, W.P. Gai, X.M. Wang, G.M. Halliday (Sydney, New South Wales, Australia)
- 80 Nedd4 ubiquitinates a-synuclein and promotes its degradation by the endosomal-lysosomal pathway; implications for Lewy body disorders
 - $G.K.\ Tofaris,\ H.T.\ Kim,\ R.\ Hourez,\ A.L.\ Goldberg\ (Oxford,\ United Kingdom)$
- Characterization of ion-permeable alpha-synculein pores in lipid membranes A possible mechanism of neuronal cell death in the pathogenesis of synucleinopathies?
 - F. Schmidt, J. Levin, H. Thomas, K. Frits, G. Armin, B. Kai (München, Germany)
- 60 Causal therapy of Parkinson's disease with anle138b, a novel protein aggregation inhibitor
 - J. Levin, J. Wagner, S. Ryazanov, A. Leonov, S. Shi, F. Schmidt, C. Prix, U. Bertsch, G. Mitteregger-Kretzschmar, M. Geissen, T. Hirschberger, P. Tavan, J. Pilger, M. Zweckstetter, T. Frank, M. Baehr, J. Weishaupt, M. Uhr, H. Urlaub, U. Teichmann, K. Boetzel, M. Groschup, H.A. Kretzschmar, C. Griesinger, A. Giese (Munich, Germany)
- Distinct roles in vivo for the ubiquitin-proteasome system and the autophagy-lysosomal pathway in the degradation of a-synuclein
 D. Ebrahimi-Fakhari, V.K. Unni, E. Rockenstein, E. Masliah,
 B.T. Hyman, P.J. McLean (Charlestown, Massachusetts, USA)
- 44 Differential pathomechanisms of disease-associated variants of the mitochondrial chaperone mortalin in Parkinson's disease L.F. Burbulla, H. Kato, D. Rapaport, H. Wolburg, D. Woitalla, O. Riess, R. Krüger (Tübingen, Germany)
- Role of TPPP/p25 on alpha-synuclein-mediated oligodendroglial degeneration and the protective effect of SIRT2 inhibition in a cellular model of multiple system atrophy
 T. Hasegawa, T. Baba, M. Kobayashi, M. Konno, N. Sugeno, A. Kikuchi, A. Takeda (Sendai, Miyagi, Japan)
- Extending the phenotype of transgenic MSA: Presence of h--syn in PNS
 D. Kuzdas, M. Kress, L. Klimaschewski, N. Stefanova, G.K. Wenning
- Wnraveling brainstem-spinal circuitries involved in the control of gait

(Innsbruck, Tirol, Austria)

V.G. van der Horst, C.B. Saper (Boston, Massachusetts, USA)

Guided Poster Tour 6 – Sleep disorders and RLS

South Building, Level 800, Room 808 13:30 - 15:00 Tuesday, June 7, 2011

Tour Leaders: Kapil Sethi, *Augusta, GA, USA* Cynthia Comella, *Chicago, IL, USA*

- 1081 Transdermal rotigotine improved mood disturbance and depressive symptoms due to restless legs syndrome (RLS) symptoms in patients with idiopathic RLS
 - H. Beneš, C. Trenkwalder, F. Grieger, E. Schollmayer, K. Moran, L. Bauer, R. Allen, R. Kohnen (Schwerin, Germany)
- 1084 Sensitivity and specificity of a survey for the diagnosis of restless legs syndrome
 - V. Parisi, G. Persi, M. Clara, J. Etcheverry, E. Gatto (Buenos Aires, Argentina)
- 1094 Drug-induced restless legs syndrome: A study in the french pharmacovigilance database
 - S. Perez-Lloret, O. Rascol, J.-L. Montastruc, And the French Network of Pharmacovigilance Center (Toulouse, France)
- 1093 Epidemiology of restless legs syndrome in pregnancy in Nigeria A.A. Olugbodi, A.O. Tomi-Olugbodi, N.O. Makinde, E.O. Orji, R.O. Biobaku, N. Okubadejo (Reading, Pennsylvania, USA)
- 1092 Restless legs syndrome in multiple sclerosis
 M. Rohani, S. Miri, M.A. Sahraian, G.A. Shahidi, B. Zamani,
 M. Moradi Lakeh (Tehran, Islamic Republic of Iran)
- 1082 Evaluation of small fibers sensory pathways function in restless legs syndrome Laser evoked potentials study
 M. Fila, A. Bogucki (Lodz, Poland)
- 1096 Does peripheral nervous system play an important role in pathophysiology of RLS? Evidence from domperidone
 S.J.G. Rios Romenets, C. Galatas, R. Postuma (Montreal, Quebec, Canada)
- 1091 A double-blind, randomized, placebo-controlled exploratory study of SYN118 in restless legs syndrome
 H. Benes, I. Eisensehr, B. Högl, U. Meya, M. Sarnecki, R. Kohnen,

