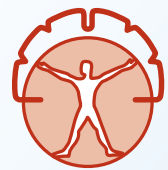


# Pattaya, Thailand

November 28-30, 2014

**4th Asian and Oceanian  
Parkinson's Disease and  
Movement Disorders  
Congress**

**Final Program**



International Parkinson and  
Movement Disorder Society  
Asian & Oceanian Section

*Main Organizer*



**THAI  
PDMDS**

*Host Organizer*





International Parkinson and  
Movement Disorder Society  
Asian & Oceanian Section

Save the Date

September 2016

MANILA, PHILIPPINES

5<sup>th</sup> Asian and Oceanian Parkinson's Disease  
and Movement Disorders Congress



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# Welcome



Louis Tan

Dear Colleagues,

On behalf of the International Parkinson and Movement Disorder Society (MDS) and the Thai Parkinson's Disease – Movement Disorder Society we would like to formally welcome you to Pattaya, Thailand for the 4th Asian and Oceanian Parkinson's Disease and Movement Disorders Congress (AOPMC).

The AOPMC Scientific Program Committee has worked very hard to bring you a diverse program that covers a wide range of topics on Parkinson's disease and other movement disorders from both a basic science and clinical perspective. You will have the opportunity to hear from world renowned experts in the field of Movement Disorders. This conference is designed to highlight the most recent advances and fundamental research and treatment strategies related to movement disorders. We hope you will take part in the many exciting educational opportunities the AOPMC has to offer.

One of the first beach resorts in Thailand, Pattaya draws in millions of tourists each year for activities ranging from water sports to indulging in some of Thailand's freshest seafood. Only 147 km from Bangkok, it is the closest of Thailand's major beach resorts to the capital city. The temperatures in this vibrant coastal city range from highs of 30°C (86°F) to lows of 20°C (73°F), enticing tourists in even the coldest months. In addition to exotic cuisine and splendid scenery, Thailand is widely known for the warm hospitality of its people who make Thailand the "Land of Smiles."

We hope this meeting will not only provide you with unforgettable educational experience, but also an opportunity to network and collaborate with your colleagues. Once again, welcome to Pattaya and we hope you have a pleasant stay.

With kind regards,

Louis Tan  
Chair, Asian and Oceanian Section of the International  
Parkinson and Movement Disorder Society, 2013-2015

Roongroj Bhidayasiri  
President, Thai Parkinson's Disease - Movement  
Disorders Society



Roongroj  
Bhidayasiri



Matthew Stern

Dear Colleagues,

On behalf of the International Parkinson and Movement Disorder Society (MDS), I would like to formally welcome you, for the first time, to one of Asia's premier tropical destinations for the 4th Asian and Oceanian Parkinson's Disease and Movement Disorders Congress (AOPMC) in Pattaya, Thailand.

The MDS Asian and Oceanian Section (MDS-AOS) hosts the AOPMC every other year to facilitate communication between clinicians and researchers in the region; disseminate updated knowledge about Movement Disorders; improve quality of life and independence of movement disorders patients and caregivers; and promote research in Movement Disorders within the region.

Pattaya has a relaxing ambience and I encourage you to take some time to enjoy the many leisure activities that this unique destination has to offer; including golf, fishing, scuba diving, botanical gardens, museums and theme parks.

The AOPMC would not be possible without the hard work and dedication of the MDS-AOS and the Thai Parkinson Disease-Movement Disorders Society. Over the past two years, these volunteers have put in countless hours planning what promises to be an extraordinary program.

Again, welcome to Pattaya! I hope you will take part in the many exciting lectures and educational opportunities the 4th Asian and Oceanian Parkinson's Disease and Movement Disorders Congress has to offer.

With kind regards,

Matthew Stern  
President, International Parkinson and Movement Disorder Society, 2013-2015





Pattaya City  
North Pattaya Road,  
Banglamung Chonburi  
20150

Dear AOPMC delegates,

Subject: Invitation to AOPMC 2014 in Pattaya, Thailand

On behalf of Pattaya City, it is a great honor for us to serve as a host city of the prestigious 4<sup>TH</sup> Asian and Oceanian Parkinson's Disease and Movement Disorders Congress (AOPMC) 2014.

Pattaya is known to the world as a vibrant seaside city of Thailand with its beautiful beaches, excellent choice of hotels & resorts, and various recreations for all visitors. In addition to its world reputation as a bustling tourist destination, Pattaya is also positioned as a dynamic congress destination. We emphasize continuous development of the city's infrastructure and facilities as well as quality of service sectors.

The City of Pattaya has played host to many important international meetings such as the Asia Pacific Advertising Festival in March 2014 with more than 800 delegates, the Asia Petrochemical Industry Conference in May 2014 with more 1,000 delegates and a recent International Conference in Sport and Exercise Science in July 2014 which received over 300 delegates.

I hereby would like to extend a most cordial invitation to all delegates of AOPMC 2014 to Pattaya, Thailand. I am confident that you will find the congress fruitful alongside an enjoyable time in Pattaya.

Yours sincerely,  


(Mr. Itthiphol Kunplome)  
Mayor of Pattaya City



## About MDS

The International Parkinson and Movement Disorder Society (MDS) is a professional society of clinicians, scientists, and other healthcare professionals who are interested in Parkinson's disease, related neurodegenerative and neurodevelopmental disorders, hyperkinetic movement disorders, and abnormalities in muscle tone and motor control. The spectrum of clinical disorders represented by the Society includes, but is not limited to:

Ataxia  
Chorea  
Dystonia  
Gait disorders  
Huntington's disease  
Myoclonus and startle  
Parkinson's disease and parkinsonism  
Restless legs syndrome  
Stiff person syndrome  
Tardive dyskinesia  
Tics and Tourette syndrome  
Tremor and essential tremor

In recent years, there has been tremendous growth in new diagnostic information, pharmacological and neurosurgical treatments for movement disorders, as well as a greater understanding of impaired motor control function. MDS offers you and your patients an essential link to this knowledge.

In 1985, The *Movement* Disorder Society was founded 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. This not-for-profit organization merged in 1992 with the International Medical Society for Motor Disturbances. Publication of the journal *Movement* Disorders began in 1986, and the first International Congress was held in 1990.

In 2013, The *Movement* Disorder Society officially changed its name to the International Parkinson and Movement Disorder Society, in order to recognize the growing importance of Parkinson's disease care and research within the field of Movement Disorders.

## Purpose, Mission And Goals

### Purpose:

The objective and mission of the Society shall be to advance the neurological sciences pertaining to Movement Disorders; to improve the diagnosis and treatment of patients; to operate exclusively for scientific, scholarly and educational purposes; to encourage research; to provide forums, such as medical journals, scientific symposia and International Congresses, for sharing ideas and for advancing the related clinical and scientific disciplines; to encourage interest and participation in the activities of the Society among healthcare and allied professionals and scientists; and to collaborate with other related professional and lay organizations.