W. Oertel (Basel, Switzerland)

- 1088 Transdermal rotigotine improved daytime functioning and daytime symptoms in patients with idiopathic restless legs syndrome
 R. Kohnen, D. García-Borreguero, R. Allen, F. Grieger, L. Bauer,
 E. Schollmayer, C. Trenkwalder (Nürnberg, Germany)
- 1086 Augmentation of restless legs syndrome (RLS) under rotigotine: Results from a 5-year prospective, multinational, open-label study R. Kohnen, D. García-Borreguero, H. Beneš, L. Ferini-Strambi, B. Högl, W. Oertel, C. Trenkwalder, A. Fichtner, E. Schollmayer (Nürnberg, Germany)



GUIDED POSTER TOURS

Guided Poster Tour 7 – Parkinsonisms (parkinson plus and secondary)

South Building, Level 800, Room 808 13:30 - 15:00 Tuesday, June 7, 2011

Tour Leaders: Dennis Dickson, *Jacksonville, FL, USA* Deborah Hall, *Chicago, IL, USA*

- 1006 Extrastriatal [123I] FP-CIT uptake helps discriminate between Parkinson's disease and multiple system atrophy A. Eusebio, E. Guedj, T. Witjas, O. Mundler, J.-P. Azulay (Marseille, France)
- 1043 Progression of clinical milestones in multiple system atrophy An analysis of the EMSA natural history study
 G.K. Wenning, F. Krismer, F. Geser, S. Duerr, K. Seppi, W. Poewe, On Behalf of the EMSA-SG (Innsbruck, Tirol, Austria)
- 1010 Longitudinal assessment of progressive supranuclear palsy and determination of the optimum test for monitoring deterioration B.C.P. Ghosh, J.R. Hodges, J.B. Rowe (Southampton, Hampshire, United Kingdom)
- 997 Square wave jerks in progressive supranuclear palsy and corticobasal degeneration: A clinicopathological study
 N.M. Browner, J.P. Vonsattel, P. Greene, S. Frucht, S. Fahn (Chapel Hill, North Carolina, USA)
- Balance disturbances and falls predict rapid transition to disability in patients with age-related white matter changes Results of the 6-year follow-up of the LADIS study
 Blahak, H. Baezner, L. Pantoni, D. Inzitari, M.G. Hennerici (Mannheim, Germany)
- 1029 Could FRM1 premutation develop two phenotypes of parkinsonism with different pathophysiological mechanism?
 E. Peña, M. Llanero, S. Montilla, B. Gonzalez, C. Fernandez (Madrid, Spain)
- 987 Clinicopathological comparison of globular glial tauopathies presenting with motor neuron disease or frontotemporal dementia:

 An emerging group of 4-repeat tauopathies

 Z. Ahmed, K. Doherty, L. Silveira-Moriyama, R. Bandopadhyay,
 T. Lashley, J. Newcombe, S.S. O'Sullivan, S. Wroe, R. De Silva,
 J.L. Holton, A.J. Lees, T. Revesz (London, United Kingdom)
- High functioning autism and Asperger's syndrome: The way they move A video-based clinical study
 C. Ganos, O. Schunke, S. Zittel, D. Schöttle, N. David, A.K. Engel, A. Münchau (Hamburg, Germany)
- 994 F-18 FDG-PET in differential diagnosis of parkinsonian syndromes M. Tripathi, A. Batla, S. Kushwaha, H. Malhotra, M.M.D. Souza, D.K. Gupta, A. Jaimini, R. Sharma, A. Mondal, R. Nehru (New Delhi, Delhi, India)
- 990 Complex saccadic tasks in a cohort of early parkinsonian patients C.A. Antoniades, C. Kennard, M. Hu (Oxford, United Kingdom)

Guided Poster Tour 8 – Tremor

South Building, Level 800, Room 808 13:30 - 15:00 Tuesday, June 7, 2011

Tour Leaders: David Riley, South Euclid, OH, USA Rodger Elble, Springfield, IL, USA

- 1132 Essential tremor quantification during activities of daily living D.A. Heldman, D. Filipkowski, J. Jankovic, D. Vaillancourt, J. Prodoehl, R.J. Elble, J.P. Giuffrida (Cleveland, Ohio, USA)
- 1136 Re-examination of the tremor disability scale-revised: Case control comparison
 D.A. Lundervold, P.A. Ament, P.S. Holt, E. Good (Kansas City, Missouri, USA)
- Logarithmic relationship between head tremor and 5-point tremor rating
 R. Elble, H. Hellriegel, J. Raethjen, G. Deuschl (Springfield, Illinois, USA)
- 1145 A new diagnostic test to distinguish tremulous Parkinson's disease from advanced essential tremor

 M. Muthuraman, A. Hossen, U. Heute, G. Deuschl, J. Raethjen (Kiel,
- Safety and efficacy of octanoic acid in the treatment of essential tremor
 D. Haubenberger, G.J. McCrossin, S. Auh, C. Lungu, L. Scheider, F.B. Nahab, E. Considine, M. Hallett (Bethesda, Maryland, USA)
- Use of botulinum toxin type A for refractary limb tremor: 24 months follow-up
 C. Borrue-Fernandez, C. Barbosa-Lopez (San Sebastian de lo Reyes, Madrid, Spain)
- Gamma knife radiosurgery for intractable tremors: Clinical outcome for 45 patients
 T. Witjas, R. Carron, A. Eusebio, M. Leveque, J.P. Azulay, J. Regis (Marseille, France)
- 1147 Changes in anti-tremor medications following deep brain stimulation for essential tremor
 A.S. Resnick, T. Malapira, D.A. Smith, F.L. Vale, K.L. Sullivan, A.M. Miller, T.A. Zesiewicz (Tampa, Florida, USA)
- Moving towards 'laboratory supported' criteria for psychogenic tremor
 P. Schwingenschuh, P. Katschnig, S. Seiler, T. Saifee,
 M. Aguirregomozcorta, R. Schmidt, J.C. Rothwell, K.P. Bhatia,

M.J. Edwards (Graz, Austria)

Mismatch between tremor self report and long-term actigraphy in psychogenic tremor
 I. Pareés, T.A. Saifee, P. Kassavetis, M. Kojovic, I. Rubio-Agustí,

15th International Congress of Parkinson's disease and Movement disorders

GUIDED POSTER TOURS

Guided Poster Tour 9 – Surgical therapy of movement disorders other than Parkinson's disease

South Building, Level 800, Room 808 13:30 - 15:00 Wednesday, June 8, 2011

Tour Leaders: Joachim Krauss, *Hannover, Germany* Elena Moro, *Toronto, ON, Canada*

- 261 Stepwise implantation of multiple electrodes in the globus pallidus internus in the treatment of primary generalized dystonia
 L. Cif, V. Gonzalez, X. Vasques, A. Corlobé, A.M. Moura, A. Bonafé, P. Coubes (Montpellier, France)
- Low frequency deep brain stimulation for dystonia: Lower is not always better
 F.M. Velez, K.D. Foote, G. Oyama, N. Hwynn, P. Zeilman, C. Jacobson, M.S. Okun (Gainesville, Florida, USA)
- Predictive factors of outcome in primary cervical dystonia treated with bilateral pallidal deep brain stimulation (DBS)
 J.L. Witt, R. Ash, E. Moro, P.A. Starr, A.M. Lozano, M. Hodaie, Y.-Y. Poon, C. Hamani, J.L. Ostrem (San Francisco, California, USA)
- 275 Shorter disease duration associated with improved long-term outcome after GPi DBS in young-onset DYT1+ primary torsion dystonia (PTD) patients
 L.C. Markun, P.A. Starr, M.M. Volz, J.L. Ostrem (San Francisco, California, USA)
- 278 Bilateral pallidal deep-brain stimulation in dystonia syndromes: Long-term outcome and safety L.M. Romito, G. Zorzi, M. Ciceri, A. Franzini, N. Nardocci, A. Albanese (Milano, Italy)
- 290 Mild hypokinetic gait changes induced by bilateral pallidal deep brain stimulation for segmental dystonia
 M.E. Wolf, C. Blahak, H.H. Capelle, M.G. Hennerici, J.K. Krauss (Mannheim, Germany)
- 262 Loss of benefit from VIM thalamic deep brain stimulation (DBS) for essential tremor (ET): A single center review of long-term outcomes K. Czarnecki, C. Lim, E. Papavassiliou, D. Tarsy, L.C. Shih (Boston, Massachusetts, USA)
- 258 The relationship between thalamic local field potentials, scalp EEG and EMG during tics in Gilles de la Tourette syndrome
 L.J. Bour, L. Ackermans, E.M. Foncke, C. van der Linden, D. Cath, V. Visser-Vandewalle, M.A. de Koning-Tijssen (Amsterdam, Netherlands)
- 280 Pallidal surgery for dystonia in Wilson's disease C.S. Sankhla, M. Chhabria, M. Sankhe, V. Udani, A. Ravan (Mumbai, India)
- 291 Surgical treatment for neuroacanthocytosis
 F. Yokochi, K. Kimura, R. Okiyama, M. Taniguchi, M. Yokochi (Tokyo, Japan)

Guided Poster Tour 10 – Genetics

South Building, Level 800, Room 808 13:30 - 15:00 Wednesday, June 8, 2011

Tour Leaders: Andrea Nemeth, Oxford, United Kingdom Oksana Suchowersky, Calgary, AB, Canada

- 931 A novel PARK2 mutation in a Peruvian family: Clinical and pathological characteristics
 L. Torres, M.R. Cornejo, I. Mata, P.E. Mazzetti, C. Cosentino, D. Rivas, C.P. Zabetian, J.B. Leverenz (Seattle, Washington, USA)
- 920 Interaction of NAT2 and UCHL1 genotypes influences the risk and age at onset of Parkinson's disease
 A. Gobel, E.A. Macklin, S. Winkler, K. Lohmann, C. Klein,
 D.K. Simon (Luebeck, Germany)
- 928 Frequency of the mutations in the PARK2, PINK1 and DJ-1 genes in Polish patients with the early-onset form of Parkinson's disease D. Koziorowski, D. Hoffman-Zacharska, J. Slawek, P. Górka, J. Bal, A. Roszmann, A. Friedman (Warsaw, Poland)
- Young onset parkinsonism due to alpha synuclein gene multiplication in a consanguineous family A case report
 M. Kojovic, U.M. Sheerin, N. Wood, H. Houlden, J. Hardy, K.P. Bhatia (London, United Kingdom)
- Brain-derived neurotrophic factor (BDNF) Val66Met polymorphism in Greek patients with Parkinson's disease. Association with clinical parameters of the disease
 C. Karakasis, K. Kalinderi, Z. Katsarou, L. Fidani, S. Bostantzopoulou (Thessaloniki, Greece)
- 930 Role of serotonin receptor 2A gene variants in the impulsive compulsive behaviors (ICB) in Parkinson's disease (PD)