### Mission and Goals:

To disseminate knowledge about Movement Disorders by:

- Providing educational programs for clinicians, scientists and the general public designed to advance scientific and clinical knowledge about Movement Disorders
- Sponsoring International Congresses and Symposia on Movement Disorders
- Collaborating with other international organizations and lay groups
- Publishing journals, videotapes and other collateral materials committed to high scientific standards and peer review

To promote research into causes, prevention and treatment of movement disorders by:

- Using the Society's influence and resources to enhance support for research
- Facilitating the dissemination of information about research
- Encouraging the training of basic and clinical scientists in Movement Disorders and related disorders

For the purposes of favorably affecting the care of patients with movement disorders, the Society will provide expertise, advice and guidance to:

- Regulatory agencies to assist them in the approval process of safe and effective therapeutic interventions
- The public (media) and patient support groups by informing them of new research and therapeutic advances
- Governments to assist them in the development of policies that affect support of research and patient care
- Educational efforts to assist in developing standards of training in the specialty



## About MDS

### MDS Officers (2013-2015)



President  
Matthew Stern  
*USA*



President-Elect  
Oscar Gershanik  
*Argentina*



Secretary  
Francisco Cardoso  
*Brazil*



Secretary-Elect  
Claudia Trenkwalder  
*Germany*



Treasurer  
Christopher Goetz  
*USA*



Treasurer-Elect  
David John Burn  
*United Kingdom*



Past-President  
Günther Deuschl  
*Germany*

### MDS International Executive Committee

Paolo Barone, *Italy*  
Bastiaan Bloem, *Netherlands*  
Murat Emre, *Turkey*  
Susan Fox, *Canada*  
Victor Fung, *Australia*  
Etienne Hirsch, *France*  
Beom Jeon, *Korea*  
Michael Okun, *USA*  
Anthony Schapira, *United Kingdom*  
Mark Stacy, *USA*

### MDS International Secretariat

International Parkinson and  
Movement Disorder Society  
555 East Wells Street, Suite 1100  
Milwaukee, WI 53202-3823 USA  
Tel: +1 (414) 276-2145  
Fax: +1 (414) 276-3349  
E-mail: [info@movementdisorders.org](mailto:info@movementdisorders.org)  
Website: [www.movementdisorders.org](http://www.movementdisorders.org)



# About MDS-AOS

## MDS Asian and Oceanian Section

The MDS Asian and Oceanian Section (MDS-AOS) serves MDS members from the majority of the Asian continent, as well as Australia, New Zealand and Oceania. The MDS-AOS Executive Committee is chaired by Dr. Louis Tan of the National Neuroscience Institute in Singapore. The MDS-AOS Education Committee is co-chaired by Prof. Madhuri Behari of the All India Institute of Medical Sciences in New Delhi, India and Prof. Shen-Yang Lim of the University of Malaya in Kuala Lumpur, Malaysia. The Asian and Oceanian Section was formed in 2006 at the 10th International Congress of Parkinson's Disease and Movement Disorders in Kyoto, Japan. Since its foundation, MDS-AOS has developed educational programs in India, Sri Lanka, China, Malaysia, the Philippines, Vietnam, Myanmar, Thailand and the United Arab Emirates among other locations. The official MDS-AOS website includes programming and Section information, including details about AOS Regional Partners, leadership, the AOS Training Fellowship Program and a calendar of events.

For further information on MDS-AOS or its educational opportunities, please visit [www.movementdisorders.org/MDS/regional-sections/asian-oceanian-section.htm](http://www.movementdisorders.org/MDS/regional-sections/asian-oceanian-section.htm).

## MDS-AOS Executive Committee



Chair  
Louis Tan  
*Singapore*



Chair-Elect  
Nobutaka Hattori  
*Tokyo*



Past Chair  
Ruey-Meei Wu  
*Taipei*



Secretary  
Roongroj Bhidayasiri  
*Bangkok*



Secretary-Elect  
Raymond Rosales  
*Manila*



Treasurer  
Yoshikazu Ugawa,  
*Fukushima*



Treasurer-Elect  
Carolyn Sue  
*Sydney*



Mandy Au-Yeung  
*Hong Kong*



Jou-Hsien Chen  
*Taipei*



Hee Tae Kim  
*Seoul*



Asha Kishore  
*Trivandrum*



Minh Le  
*Ho Chi Minh City*



Shen-Yang Lim  
*Kuala Lumpur*



Miho Murata  
*Tokyo*



Barry Snow  
*Auckland*



Jonas Yeung  
*Hong Kong*



Baorong Zhang  
*Hangzhou*





# AOPMC Organizing Committees

## Oversight Committee

Louis Tan, *Singapore* (Chair)  
Madhuri Behari, *New Delhi*  
Roongroj Bhidayasiri, *Bangkok*  
Victor Fung, *Sydney*  
Raymond Rosales, *Manila*  
Bhim Singhal, *Mumbai*  
Yoshikazu Ugawa, *Fukushima*  
Ruey-Meei Wu, *Taipei*

## Scientific Program Committee

Roongroj Bhidayasiri, *Bangkok* (Chair)  
Beom Jeon, *Seoul*  
Shen-Yang Lim, *Kuala Lumpur*  
Apichart Pisarnpong, *Bangkok*  
Raymond Rosales, *Manila*  
Suwanna Setthawatcharawanich, *Songkhla*  
Hui-Fang Shang, *ChengDu*  
Ryosuke Takahashi, *Kyoto*  
Eng-King Tan, *Singapore*  
Akkravudh Viriyavejakul, *Bangkok*

## Local Organizing Committee

Roongroj Bhidayasiri (Chair)  
Apichart Pisarnpong (Vice-Chair)  
Parnsiri Chairangsaris  
Solaphat Hemrungrojn  
Priya Jagota  
Surasa Khongprasert  
Witsanu Kumthornthip  
Natlada Limotai  
Helen Ling  
Praween Lolekha  
Sarun Nunta-Aree  
Sitthi Petchrutchatachart  
Sith Sathornsumetee  
Vorapun Senanarong  
Suwanna Setthawatcharawanich  
Oraporn Sitburana  
Chutamanee Suthisisang  
Surat Tanprawate  
Somsak Tiamkao  
Akkravudh Viriyavejakul

## Honorary Advisors

Pairoj Boonkongchuen  
Siwaporn Chankrachang  
Niphon Pongvarin  
Kammant Phanthumchinda  
Jithanorm Suwantamee  
Somchai Towanabutr



# MDS Membership Information

## Membership Benefits

### Highlights

- Annual Subscription to the print and online **Journal, Movement Disorders**
- **New in 2014** – online only journal, *Movement Disorders-Clinical Practice*
- Quarterly **Newsletter** entitled, *Moving Along*
- Access to the Members Only online **Membership Directory**
- **Reduced Registration** rates
- Access to Members Only **CME Activities** and **Web Resources**
- Access to **DVDs, Webcasts**, and the **MDS Video Library**
- **Voting Rights** in MDS elections and selection of leadership representatives

### Details

- **JOURNALS:** *Movement Disorders* is a peer-reviewed journal covering all topics of the field of basic science. Subscribers receive 14 regular issues of the journal each year. *Movement Disorders—Clinical Practice* is the new exclusively online journal from MDS. Debuting in 2014, the sister publication to *Movement Disorders, Movement Disorders-Clinical Practice* seeks to publish peer-reviewed articles that are focused on clinical practice and educational issues relevant to movement disorders neurology.
- **NEWSLETTER:** *Moving Along* - This quarterly newsletter highlights recent and ongoing Society activities, as well as offers a forum for members to exchange ideas and read about noteworthy and upcoming leaders in the field of Movement Disorders.
- **DIRECTORY:** An Online and Mobile Directory which lists addresses, telephone and fax numbers, and e-mail addresses for all current members.
- **REDUCED REGISTRATION:** A reduction in fees charged for participation in the Society's educational programs. Among these are the annual International Congress of Parkinson's Disease and Movement Disorders, and various clinical and scientific programs held separately from the International Congress each year.
- **CME ACTIVITIES, DVDS, TRAINING VIDEOS, and VIDEO LIBRARY:** A unique selection of educational opportunities, including live and online CME/CPD activities and reference material on topics in Movement Disorders.

## **FREE 12-Month trial Membership! MDS Associate Member Program**

Non-Members now have the opportunity to apply for membership with the International Parkinson and Movement Disorder Society (MDS) absolutely free! Delegates of the AOPMC will receive one year of membership, including member benefits\*, immediately upon acceptance to the Society, for no charge at all. Eligible delegates\*\* will be contacted approximately one month following the AOPMC; wherein the International Secretariat will provide special instructions to apply online for associate membership with the Society. Interested individuals are encouraged to apply online within 30 days of contact.

*\*Associate members will not receive the print journal and do not have voting rights.*

*\*\*Participants paying the Non-Member registration fee will be eligible to participate in the Associate Member program. This option is not available to those registering as a Junior or Health Professional participant or anyone who registered as part of a group. Only those who have not previously been members of MDS are eligible to apply.*

**Join us in 2015!** We expect 2015 to be an exciting year for MDS and we look forward to bringing you news of these and other new initiatives through the *Movement Disorders* journals, *Moving Along* newsletter and the MDS website.