 J.-Y. Lee, B.S. Jeon, H.-J. Kim, J.-Y. Kim, S.-S. Park (Seoul, Republic of Korea)
- The LRRK2 G2019S mutation predisposes Parkinson's disease patients to cancer
 R. Inzelberg, O. Cohen, J. Aharon-Peretz, I. Schlesinger, R. Gershoni-Baruch, R. Djaldetti, Z. Nitsan, L. Ephraty, O. Tunkel, E. Kozlova, L. Inzelberg, N. Kaplan, E. Schechtman, E. Friedman, S. Hassin-Baer (Tel Hashomer, Israel)
- 960 Rapid-onset dystonia-parkinsonism: Searching for a new gene K. Zschiedrich, A. Weissbach, S. Winkler, K. Isbruch, M. Schwarz, C. Klein, K. Lohmann (Lübeck, Germany)
- 945 Clinical and genetic spectrum of myoclonus dystonia syndrome K.J. Peall, A.J. Waite, M.A. Kurian, T. Hedderly, M. Smith, J.-P. Lin, M.D. King, T.T. Warner, H. Pall, P. Chinnery, A. Whone, K.K. Mantripragada, N.M. Williams, M.J. Owen, D.J. Blake, H.R. Morris (Cardiff, United Kingdom)
- 912 The Cuban program for SCA2 predictive diagnosis: A 1,000 patients review
 - T. Cruz Mariño, Y. González Zaldivar, M. Velázquez Santos, A. Estupiñán Quesada, R. Aguilera Rodríguez, Y. Vázquez Mojena, R. Reynaldo Armiñán, J.M. Laffita Mesa, L.E. Almaguer Mederos, M. Paneque Herrera, L. Velázquez Pérez (Holguín, Cuba)



GUIDED POSTER TOURS

Guided Poster Tour 11 – Parkinson's disease: Phenomenology

South Building, Level 800, Room 808 13:30 - 15:00 Wednesday, June 8, 2011

Tour Leaders: Oscar Gershanik, *Buenos Aires, Argentina* Anthony Lang, *Toronto, ON, Canada*

- 544 Reduced arm swing in a cohort of tremulous SWEDD patients compared with tremor dominant Parkinson's disease patients with non-drug related dystonia
 N. Bajaj (Nottingham, United Kingdom)
- 563 Balance difficulty correlates with step length and velocity in Parkinson's disease
 S. Husain, N. Salins, A. Lieberman, A. Santiago, D. Pan (Phoenix, Arizona, USA)
- 591 Cycling is less affected then walking in patients with Parkinson's disease and freezing of gait
 A.H. Snijders, M. van Kesteren, B.R. Bloem (Nijmegen, Netherlands)
- Profile of weight change in Parkinson's disease: Weight losers vs non-weight losers Does olfaction matter?
 J.C. Sharma, J. Turton (Lincoln, Lincs., United Kingdom)
- Characterising non motor patterns of early morning off periods in Parkinson's disease: An international study
 A. Rizos, T.K. Kozul, A. Martin, B. Kessel, Y. Naidu, P. Reddy,
 P. Martinez-Martin, P. Odin, A. Antonini, C. Falup-Pecurariu,
 A. DosSantos, K. Ray Chaudhuri (London, England, United Kingdom)
- Levodopa-induced dyskinesias in patients with Parkinson's disease. First national registry of Parkinson's disease: Parkinson en Movimiento
 T. Arakaki, E. Gatto, C. Peralta, N. Garretto, M. Burgos, R. Femminini, M. Rodriguez, G. Zeppa, D. Simonetti, G. Napoli, J. Ziliani, R. Rey, A. Chade, M. Questa Laudanni, D. Bauso, R. Giannaula, M. Merello, J. Bueri, F. Pelli Noble, S. Bestoso, E. Suby, O. Gershanik (Buenos Aires,
- 576 Spiral drawing during self-rated dyskinesia is more impared than during self-rated off

M. Memedi, J. Westin (Borlänge, Sweden)

Argentina)