### **For further information, please contact:**

International Parkinson and Movement Disorder Society  
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](mailto:info@movementdisorders.org)  
Website: [www.movementdisorders.org](http://www.movementdisorders.org)



## MDS Education

To better fulfill its global mission of advancing the neurological sciences as they relate to the field of Movement Disorders, MDS is continually expanding its educational portfolio. This growing portfolio offers an increasing variety of high caliber continuing medical education and continuing professional development opportunities in movement disorders. For more information about the opportunities listed in this section, please visit [www.movementdisorders.org/MDS/education.htm](http://www.movementdisorders.org/MDS/education.htm) or e-mail [education@movementdisorders.org](mailto:education@movementdisorders.org).

### Outreach Education Programs

The following outreach education programs are intended to support movement disorders conferences and meetings in underserved areas. Applications, which include a proposed program, a budget and an online form, are submitted through the MDS website. Corresponding MDS Regional Sections and the MDS Education Committee review outreach education applications throughout the year.

#### Developing World Education Program

MDS is committed to supporting quality movement disorders education in underserved areas worldwide. Through the Developing World Education Program (DWEP), funds are administered in a flexible support program tailored to the needs of each region. The funds can be used to sponsor faculty travel and accommodation, logistics costs or other course expenses which are approved at the time of application.

#### Ambassador Program

The Ambassador Program supports the travel of one or two international experts, who are MDS members, to an underserved area for the purposes of education and scientific exchange. Sponsored speakers should deliver a keynote lecture during the meeting.

#### Visiting Professor Program

The Visiting Professor Program supports the travel of one or two international experts, who are MDS members, to an underserved area for the purposes of education and scientific exchange. During the visit, invited experts should conduct teaching seminars in local hospitals or institutions, participate in grand rounds and/or provide input to further the understanding of movement disorders in the host country.

## Online Education

### Coffee Break CME

The Coffee Break CME program provides education critical to providing the best care possible. Scientific content is presented in a modular format where each module is focused on a single topic. Each module can be completed in a short period of time and provides the clinician with updated information relevant to their practice. Both standard approaches and new advances are highlighted.

MDS is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. MDS designates this educational activity for a maximum of 2.0 *AMA PRA Category 1 Credits*<sup>™</sup> for each module. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### 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 continuing medical education for physicians. MDS designates this educational activity for a maximum of 1.0 *AMA PRA Category 1 Credits*<sup>™</sup> for each module. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### Educational DVDs and Streaming Content

As part of its educational mission to expand the availability of educational content, MDS produces enduring materials of select programming. Teaching Courses, Themed Sessions and MDS Video Challenges from the 15th, 16th, 17th, and 18th International Congresses are available to order on the MDS website.



# MDS Education

## Other Online Education Resources

MDS provides a variety of online educational activities in addition to streaming video and CME programming. The following educational tools are available on the MDS website.

### Parkinson and Movement Disorders Curriculum

The Parkinson and Movement Disorders Curriculum provides an overview of movement disorders and a clinical approach to the evaluation and management of common movement disorders. This curriculum is specially developed for trainees, internists, general neurologists and other clinicians interested in acquiring a basic understanding of movement disorders. Interested organizations or institutions may apply to MDS to request permission to use the curriculum.

### MDS 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.

### Live Courses

Through the MDS Regional Sections, MDS offers a robust list of live course learning opportunities. Below is a listing of upcoming courses offered by MDS in the Asian and Oceanian region. Please note that dates and locations are subject to change. For the most up-to-date list of live courses, please visit [www.movementdisorders.org/MDS/education.htm](http://www.movementdisorders.org/MDS/education.htm).

Deep Brain Stimulation for Movement Disorders  
March 13-14, 2015  
Seoul, Korea

2nd Middle East Camp for Parkinson's, Movement Disorders and Neuromodulation:  
From Neurodegeneration to Neuroregeneration  
April 2-4, 2015  
Amman, Jordan

The China Continuing Education Classes for Parkinson and Movement Disorders  
April 11-12, 2015  
Hangzhou, China

## Rating Scales and Training Videos

### Rating Scales

MDS provides rating scales and related resources published in the *Movement Disorders* journal to physicians, researchers and health professionals interested in Parkinson's disease and other movement disorders. By making these scales available, MDS works to improve the diagnosis of movement disorders and patient care, as well as increase the validity and reliability of research studies. You can access the rating scales below online by visiting [www.movementdisorders.org/MDS/Education/Rating-scales.htm](http://www.movementdisorders.org/MDS/Education/Rating-scales.htm). Links to the MDS-UPDRS and UDysRS training programs and rating scales use permission forms are also available through the rating scales link. Licensing fees are free for individual use, but fees may apply for government, nonprofit or industry-funded research.

The following rating scales are currently available:

- Global Assessment Scale for Wilson's Disease (GAS for WD)
- Global Dystonia Scale
- Non-Motor Symptoms Scale (NMSQ) + (Includes NMSQ)
- Quality of Life Essential Tremor Questionnaire (QUEST)
- Rating Scale for Psychogenic Movement Disorders (PMD)
- Rush Dyskinesia Rating Scale\*
- Rush Videobased Tic Rating Scale
- UFMG Sydenham's Chorea Rating Scale (USCRS)
- Unified Dyskinesia Rating Scale (UDysRS) +\*
- Unified Dystonia Rating Scale (UDRS)
- Unified Multiple System Atrophy Rating Scale (UMSARS)
- Unified Parkinson's Disease Rating Scale (MDS-UPDRS) +\*

Asterisk (\*) indicates scale was developed by MDS; Plus symbol (+) indicates translations of the scale are available.



# MDS Education

## Training Videos

MDS publishes several audiovisuals, which are available for sale from the MDS International Secretariat. All materials are available in DVD format. Special reduced rates are available to MDS members. For more information or to place an order, visit [www.movementdisorders.org/MDS/Resources/Audio-Visuals-for-Sale.htm](http://www.movementdisorders.org/MDS/Resources/Audio-Visuals-for-Sale.htm).

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 3 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 DVD**

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 DVD (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 International Parkinson and Movement Disorder Society's Unified Parkinson's Disease Rating Scale (MDS-UPDRS) Training DVD (2010)**

The International Parkinson and 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.



# Award Information

## MDS-AOS Lectureship Awards

The MDS-AOS lectureships were established to honor Professors Yoshikuni Mizuno and Philip Thompson as experts in the field of Movement Disorders and to recognize their contributions as leaders within the International Parkinson and Movement Disorder Society. The lectureships also honor their leadership role in establishing the Asian-Oceanian section (AOS) of the MDS in 2005. The award lectures will be given at the 4th AOPMC during the MDS-AOS Lectureship Plenary session on Sunday, November 30, 2014.



### Yoshikuni Mizuno

Dr. Yoshikuni Mizuno is a Professor and the Chairman of the Department of Neurology at Juntendo University School of Medicine. He has been a member of the International Parkinson and Movement Disorder Society since 1992, and has served in many capacities

including Treasurer of The *Movement* Disorder Society from 2007-2009, International Executive Committee member from 2001-2004, and MDS-AOS Secretary from 2005-2006.

Dr. Mizuno received medical training at the University of Tokyo and completed his neurological residency at Northwestern University Medical Center in Chicago, Illinois, USA. His research interests have been focused on the study of genetics and treatment of Parkinson's disease. Dr. Mizuno has published more than 250 original articles on Parkinson's disease and related disorders and is particularly interested in the etiology and pathogenesis of Parkinson's disease. He and his collaborators identified the gene (*parkin*) for an autosomal recessive form of young onset familial Parkinson's disease.



### Philip Thompson

Philip Thompson is the Professor of Neurology in the University Department of Medicine at the University of Adelaide and Head of the Department of Neurology at the Royal Adelaide Hospital.

Prof. Thompson trained in Adelaide, Perth and London. His research has focused on the physiology of motor control in normal subjects, the mechanisms of brain stimulation, and disorders of motor control in neurological disease, particularly movement disorders.

Prof. Thompson has served on the International Executive of The *Movement* Disorder Society for the last 14 years including Secretary of The *Movement* Disorder Society from 2004-2006 and President of The *Movement* Disorder Society from 2009-2011. He was Chairman of the Asian and Oceanian Section of The *Movement* Disorder Society from 2005-2006.

He also has published more than 300 articles and book chapters with special interest in the neurophysiology of motor control, movement disorders and gait.

## Yoshikuni Mizuno Award



The Yoshikuni Mizuno Award Lecture was created to recognize an outstanding scholar and inspiring neuroscientist from the AOS region in the field of Movement Disorders. This year's recipient is Professor Nobutaka Hattori.

Prof. Nobutaka Hattori is Professor and Chairman of the Department of Neurology at Juntendo University School of Medicine in Tokyo, Japan. He has been a member of the International Parkinson and Movement Disorder Society since 1998, and has served on multiple committees including the MDS-AOS Executive Committee and the MDS Development Committee.

After receiving his Medical Degree at Juntendo University School of Medicine, he completed his residency in Neurology at Fuji National Hospital in Shizuoka, Japan. He received his PhD in Neurology from Juntendo University where he also studied Molecular Biology. Before beginning his professorship at Juntendo University, he was a Medical Staff in the Department of Neurology at the Tokyo Metropolitan Ebara Hospital. His research interests have been focused on Parkinson's disease, in particularly genetics, pathogenesis, and treatment.

## Philip Thompson Award



The Philip Thompson Award Lecture is created to recognize an outstanding scholar and role-model clinician from the AOS region in the field of Movement Disorders. This year's recipient is Professor Robert Iansek.

Prof. Robert Iansek is Professor of Geriatric Neurology at Monash University. He is also director of the Victorian Comprehensive Parkinson Program (VCPP) and director of the Clinical Research Centre for Movement Disorders and Gait at Kingston Centre, Monash Health. He is the director of the National Parkinson Foundation Centre of Excellence in Melbourne, the only such centre of excellence in Oceania. Professor Robert Iansek is a neurologist by training and has more than 25 years experience in neurophysiological research in the control of movement, gait disorders and Parkinson's disease. He was instrumental in the development of a unique rehabilitation program for people with Parkinson's disease and established multi-disciplinary teams in care provision for people with Parkinson's disease. He has published nearly 200 articles, books and videos. He was instrumental in the establishment of the Asian and Oceanian section of the International Parkinson and Movement Disorder Society and was a recent Past-Chair. He was recently awarded an Order of Australia Medal (OAM) for his work in Clinical Neurology.



## Award Information

### Junior Awards

Two Junior Award recipients have been selected based on their significant contribution to the research in the field of Movement Disorders.

#### Linda Oosterveld, MD

Singapore

##### **Predictors of mortality in Parkinson's disease**

*Linda Oosterveld, Irene Seah, John Allen, Giselle Reinoso, Kay Yaw Tay, Wing Lok Au, Louis Tan (Singapore)*

**Objectives:** This study aims to identify demographic and clinical features that predict mortality in Parkinson's disease (PD).

**Background:** Several studies have evaluated predictors of mortality in PD. However, there have been few studies that have examined large study cohorts. [1, 2]

**Methods:** PD patients seen from 2002 to 2012 were identified from the National Neuroscience Institute Movement Disorder Database. Demographic information and prospectively collected baseline clinical variables assessed within 2 years of diagnosis (where available) were obtained from the Database. All patients were linked to the Singapore Registry of Birth and Death to obtain information on vital status until 2012. Predictor variables included gender, ethnicity, age at diagnosis, UPDRS motor score, Hoehn & Yahr stage (H&Y), clinical subtype, cognitive impairment (MMSE <24), years of education and type of PD medication used. Stepwise regression was carried out to evaluate predictors of mortality in PD.

**Results:** Of the 1786 PD patients identified, 363 (20.3%) had died during the study period. Median survival time from diagnosis was 15.8 years (range 0.3 – 31). All variables obtained were entered into a stepwise regression model. The factors that did not significantly predict mortality were ethnicity, H&Y, clinical subtype, years of education and type of medication used. Independent predictors of higher mortality were male gender (HR 2.23; 95% CI 1.52 – 3.28), age at diagnosis >50 years (HR 2.96; 95% CI 1.18 – 7.44), UPDRS motor score =30 (HR 1.72; 95% CI 1.19 – 2.48), and cognitive impairment (HR 2.89; 95% CI 1.91 – 4.37).

**Conclusion:** In one of the largest studies that evaluated baseline factors to predict mortality in PD, we found that male gender, older age at diagnosis, baseline cognitive impairment and higher baseline UPDRS motor scores were predictors of higher mortality in PD.

##### **References**

1. Willis AW, Schootman M, Kung N, et al. Predictors of Survival in Patients with Parkinson Disease. *Arch Neurol.* 2012;69:601-607
2. Chillag-Talmor O, Giladi N, Linn S, et al. Estimation of Parkinson's disease survival in Israeli men and women, using health maintenance organization pharmacy data in a unique approach. *J Neurol* 2013;260:62-70

#### Norihito Uemura, MD

Japan

##### **Neuronopathic Gaucher's disease model of medaka displayed axonal accumulation of alpha-synuclein**

*Norihito Uemura, Ryosuke Takahashi, Masato Koike, Masato Kinoshita, Tomoko Fujiwara-Ishikawa, Hideaki Matsui, Hodaka Yamakado, Yasuo Uchiyama, Takeshi Todo, Shun-ichi Takeda (Kyoto, Japan)*

**Objective:** To clarify the pathological mechanisms of glucocerebrosidase (GBA) mutations leading to Parkinson's disease (PD).

**Background:** GBA is a causative gene of Gaucher's disease (GD), a lysosomal storage disease. Heterozygous mutations in this gene have been identified as the most common and strong risk factor for PD. However, the mechanisms behind remain unclear.

**Methods:** We generated GBA mutant medaka by screening a TILLING (Targeting Induced Local Lesions In Genomes) library and analyzed their phenotype. To clarify the further pathological mechanisms obtained from GBA mutant medaka, we analyzed the primary cortical neurons from mice embryos in the presence or absence of lysosomal inhibitors including bafilomycin, leupeptin and pepstatin.

**Results:** We generated GBA nonsense mutant (GBA<sup>-/-</sup>) medaka completely deficient in glucocerebrosidase (GCase) activity. In contrast to the perinatal death of human and mice lacking GCase activity, GBA<sup>-/-</sup> medaka survived for months, enabling us to analyze the pathological progression. GBA<sup>-/-</sup> medaka showed abnormal swimming movement at 2 months and died by 5 months. Pathologically, GBA<sup>-/-</sup> medaka displayed non-selective neuronal loss accompanied by neuroinflammation, lysosomal abnormalities and alpha-synuclein (a-syn) accumulation in spheroids containing autophagosomes. Lysosomal inhibition of primary mouse neurons caused the increased number of both LC3 and a-syn-positive puncta in axons.

**Conclusions:** GBA<sup>-/-</sup> medaka is a viable neuronopathic GD model as well as an alpha-synuclein accumulation model. The treatment of primary mouse neurons with lysosomal inhibitors replicated the axonal pathology of GBA<sup>-/-</sup> medaka, which indicates that GBA deficiency primarily causes lysosomal dysfunction and secondarily causes the spheroids containing autophagosomes where a-syn accumulated. GBA<sup>-/-</sup> medaka provides novel insights into the pathological mechanisms of GBA mutations leading to PD.