- A population-based cohort to study non-motor-symptoms in parkinsonism
 M. Kasten, J. Hagenah, J. Graf, V. Tadic, M. Al-Khaled,
 N. Brüggemann, E.-J. Vollstedt, A. Lorwin, H. Raspe, C. Klein (Lübeck, Schleswig-Holstein, Germany)
- 570 Prevalence of diverse non-motor symptoms along the course of Parkinson's disease
 M.M. Kurtis, V. Borges, K.R. Chaudhuri, P. Martinez-Martin, The NMS Questionnaire Group (Madrid, Spain)
- 590 Vowel articulation in Parkinson's disease A longitudinal study S. Skodda, G. Wenke, S. Uwe (Bochum, Germany)

Guided Poster Tour 12 – Lewy body dementia and other dementias in movement disorders

South Building, Level 800, Room 808 13:30 - 15:00 Wednesday, June 8, 2011

Tour Leaders: Stanley Fahn, *New York, NY, USA* Dag Aarsland, *Stavanger, Norway*

- 966 Cell adhesion molecules in Lewy bodies dementia D.A. Labunskiy, T.A. Fedotova (Santa Rosa, California, USA)
- 964 CSF biomarkers differentiate dementia with Lewy bodies from Alzheimer's disease
 M.B. Aerts, W.F. Abdo, R.A. Esselink, J.A. Claassen, B.R. Bloem (Nijmegen, Netherlands)
- CSF levels of sAPP-α and sApp-β levels in dementia with Lewy body and Parkinson's disease dementia
 E. Mulugeta, K. Blennow, H. Zetterberg, C. Ballard, L. Minthon,
 E. Londos, O. Hansson, D. Aarsland (Stavanger, Norway)
- 968 Lewy body disease presenting with clinical features of frontotemporal dementia: A case series S.T. O'Dowd, B. Murray, B. Magennis, C. Doherty, M. Farrell, C. Keohane, T. Lynch (Dublin, Ireland)
- 965 Neuropathologic features of corticobasal degeneration presenting as corticobasal syndrome or Richardson's syndrome
 N. Kouri, A. Hassan, M.E. Murray, K.A. Josephs, D.W. Dickson (Jacksonville, Florida, USA)
- Longitudinal study of silent vascular burden and cognition in Parkinson's disease
 R. Gonzalez-Redondo, J. Toledo, P. Clavero, D. Garcia-Garcia, I. Lamet,
 P. Martinez-Lage, J.A. Obeso, M.C. Rodriguez-Oroz (Pamplona, Spain)
- 454 Sensitivity and specificity of Addenbrooke's cognitive examination, Mattis dementia rating scale and frontal assessment battery for diagnosing dementia in Parkinson's disease N. Kovacs, B. Kaszas, I. Balas, Z. Aschermann, Z. Kerekes, F. Nagy, S. Komoly, K. Karadi (Pecs, Hungary)
- Mass spectroscopy and GFAP and S-100 proteins as markers in frontotemporal dementia
 D.A. Labunskiy, V.V. Poleshchuk (Santa Rosa, California, USA)

Rapidly progressive early-onset extrapyramidal syndrome due to a novel presenilin-1 mutation
 S. Vijayaraghavan, M. Grossman, C.M. Gomez, T.-W. Liang

435 Short latency afferent inhibition is impaired in Parkinson's disease dementia as in Alzheimer's disease
O. Celebi, C. Temucin, B. Elibol, E. Saka (Ankara, Turkey)

(Philadelphia, Pennsylvania, USA)

15th International Congress of Parkinson's disease and Movement disorders

GUIDED POSTER TOURS

Guided Poster Tour 13 – Parkinson's disease: Clinical trials

South Building, Level 800, Room 808 13:30 - 15:00 Thursday, June 9, 2011

Tour Leaders: Janis Miyasaki, *Toronto, ON, Canada* Cristina Sampaio, *Lisbon, Portugal*

- 413 STEADY-PD. Safety and tolerability of isradipine CR in patients with early Parkinson's disease. Interim tolerability data analysis T. Simuni, K. Biglan, C. Deeley, I. Gardiner, D. Oakes (Chicago, Illinois, USA)
- 424 Levodopa-treatment in early Parkinson's disease: A randomized, delayed start-trial
 C.V.M. Verschuur, R.M.A. De Bie (Amsterdam, Netherlands)
- Efficacy and safety of IPX066, a new carbidopa-levodopa (CD-LD) extended-release formulation, in LD-naïve early Parkinson's disease (APEX-PD trial)
 R. Pahwa, A. Ellenbogen, J. Jankovic, R. Hauser, S. Fahn, Clinical Team at Impax Pharmaceuticals (Kansas City, Kansas, USA)
- 385 Inhaled apomorphine (VR040) for 'off' periods in Parkinson's disease
 K.A. Grosset, F. Morgan, D. Grosset, For the VR040 Inhaled
 Apomorphine Study Group (Glasgow, United Kingdom)
- Efficacy of zonisamide in advanced Parkinson's disease: Impact in quality of life and motor fluctuations
 C. Borrue-Fernandez, M.A. Ortega, C. Barbosa, A. Miralles (San Sebastian de lo Reyes, Madrid, Spain)
- First 2-year, controlled study to assess safinamide as add-on to levodopa in Parkinson's disease with motor fluctuations
 R. Borgohain, J. Szasz, P. Stanzione, C. Meshram, M. Bhatt, F. Stocchi, V. Lucini, R. Anand, For the Study 018 Investigators (Hyderabad AP, India)
- Interim results of motor-symptom endpoints of an ongoing, open-label study of levodopa-carbidopa intestinal gel in Parkinson's disease patients with severe motor fluctuations
 A.J. Espay, K. Chatamra, H.H. Fernandez, D.G. Standaert, R.A. Hauser, J. Benesh, S.D. Caras, Y.L. Pritchett, R.A. Lenz (Cincinnati, Ohio, USA)
- 358 PET assessment of the aromatic L-amino acid decarboxylase gene expression in a phase I gene therapy study for Parkinson's disease S. Asari, K. Fujimoto, S. Kato, H. Mizukami, K. Ikeguchi, T. Kawakami, M. Urabe, E. Watanabe, T. Sato, K. Ozawa, I. Nakano, S. Muramatsu (Shimotsuke, Tochigi, Japan)
- 412 Singing in groups for Parkinson's disease (SING-PD): A pilot study of group singing therapy for PD-related voice/speech disorders L. Shih, J. Piel, A. Warren, L. Kraics, A. Silver, V. Vanderhorst, D. Simon, D. Tarsy (Boston, Massachusetts, USA)
- 391 Vibration therapy and Parkinson's disease S.S. Kapur, G.T. Stebbins, C.G. Goetz (Chicago, Illinois, USA)