# AOPMC Schedule-at-a-Glance

## Friday, November 28

## Saturday, November 29

## Sunday, November 30

		AOPMC Plenary Session 1 8:00 - 9:30		MDS-AOS Lectures 8:30 - 10:00	
		Break		Break	
		AOPMC Plenary Session 2 10:00 - 11:30		AOPMC Plenary Session 3 10:30 - 12:00	
		Poster Session Guided Poster Tour 11:30 - 12:30		Poster Session Guided Poster Tour 12:00 - 13:00	
		Break		Break	
Boehringer-Ingelheim Symposium 12:45 - 13:45	Exhibition	Medtronic Lunch Symposium 13:00 - 14:00	Exhibition	Britannia Lunch Symposium 13:30 - 14:30	Exhibition
Allergan Symposium 14:00 - 15:00		Break		Break	
Break		Parallel Sessions (3) 14:30 - 16:00		Break	
Novartis Symposium 15:30 - 16:30		Break		Parallel Sessions (3) 15:00 - 16:30	
Abbott/UCB Symposium 16:45-17:45		Parallel Sessions (3) 16:30 - 18:00		Break	
Opening Ceremony 18:00 - 19:00		Break		Parallel Sessions (3) 17:00 - 18:30	
Reception 19:00 - 19:30		Ipsen Dinner Symposium 18:30 - 19:30			
Lundbeck Dinner Symposium 19:30-20:30		Break			
		Video Tournament 20:00 - 22:00			

### Exhibition Hours

Location: PEACH Hall A Foyer, Level 3

November 28:	11:00-19:30
November 29:	9:30-18:30
November 30:	10:00-18:30

### Registration Hours

Location: PEACH Hall A Foyer, Level 3

November 27:	16:00-19:00
November 28:	10:00-18:00
November 29:	7:00-17:00
November 30:	7:00-17:00





# Scientific Program

Friday, November 28

**12:45-13:45** **1101 Opening Symposium: *Balancing efficacy and adverse events of dopamine agonist in Parkinson's disease management*** (Sponsored by Boehringer-Ingelheim)

Location: PEACH Hall A1, Level 3  
Chairs: Yoshikuni Mizuno (Japan);  
Somsak Laptikultham (Thailand)

Challenges in managing the motor symptoms in the early and advanced PD patients

Tim Anderson (New Zealand)

How to deliver the right dose? Practical tips of pramipexole in your clinic

Yoshikuni Mizuno (Japan)

**16:45-17:45** **1104 Opening Symposium: *A holistic view of Parkinson's disease*** (Sponsored by Abbott-UCB)

Location: PEACH Hall A2/A3, Level 3  
Chair: Simon Lewis (Australia)

Nonmotor PD: The real challenges for clinicians

Simon Lewis (Australia)

Going beyond motor symptoms in Parkinson's disease

K. Ray Chaudhuri (United Kingdom)

Optimizing dopaminergic therapy to treat non-motor symptoms in Parkinson's disease

Thomas Kimber (Australia)

**14:00-15:00** **1102 Opening Symposium: *Complementing clinical examinations in targeting muscles for botulinum toxin injection: Methods of localization by using cervical dystonia as a model*** (Sponsored by Allergan)

Location: PEACH Hall A1, Level 3  
Chair: Niphon Pongvarin (Thailand)

Injecting botulinum toxin accurately in cervical dystonia-The basics of botulinum toxin therapy and muscle localization

Priya Jagota (Thailand)

Injecting botulinum toxin accurately in cervical dystonia-Complementing with advanced techniques

Erle Lim (Singapore)

**18:00-19:00** **Opening Ceremony**  
Location: PEACH Hall A1, Level 3

**19:00-19:30** **Welcome Reception**  
Location: PEACH Hall A Foyer, Level 3

**19:30-20:30** **1105 Dinner Symposium: *Optimizing Parkinson's disease pharmacotherapy*** (Sponsored by Lundbeck)

Location: PEACH Hall A2/A3, Level 3  
Chair: Somchai Towanabut (Thailand)

Rasagiline as mono- and adjunct therapy to treat Parkinson's disease:

Two randomized, double-blind studies in China

Zhen-Xin Zhang (Peoples Republic of China)

What do we do when the honeymoon is over?

Heinz Reichmann (Germany)

**15:30-16:30** **1103 Opening Symposium: *Practical tips for managing complications in advanced Parkinson's disease*** (Sponsored by Novartis)

Location: PEACH Hall A2/A3, Level 3  
Chairs: Louis Tan (Singapore);  
Vorapun Senanarong (Thailand)

Tackling the problem of levodopa-induced motor complications

Werner Poewe (Austria)

Research update on clinical management of Parkinson's disease dementia

Nobutaka Hattori (Japan)



# Scientific Program

Saturday, November 29

**8:00-9:30**     **1201 Plenary Session I: *Perspectives on Parkinson's disease: Past accomplishments and future possibilities***

Location: PEACH Hall A1, Level 3  
Chairs: Oscar Gershanik (Argentina);  
Kammant Phanthumchinda (Thailand)

8:00     Evolving clinicopathological concepts of Parkinson's disease: Moving beyond the "Decade of the Brain"

Werner Poewe (Austria)

8:30     Indications for using biomarkers for the diagnosis of Parkinson's disease: Options for various scenarios

Anthony Lang (Canada)

9:00     Insights into the natural history of Parkinson's disease: What is the appropriate therapy for patients in different stages?

Victor Fung (Australia)

**10:00-11:30**     **1202 Plenary Session II: *Therapeutics in Parkinson's disease: The Asian-Oceanian viewpoint***

Location: PEACH Hall A1, Level 3  
Chairs: Yoshikuni Mizuno (Japan);  
Louis Tan (Singapore)

10:00     Pharmacological, surgical, and infusional therapies in Parkinson's disease: A closer look at the Asian-Oceanian data

Shen-Yang Lim (Malaysia)

10:30     Asian complementary practices in the management of Parkinson's disease: Applications and evidence

Beom Jeon (South Korea)

11:00     The use of neurorestorative technologies in Parkinson's disease: Asian-Oceanian experiences

Ryosuke Takahashi (Japan)

**11:30-12:30**     **Poster Session**

Location: PEACH Hall A Foyer, Level 3

Poster numbers 1-125

**Guided Poster Tours 1-4**

(Please see page 25 for details)

**13:00-14:00**     **1203 Lunch Symposium: *Partnerships beyond the technology*** (Sponsored by Medtronic)

Location: PEACH Hall A2/A3, Level 3  
Chair: Apichart Pisarnpong (Thailand)

**DBS clinical evidence**

Chong Sik Lee (South Korea)

**Incorporating DBS in your practice**

Elena Moro (France)

**14:30-16:00**     **1211 Parallel Session: *Effective management of Parkinson's disease symptoms (motor and non-motor) fluctuations in clinical practice?*** (Supported by Roche)

Location: PEACH Hall A1, Level 3  
Chairs: Heinz Reichmann (Germany);  
Chuthaman Suthisang (Thailand)

14:30     Clinicopathologic correlations of symptom (motor and non-motor) fluctuations in Parkinson's disease

Francisco Cardoso (Brazil)

15:00     Symptom fluctuations in PD: Boundaries beyond recognition

Ruey-Meei Wu (Taiwan)

15:30     How can medications be adjusted to minimize symptom fluctuations? Basic principles

Shengdi Chen (Peoples Republic of China)

**14:30-16:00**     **1212 Parallel Session: *Physiological studies in movement disorders: When do clinicians need them and practical interpretation?***

Location: Pattaya 10, Level 4  
Chairs: Mitsutoshi Yamamoto (Japan);  
Kongkiat Kulkantrakorn (Thailand)

14:30     Electrophysiological studies on tremor, myoclonus and dystonia

Ryuji Kaji (Japan)

15:00     Diagnostic and therapeutic roles of rTMS in movement disorders

Yoshikazu Ugawa (Japan)

15:30     Electrophysiological studies in peripheral movement disorders

Jou-Hsien Chen (Taiwan)



# Scientific Program

Saturday, November 29

**14:30-16:00** **1213 Parallel Session: *Diagnostic clues from neuroimaging: Practical tips for clinicians***

Location: Pattaya 11, Level 4  
Chairs: Saeed Bohlega (Saudi Arabia);  
Suwanna Setthawatcharawanich (Thailand)

14:30 **Parkinsonism**  
Chong-Sik Lee (South Korea)

15:00 **Non-parkinsonian disorders**  
Mohit Bhatt (India)

15:30 **Interactive session: Radiological diagnosis**  
Oraporn Sitburana (Thailand)

**16:30-18:00** **1224 Parallel Session: *Defrosting Parkinson's disease and understanding "freezing of gait" (FOG) and falls***

Location: PEACH Hall A1, Level 3  
Chairs: Robert Iansek (Australia);  
Jae-Woo Kim (South Korea)

16:30 **Subclinical gait and postural dysfunction in early PD: Time for intervention?**  
Simon Lewis (Australia)

17:00 **The physiological and clinical dynamics of FOG and falls**  
Yasuyuki Okuma (Japan)

17:30 **Implementing effective strategies to reduce FOG and falls in PD patients- medications, training, devices and home modifications**  
Meg Morris (Australia)

**16:30-18:00** **1225 Parallel Session: *Recognition and management of movement disorders conditions in general medical practice***

Location: Pattaya 10, Level 4  
Chairs: Yotin Chinvarun (Thailand);  
Minh Le (Vietnam)

16:30 **Movement disorders in intensive care units: Differentiation from mimics and therapeutic priorities**  
Chusak Limotai (Thailand)

17:00 **Movement disorders in autoimmune and neoplastic disorders**  
Yih-Ru Wu (Taiwan)

17:30 **Movement disorders in metabolic disorders**  
Norlinah Ibrahim (Malaysia)

**16:30-18:00** **1226 Parallel Session: *Chorea in clinical practice***

Location: Pattaya 11, Level 4  
Chairs: Bhim Singhal (India);  
Akравudh Viriyavejakul (Thailand)

16:30 **Clinical clues to look for that help define your differential diagnosis**  
Philip Thompson (Australia)

17:00 **Diagnostic work-up in chorea: Practical considerations**  
Hui Fang Shang (Peoples Republic of China)

17:30 **Spectrum and management of drug-induced movement disorders**  
Sith Sathornsumetee (Thailand)

**18:30-19:30** **1227 Dinner Symposium: *Maximizing the efficacy of botulinum toxin to restore facial symmetry in blepharospasm and hemifacial spasm (sponsored by Ipsen)***

Location: PEACH Hall A2/A3, Level 3  
Chair: Witsanu Kumthornthip (Thailand)

**Pearls and pitfalls of toxin injections in blepharospasm**  
Shen-Yang Lim (Malaysia)

**Hemifacial spasm and the use of toxin for correction**  
Raymond Rosales (Philippines)

**20:00 - 22:00** **MDS-AOS Video Tournament**

Location: PEACH Hall A1, Level 3  
Masters of Tournament: Anthony Lang (Canada) and Victor Fung (Australia)

This is an interactive tournament in which participants will improve diagnostic skills with unique and interesting cases. Teams were formed based on nominations to create multi-country groups. Winning teams will be awarded with medals and certificates.



# Scientific Program

## Sunday, November 30

### 8:30 - 10:00 **2201 Plenary Session III MDS-AOS Lectureship Awards**

Location: PEACH Hall A1, Level 3  
Chairs: Roongroj Bhirayasiri (Thailand);  
Louis Tan (Singapore)

### 8:30 **Philip Thompson Lectureship Award** *Comprehensive care in Parkinson's disease: Are we ready yet?*

Robert Iansek (Australia)

### 9:00 **Yoshikuni Mizuno Lectureship Award** *Pathogenesis of Parkinson's disease: Mechanistic insights from gene functions of monogenic forms of Parkinson's disease*

Nobutaka Hattori (Japan)

### 9:30 **Junior Award Lectureships**

Linda Oosterveld (Singapore)  
Norihito Uemura (Japan)

### 10:00-10:10 **2202 AOPMC Poster Highlights**

Location: PEACH Hall A1, Level 3  
Beom Jeon (Korea)

### 10:30-12:00 **2203 Plenary Session IV: Specific movement disorders in the Asian- Oceanian region: Historical and recent developments**

Location: PEACH Hall A1, Level 3  
Chairs: Nobutaka Hattori (Japan);  
Pairoj Boonkongchuen (Thailand)

### 10:30 **Sex-linked recessive dystonia parkinsonism of Panay**

Lilian Lee (Philippines)

### 11:00 **Segawa's disease and Parkinsonism, ALS, Dementia complex of Kii Peninsula**

Shigeki Kuzuhara (Japan)

### 11:30 **Common movement disorders in the Asian-Oceanian region**

Roongroj Bhirayasiri (Thailand)

### 12:00-13:00 **Poster Session**

Location: PEACH Hall A Foyer, Level 3

Poster numbers 126-249

### **Guided Poster Tours 5-8**

(Please see page 25 for details)

### 13:30-14:30 **2204 Lunch Symposium: Apomorphine in Parkinson's disease: Clinical evidence and best practice (Sponsored by Britannia)**

Location: PEACH Hall A2/A3, Level 3

Chairs: Beom Jeon (Korea);  
Siwaporn Chankrachang (Thailand)

### **Introduction to Apomorphine—Continuous dopaminergic treatment strategies**

Teus van Laar (Netherlands)

### **Experiences in initiating an apomorphine infusion service: Case study**

Roongroj Bhirayasiri (Thailand)

### 15:00-16:30 **2217 Parallel Session: Clinical signs that assist clinicians in making a diagnosis of a movement disorder condition**

Location: Pattaya 10, Level 4

Chairs: Baorong Zhang (China);  
Jithanorm Suwannathemee (Thailand)

### 15:00 **Parkinsonian disorders**

Robert Iansek (Australia)

### 15:30 **Hyperkinesias**

Asha Kishore (India)

### 16:00 **Psychogenic movement disorders**

Mark Hallett (USA)

### 15:00-16:30 **2218 Parallel Session: Surgery of movement disorders**

Location: PEACH Hall A1, Level 3

Chairs: John Thomas (Singapore);  
Thien Thien Lim (Malaysia)

### 15:00 **Evolution of surgical therapy for PD and dystonia: Where are we now?**

Sun Ha Paek (South Korea)

### 15:30 **Various targets of PD surgery: Practical considerations for clinicians**

Jawad A. Bajwa (Saudi Arabia)

### 16:00 **Troubleshooting common surgical complications and DBS issues in PD and dystonia**

Apichart Pisarnpong (Thailand)



# Scientific Program

## Sunday, November 30

### 15:00-16:30 **2219 Parallel Session: Management strategies of difficult problems in movement disorders**

Location: Pattaya 11, Level 4

Chairs: Raymond Rosales (Philippines);  
Supoch Tunlayadechanont (Thailand)

15:00 Management of autonomic dysfunction in parkinsonism

Miho Murata (Japan)

15:30 Management of sleep problems in parkinsonism

Madhuri Behari (India)

16:00 Management of hereditary degenerative ataxias

Hidehiro Mizusawa (Japan)

### 17:00-18:30 **2310 Parallel Session: Nutritional considerations and gastrointestinal dysfunction in Parkinson's disease: Practical management**

Location: Pattaya 10, Level 4

Chairs: Mandy Au-Yeung (Hong Kong);  
Priya Jagota (Thailand)

17:00 Effective management of dysphagia in PD

Sarah Ko (Singapore)

17:30 The contributions of gastrointestinal dysfunction to weight loss in PD: What are the therapeutic options?