Guided Poster Tour 14 – Huntington's disease

South Building, Level 800, Room 808 13:30 - 15:00 Thursday, June 9, 2011

Tour Leaders: Francisco Cardoso, Belo Horizonte, Brazil

- 186 Targeting oxidative stress attenuates malonic acid induced
 Huntington like behavioral and mitochondrial alterations in rats
 H. Kalonia, A. Kumar (Chandigarh, India)
- 192 Brain glucose hypometabolism in a subject carrying an unstable allele of intermediate CAG₃₃ repeat length in the Huntington's disease gene
 F. Squitieri, M. Esmaeilzadeh, A. Ciarmiello, J. Jankovic (Pozzilli, Italy)
- 187 Earliest disfunction in Huntington 's disease F. Moreira, C. Nunes, F. Júlio, C. Januário (Coimbra, Portugal)
- 189 Gait variability increases with proximity to diagnosis in prodromal Huntington's disease: Longitudinal quantitative gait analysis
 A.K. Rao, E.D. Louis, K.S. Marder (New York, New York, USA)
- The influence of neuropsychiatric symptoms on functional disability in Huntington's disease
 K. Banaszkiewicz, M. Bielanska, E. Klimiec, D. Nieweglowska, M. Banach, M. Rudzinska, A. Szczudlik (Krakow, Poland)
- 182 Apathy in Huntington's disease from an Argentinean series of cases A. Bottini Bonfanti, V. Parisi, G. Persi, J. Etcheverry, E. Gatto (, Argentina)
- 176 Parkinsonian signs in Huntington's disease patients
 K. Banaszkiewicz, E. Klimiec, P. Moskal, M. Rudzinska, A. Szczudlik
 (Kraków, Poland)
- 179 Late-stage Huntington's disease (HD): A cohort from the European Huntington's disease network

 M. Coelho, T. Mestre, J.J. Ferreira, EHDN Investigators (Lisbon,
- 185 A clinical and genetic profile of 17 patients with Huntington's disease seen in Southern India
 K.R. Jhavar, P.K. Pal, M.S. Nagaraj, R. Yadav, S. Jain, J. Saini,
 M. Purushottam (Bangalore, Karnataka, India)
- Novel "bottom-up" recruiting strategies for a Huntington's disease clinical trial at Evergreen Neuroscience Institute, a new HSG investigative site lacking a patient base
 P. Agarwal, C.C. Sia, L.V. Goodman (Kirkland, Washington, USA)



GUIDED POSTER TOURS

Guided Poster Tour 15 – Surgical therapy: Parkinson's disease

South Building, Level 800, Room 808 13:30 - 15:00 Thursday, June 9, 2011

Tour Leaders: Marcelo Merello, Buenos Aires, Argentina Jens Volkmann, Würzburg, Germany