K. Ray Chaudhuri (United Kingdom)

18:00 Nutritional tips for PD: Prevent weight loss, optimize absorption of levodopa and enhance musculoskeletal and cognitive fitness

Juei-Jueng Lin (Taiwan)

### 17:00-18:30 **2311 Parallel Session: Movement disorders in vascular diseases and hydrocephalus**

Location: Pattaya 11, Level 4

Chairs: Tim Anderson (New Zealand);  
Nijasri Suwanwela (Thailand)

17:00 Poststroke movement disorders: Strategic locations, spectrum and management

Jonas Yeung (Hong Kong)

17:30 From 'atherosclerotic' to 'vascular' parkinsonism: Evolving concept and therapeutic principles

Pramod Pal (India)

18:00 Clinical complexity of hydrocephalus and parkinsonism: Optimal balance between medical and surgical management

Masakazu Miyajima (Japan)

### 17:00-18:30 **2312 Parallel Session: Understanding neuropsychiatric manifestations in Parkinson's disease and atypical parkinsonisms**

Location: PEACH Hall A1, Level 3

Chairs: Han-Cheng Wang (Taiwan);  
Parnsiri Chairangsaris (Thailand)

17:00 Cognitive impairment and behavioral disorders

Hee Tae Kim (South Korea)

17:30 Multisensory hallucinations and delusions

Praween Lolekha (Thailand)

18:00 Impulse control disorders/ Behavioral addictions

Thomas Kimber (Australia)



# Faculty and Chair Listing

Anderson, Tim  
*New Zealand*  
1101, 2311

Au-Yeung, Mandy  
*Peoples Republic of China*  
2310

Bajwa, Jawad  
*Saudi Arabia*  
2218

Behari, Madhuri  
*India*  
2219

Bhatt, Mohit  
*India*  
1213

Bhidayasiri, Roongroj  
*Thailand*  
2201, 2203, 2204

Bohlega, Saeed  
*Saudi Arabia*  
1213

Boonkongchuen, Pairoj  
*Thailand*  
2203

Cardoso, Francisco  
*Brazil*  
1211

Chairangsaris, Parnsiri  
*Thailand*  
2312

Chankrachang, Siwaporn  
*Thailand*  
2204

Chaudhuri, Ray  
*United Kingdom*  
1104, 2310

Chen, Jou-Hsien  
*Taiwan*  
1212

Chen, Shengdi  
*Peoples Republic of China*  
1211

Chinvarun, Yotin  
*Thailand*  
1225

Fung, Victor  
*Australia*  
1201

Gershanik, Oscar  
*Argentina*  
1201

Hallett, Mark  
*United States*  
2217

Hattori, Nobutaka  
*Japan*  
1103, 2201, 2203

Iansek, Robert  
*Australia*  
1224, 2201, 2217

Ibrahim, Norlinah  
*Malaysia*  
1225

Jagota, Priya  
*Thailand*  
1102, 2310

Jeon, Beom  
*Korea*  
1202, 2202, 2204

Kaji, Ryuji  
*Japan*  
1212

Kim, Hee Tae  
*Korea*  
2312

Kim, Jae-Woo  
*Korea*  
1224

Kimber, Thomas  
*Australia*  
1104, 2312

Kishore, Asha  
*India*  
2217

Ko, Sarah  
*Singapore*  
2310

Kulkantrakorn, Kongkiat  
*Thailand*  
1212

Kumthornthip, Witsanu  
*Thailand*  
1227

Kuzuhara, Shigeki  
*Japan*  
2203

Lang, Anthony  
*Canada*  
1201

Laptikultham, Somsak  
*Thailand*  
1101

Le, Minh  
*Viet Nam*  
1225

Lee, Chong Sik  
*Korea*  
1203, 1213

Lee, Lillian  
*Philippines*  
2203

Lewis, Simon  
*Australia*  
1104, 1224

Lim, Erle  
*Singapore*  
1102

Lim, Shen-Yang  
*Malaysia*  
1202, 1227

Lim, Thien Thien  
*Malaysia*  
2218

Limotai, Chusak  
*Thailand*  
1225

Lin, Juei-Jueng  
*Taiwan*  
2310

Lolekha, Praween  
*Thailand*  
2312

Miyajima, Masakazu  
*Japan*  
2311

Mizuno, Yoshikuni  
*Japan*  
1101, 1202

Mizusawa, Hidehiro  
*Japan*  
2219

Moro, Elena  
*France*  
1203

Morris, Meg  
*Australia*  
1224

Murata, Miho  
*Japan*  
2219

Okuma, Yasuyuki  
*Japan*  
1224

Paek, Sun-Hae  
*Korea*  
2218

Pal, Pramod  
*India*  
2311

Phanthumchinda, Kammant  
*Thailand*  
1201

Pisarnpong, Apichart  
*Thailand*  
1203, 2218

Poewe, Werner  
*Austria*  
1103, 1201

Poungvarin, Niphon  
*Thailand*  
1102

Reichmann, Heinz  
*Germany*  
1105, 1211

Rosales, Raymond  
*Philippines*  
1227, 2219

Sathornsumetee, Sith  
*Thailand*  
1226



## Faculty and Chair Listing

Senanarong, Vorapun  
*Thailand*  
1103

Setthawatcharawanich,  
Suwanna  
*Thailand*  
1213

Shang, Hui Fang  
*Peoples Republic of China*  
1226

Singhal, Bhim  
*India*  
1226

Sitburana, Oraporn  
*Thailand*  
1213

Suthisisang, Chuthaman  
*Thailand*  
1211

Suwantamee, Jithanorm  
*Thailand*  
2217

Suwanwela, Nijasri  
*Thailand*  
2311

Takahashi, Ryosuke  
*Japan*  
1202

Tan, Louis  
*Singapore*  
1103, 1202, 2201

Thomas, John  
*Singapore*  
2218

Thompson, Philip  
*Australia*  
1226

Towanabut, Somchai  
*Thailand*  
1105

Tunlayadechanont, Supch  
*Thailand*  
2219

Ugawa, Yoshikazu  
*Japan*  
1212

Van Laar, Teus  
*Netherlands*  
2204

Viriyavejakul, Akravudh  
*Thailand*  
1226

Wang, Han-Cheng  
*Taiwan*  
2312

Wu, Ruey-Meei  
*Taiwan*  
1211

Wu, Yih-Ru  
*Taiwan*  
1225

Yamamoto, Mitsutoshi  
*Japan*  
1212

Yeung, Jonas  
*Hong Kong*  
2311

Zhang, Baorong  
*Peoples Republic of China*  
2217

Zhang, Zhen-Xin  
*China*  
1105



# Poster Session Schedule

## Saturday, November 29, 2014

Poster Session: 11:30 – 12:30

Poster viewing: 8:00 – 18:00

Location: PEACH Hall A Foyer, Level 3

Parkinson's disease: Nursing and Allied health interventions . . . . .	1-20
Parkinsonism (secondary and parkinsonism-plus) . . . . .	21-38
Parkinson's disease: Behavioral disorders . . . . .	39-49
Parkinson's disease: Clinical trials . . . . .	50-66
Parkinson's disease: Cognition . . . . .	67-78
Parkinson's disease: Dysautonomia . . . . .	79-80
Parkinson's disease: Electrophysiology . . . . .	81-84
Parkinson's disease: Neuropharmacology . . . . .	85-89
Parkinson's disease: Phenomenology . . . . .	90-100
Parkinson's disease: Quality of life/caregiver burden . . . . .	101-109
Parkinson's disease: Sleep disorders . . . . .	110-112
Huntington's disease . . . . .	113-119
Surgical therapy: Parkinson's disease . . . . .	120-125

## Sunday, November 30, 2014

Poster viewing: 8:00 – 18:00

Poster Session: 12:00 – 13:00

Location: PEACH Hall A Foyer, Level 3

Ataxia . . . . .	126-134
Basic science . . . . .	135-161
Choreas (non-Huntington's disease) . . . . .	162-163
Drug-Induced movement disorders . . . . .	164-166
Dystonia . . . . .	167-174
Education in Movement Disorders . . . . .	175-180
Epidemiology . . . . .	181-191
Genetics . . . . .	192-206
Lewy body dementia and other dementias in movement disorders . . . . .	207-208
Myoclonus . . . . .	209-213
Neuroimaging . . . . .	214-224
Neuropharmacology . . . . .	225-228
Quality of life/caregiver burden in movement disorders . . . . .	229-234
Restless legs syndrome . . . . .	236-237
Surgical therapy: Other movement disorders . . . . .	238-239
Tics/Stereotypies . . . . .	240
Tremor . . . . .	241-249
Wilson's disease, storage and metabolic movement disorders . . . . .	250





## Guided Poster Tours

Guided Poster Tours will take place during the regular poster sessions on November 29-30, 2014. They will be led by members of the AOPMC faculty and the authors will be present to discuss the abstracts. There will be eight total Guided Poster Tours with four simultaneous tours per day on Saturday, November 29 and Sunday November 30. Anyone is welcome to attend. Each tour will highlight approximately ten exceptional posters.