- 250 Clinically effective subthalamic deep brain stimulation antidromically activates frontal cerebral cortex in Parkinson's disease H.C. Walker, E.B. Montgomery, H. Huang, C.L. Gonzalez, J.E. Bryant, J. Killen, B.L. Guthrie, R.C. Knowlton, R.L. Watts (Birmingham, Alabama, USA)
- 231 A randomized controlled trial of constant current DBS active stimulation versus off stimulation in Parkinson's disease M.S. Okun, B.V. Gallo, G. Mandybur, J. Arle, J. Elias, B. Ford, S. Horn, S. Humg, J.J. Jankovic, F. Junn, F. Marshall, R.M. Stewart, D. Swope, L. Verhagen, M. Tagliati (Gainesville, Florida, USA)
- 233 Effect of low frequency stimulation (60Hz) in bilateral STN DBS on gait in Parkinson's disease
 F.T. Phibbs, P. Arbogast, T.L. Davis (Nashville, Tennessee, USA)
- Unilateral versus bilateral subthalamic stimulation in Parkinson's disease (PD)
 U.N. Chukwueke, M.S. Cartwright, L.P. Griffin, R. Strowd, I. Haq, T.L. Ellis, V. Abbott, S.B. Tatter, M.S. Siddiqui (Winston-Salem, North Carolina, USA)
- Effect of bilateral STN-DBS versus best medical therapy on non motor symptoms in idiopathic Parkinson's disease
 P. Ankathi, R. Borgohain, R. Kandadai (Hyderabad, Andhra Pradesh, India)
- 204 Ten-year follow-up of bilateral subthalamic stimulation in advanced Parkinson's disease: A blinded evaluation
 A. Castrioto, A.M. Lozano, Y.-Y. Poon, M. Fallis, J.O. Dostrovsky,
 W.D. Hutchinson, A.E. Lang, J.M. Miyasaki, E. Moro (Perugia, Italy)
- Motor and non-motor features of Parkinson's disease patients ten years after subthalamic implants
 A. Fasano, M. Zibetti, A. Daniele, L.M. Romito, L. Rizzi, L. Lopiano, A. Albanese (Rome, Italy)
- Weight change following pallidal or subthalamic nucleus deep brain stimulation in Parkinson's disease and dystonia
 K.A. Mills, R. Scherzer, L. Collins, P.A. Starr, O.L. Jill (San Francisco, California, USA)
- Cognitive effects of deep brain stimulation (DBS) in advanced Parkinson's disease (PD): Is pedunculopontine nucleus (PPN) better than subthalamic nucleus (STN) DBS?
 S.J. Duff Canning, A.M. Lozano, Y.Y. Poon, M. Fallis, M. Hodaie, E. Moro (Toronto, Ontario, Canada)
- Long-term effects of pedunculopontine nucleus area stimulation in Parkinson's disease: A double blind study
 D. Nosko, M.M. Ferraye, V. Fraix, E. Seigneuret, P. Krack, A. L. Benabid, S. Chabardès, P. Pollak, B. Debû (Grenoble, France)

Guided Poster Tour 16 – Parkinson's disease: Cognition

South Building, Level 800, Room 808 13:30 - 15:00 Thursday, June 9, 2011

Tour Leaders: Jennifer Goldman, *Chicago, IL, USA* Antonio Strafella, *Toronto, ON, Canada*

- 452 Prefrontal dopaminergic receptor abnormalities and cognitive functions in Parkinson's disease
 J.H. Ko, F. Antonelli, O. Monchi, N. Ray, P.M. Rusjan, S. Houle,
 L. Christopher, A.P. Strafella (Toronto, Ontario, Canada)
- 459 The patterns of fronto-striatal activation during set-shifting in early Parkinson's disease depends on the cognitive profile of the patient O. Monchi, A. Naguno-Saito, C. Habak, B. Mejia, T. Jubault, L. Monetta, A. Ptito, A.P. Strafella (Montreal, Quebec, Canada)
- Attention rather than spatial memory predicts distinct characteristics of gait in Parkinson's disease
 S. Lord, B. Galna, K. Wesnes, D. Burn, L. Rochester (Newcastle upon Tyne, Tyne & Wear, United Kingdom)
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- 279 Stopping deep brain stimulation beyond washout after long term treatment of dystonia? Retention of clinical benefit is not associated with changes in neurophysiological status in the motor system D. Ruge, L. Cif, P. Limousin, V. Gonzalez, P. Coubes, J.C. Rothwell (London, United Kingdom)
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- 331 Psychiatric co-morbidities in Parkinson's disease patients with impulse control disorder referred to a neuropsychiatry clinic D. Okai, S. Askey-Jones, M. Samuel, R.S. Brown, A. David (London, Camberwell, United Kingdom)

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336 Prefrontal dopaminergic changes associated with pathological gambling in Parkinson's disease

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- 337 Impulse-control disorders in Parkinson's disease patients S. Perez-Lloret, M.V. Rey, J.-L. Montastruc, O. Rascol (Toulouse,
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- 343 Non-motor fluctuations induced by levodopa administration in Parkinson's disease: A pilot study using profile of mood states scale C. Siri, N. Meucci, A. Colombo, G. Sacilotto, M. Zini, G. Pezzoli (Milan, Italy)
- 344 Dopaminergic replacement therapy enhances artistic productivity in patients with Parkinson's disease

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> M. Takanashi, A. Nakajima, A. Yoritaka, N. Hattori (Bunkyo, Tokyo, Japan)

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- 348 Impulse control disorders in Parkinson's disease: A case control study G. Valença, P. Glass, N. Negreiros, M. Duarte, L. Ventura, M. Mueller, J. Oliveira-Filho (Salvador, Bahia, Brazil)
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- 351 Parkinson's disease dysphonia: Results from 273 patients of the Aixen-Provence parkinsonian speech database

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- 356 Withdrawn by Author
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- 358 PET assessment of the aromatic L-amino acid decarboxylase gene expression in a phase I gene therapy study for Parkinson's disease S. Asari, K. Fujimoto, S. Kato, H. Mizukami, K. Ikeguchi, T. Kawakami, M. Urabe, E. Watanabe, T. Sato, K. Ozawa, I. Nakano, S. Muramatsu (Shimotsuke, Tochigi, Japan)
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- 360 Impaired finger dexterity in Parkinson's disease is associated with praxis function
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 B. Boroojerdi, R.L. Watts, J. Jankovic, E. Surmann, L. Ghys (Monheim,
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 385 Inhaled apomorphine (VR040) for 'off periods in Parkinson's disease
- 385 Inhaled apomorphine (VR040) for 'off' periods in Parkinson's disease K.A. Grosset, F. Morgan, D. Grosset, For the VR040 Inhaled Apomorphine Study Group (Glasgow, United Kingdom)
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- 397 Low contrast visual acuity is decreased in patients with parkinsonism C. Sheriff, S. Novaro, C.G. Maitland, J. Specht (Tallahassee, Florida, USA)
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- 402 A randomized, double-blind, double-dummy, placebo- and ropinirole-controlled trial of rotigotine in patients with advanced Parkinson's disease in Japan
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- 403 Accordion pill carbidopa/levodopa for an improved treatment of Parkinson's disease symptoms
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- Factors predictive of the development of dyskinesias and wearing-off in the STRIDE-PD study
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- 405 Design of a randomized, double-blind, double-dummy, placebocontrolled study of levodopa-carbidopa intestinal gel in patients currently receiving optimized treatment for advanced Parkinson's disease

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- 406 Lubiprostone for constipation in Parkinson's disease, a multi-center, placebo controlled parallel trial
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- 407 Efficacy and safety of IPX066, a new carbidopa-levodopa (CD-LD) extended-release formulation, in LD-naïve early Parkinson's disease (APEX-PD trial)

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- 408 Long-term safety and sustained efficacy of extended-release pramipexole in early and advanced Parkinson's disease
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- 411 A delayed start trial of GM1 ganglioside in Parkinson's disease J.S. Schneider, S. Sendek, S.M. Gollomp, A. Colcher, F. Cambi, W. Du (Philadelphia, Pennsylvania, USA)
- Singing in groups for Parkinson's disease (SING-PD): A pilot study of group singing therapy for PD-related voice/speech disorders
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- 414 STEADY-PD. Safety and tolerability of isradipine CR in patients with early Parkinson's disease. Baseline characteristics of the cohort T. Simuni, K. Biglan, C. Deeley, I. Gardiner, D. Oakes (Chicago, Illinois, USA)
- Pilot study of a new formulation of BoNT-A injection for sialorrhea in PD
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- Differences in turning strategies between Parkinson's disease patients with and without freezing of gait
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840 Actively-transported levodopa prodrug XP21279: A study in Parkinson's disease subjects experiencing motor fluctuations P. LeWitt, A. Ellenbogen, D. Chen, R. Lal, K. McGuire, K. Zomorodi, W. Luo, F.J. Huff (West Bloomfield, Michigan, USA)

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- Rehabilitation of patient with the young-onset Parkinson's disease (Case report)
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- 872 Diversity of wearing off symptoms in Parkinson's disease A. Fattah, A.Q. Rana, I. Siddiqi (Toronto, Canada)
- Preliminary outcome evaluation of a modified LSVT BIG protocol for improved motor symptoms, physical mobility and quality of life (QOL) in people with Parkinson's disease (PD)

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- Preparing to master DBS: A multi-disciplinary intervention to enhance coping with conscious surgery
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- Self-reported physical activity engagement among individuals living with Parkinson's disease
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- 877 WOQ-19 improves satisfaction of patients with Parkinson's disease
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- Dance for Parkinson's disease: A pilot investigation of effects on motor impairments and quality of life
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- 881 Longitudinal study of neural tissue implantation for treatment of Parkinson's disease: Effects on quality of life
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 885 Contributing factors to frailty status in persons with Parkinson's
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- 887 Safinamide improves quality of life rating scale scores in PD patients with motor fluctuations despite optimized antiparkinsonian therapy:
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- **Evodopa phobia" causing motor disabilities in Parkinson's disease H. Takahashi, Y. Gotoh, A. Mizuma, H. Chiba, S. Takagi (Isehara, Kanagawa, Japan)
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898 Olfaction and color vision predict neurodegenerative disease in REM sleep behavior disorder

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906 Correlation between the presence of REM sleep behavior disorder and the severity of myocardial sympathetic degeneration in Parkinson's disease

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925 The LRRK2 G2019S mutation predisposes Parkinson's disease patients to cancer

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- Young onset parkinsonism due to alpha synuclein gene multiplication in a consanguineous family A case report
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- 938 An α-synuclein 3'-flanking region SNP interacts with Parkinson's disease susceptibility via allele-specific binding of a transcription factor

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- 939 Transcriptional activation of LINE1 elements in response to age and heavy metal induced stress in male wistar rats
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- 940 Expression of alpha-synuclein isoforms in familial and sporadic Parkinson's disease
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