### Saturday, November 29, 2014

11:30 – 12:30

Location: PEACH Hall A Foyer, Level 3

#### Guided Poster Tour 1: Parkinson's disease: Nursing and Allied Health Interventions

Tour Leaders: Maduri Behari (India)  
Areerat Suputtitada (Thailand)

Posters featured in this tour:

Poster#	Title
3	Short-term progression of non-motor symptoms in Parkinson's disease in Singapore
5	Role of Bacopa monnieri as Neuroprotectant in MPTP induced Parkinson's disease (PD) animal model
6	Reach-to-Grasp Actions during ON- and OFF-state of dopaminergic medication in Parkinson's disease: Insights from a barrier task
8	Oral health and nutritional status in patients affected with Parkinson's disease
11	The Use of a Text Messaging Medication Reminder System to Enhance Adherence of Parkinson's disease Patients
12	Quality of Life in Deep Brain Stimulation and Duodenal Levodopa-Carbidopa Infusion Patients
14	Knowledge About Parkinson's Disease in Patients with Parkinson's Disease—A Survey
17	Perception of the Disease in Patients with Parkinson's Disease: Past, Present and Future

#### Guided Poster Tour 2: Parkinsonism (secondary and parkinsonism-plus) Parkinson's disease: Behavioral disorders Parkinson's disease: Clinical trials

Tour Leaders: Chin Song Lu (Taiwan)  
Surat Singmaneesakulchai (Thailand)

Posters featured in this tour:

Poster #	Title
30	Progressive supranuclear palsy showing pure akinesia with gait freezing: Clinicopathological report of an autopsy case
32	The frontal lobe dysfunction and behavior changes in Chinese patients with multiple system atrophy
36	A novel mutation of PDE8B gene in a Japanese family of Autosomal-Dominant Striatal Degeneration
44	Role of astrocytes in functional compensation of the motor deficits after dopaminergic nigrostriatal system degeneration in relation to early Parkinson's disease
52	Prevalence of vitamin D insufficiency and risk of instability and falls in Thai Parkinson's disease patients
54	Comparison of Multi-directional and One-directional patterns of partial body weight support treadmill training in balance improvement in Parkinson's disease
55	Efficacy and safety of Rasagiline in levodopa-treated Korean Parkinson's disease patients with motor fluctuations: Randomized, placebo-controlled, double-blind study
62	Repetitive transcranial magnetic stimulation for freezing of gait in Parkinson's disease
65	Long-term effect of the combination therapy of lidocaine injection and neck corset for drop head in Parkinson's disease
66	Can Speech of Idiopathic Parkinson's Disease in the Early Stage be Pre-Diagnosed by Human Hearing?



# Guided Poster Tours

## **Guided Poster Tour 3: Parkinson's disease: Cognition Parkinson's disease: Electrophysiology Parkinson's disease: Neuropharmacology Parkinson's disease: Phenomenology**

Tour Leaders: John Thomas (Singapore)  
Natilda Limotai (Thailand)

Posters featured in this tour:

Poster #	Title
73	Prevalence and treatment pattern of Parkinson's disease dementia in Korea
76	Cognitive dysfunction in Parkinson's disease with SWEDDs
77	Relationship between apathy, and cognition /QOL in patients with PD
78	Neuropsychological patterns of impairment in Parkinson's Disease patients in Singapore
82	Prevalence of small fiber neuropathy in idiopathic Parkinson's disease evaluated by Quantitative Sensory Testing: The cross sectional investigational study
83	Efficacy of high-frequency repetitive transcranial magnetic stimulation on depression in Parkinson's disease: A randomized sham-controlled study
84	Voltage Adjustment Effects More on Limb Symptoms than Axial Symptoms in Parkinson's Disease Patients Treated with Subthalamic Nucleus Stimulation
86	Apocyanin, a microglia PHOX inhibitor prevents dopaminergic neuronal degeneration in Lipopolysaccharide induced Parkinson's disease model
97	Investigation of factors associated with psychiatric symptoms in patients with advanced-staged Parkinson's disease
99	Evidence of association between LRKK2 R1628P variant and caffeine intake in Parkinson's disease

## **Guided Poster Tour 4: Parkinson's disease: Quality of life/caregiver burden Parkinson's disease: Sleep disorders Huntington's disease**

Tour Leaders: Jee Young Lee (Korea)  
Onanong Jitkrittadukul (Thailand)

Posters featured in this tour:

Poster #	Title
103	Changing standing position is the risk factor of falls in Parkinson's disease
106	Gender-related differences in sexual functioning in Parkinson's disease patients
108	Features of non-motor symptoms and determinants of poor Quality of life among different motor subtypes of early Chinese Parkinson's disease
110	Characterizing apathy with other nonmotor symptoms in Parkinson's disease
111	How good do Parkinson's disease (PD) patients turn in bed? A comparative study between PD patients and their spouses using multisite accelerometers
112	The Asian Perspectives of Perceived Burden of Parkinson's Patients with Sleep Disorders: An Assessment of Spousal vs. Offspring Caregivers
115	Improvement of mitochondrial NAD <sup>+</sup> /FAD <sup>+</sup> -linked state-3 respiration by caffeine attenuates quinolinic acid induced motor impairment in rats: Implications in Huntington's disease
117	A 12-month longitudinal study of eye-hand coordination in a visually guided task in Huntington's disease
118	Altered rhythmical eye-hand movement in self-paced and cued tasks in Huntington's disease



# Guided Poster Tours

Sunday, November 30, 2014

12:00 – 13:00

## Guided Poster Tour 5: Ataxia

### Basic science

Tour Leaders: Hui Fang Shang (Peoples Republic of China)  
Saknan Bongsebandhu-Phubhakdi (Thailand)

Posters featured in this tour:

Poster #	Title
130	The distribution and progression pattern of adult onset cerebellar ataxias
142	No correlation found between serum biochemical levels of vitamin D and calcium to the status of depression in patients with Parkinson's disease
143	Gray matter volume change correlates with oxidative stress biomarker in Parkinson's disease
148	Neuronopathic Gaucher's disease model of medaka displayed axonal accumulation of alpha-synuclein
149	Respiratory chain analysis of skin fibroblasts in Parkinson's disease patients with mutations of Parkin and glucocerebrosidase 1 genes
154	Optogenetic dopaminergic stimulation in mice
156	The effects of optical stimulation of specific glutamatergic afferent fibers from STn in GPe
158	Structural basis for human glucocerebrosidase 2 deficiencies leading to hereditary ataxias
160	iPS Cell Modeling of Genetic Parkinson's disease

## Guided Poster Tour 6: Drug-induced movement disorders

### Dystonia

### Education in Movement Disorders

### Epidemiology

Tour Leaders: Win Min Thit (Myanmar)  
Praween Lolekha (Thailand)

Posters featured in this tour:

Poster #	Title
167	Genetic analysis of TOR1A & THAP1 genes in Indian primary dystonia patients
168	Acute dystonic reaction associated with general anesthesia following thymectomy under general anesthesia in patient with myasthenia gravis
178	Awareness of Parkinson's disease in a multiethnic urban Asian setting
180	Increasing Knowledge of Parkinson's disease among Medical Professionals in Southeast Asia: Piloting the Thailand-Myanmar-Laos model (TML model) in continuing medical education
184	Role of microglia-mediated neuroinflammation in the aging process and pathogenesis of Parkinson's disease
187	Prevalence and associated factors of depression in Parkinson's disease patients in Parkinson's disease clinic at Siriraj Hospital
188	Assessing plasma levels of heavy metals in patients of Parkinson's disease
189	Predictors of mortality in Parkinson's disease



# Guided Poster Tours

## Guided Poster Tour 7: Genetics

### Lewy body dementia and other dementias Neuroimaging

Tour Leaders: Mandy Au Yeung (Hong Kong)  
Kulthida Methawasin (Thailand)

Posters featured in this tour:

Poster #	Title
193	A Chinese familial cortical myoclonic tremor with epilepsy pedigree localized on chromosome 8q22.3-q24.13
200	Cytogenetic study and compared with measurements of oxidative stress and PARK2 gene in Parkinson's disease patients
201	Relationship between the Mitochondrial DNA polymerase gamma Gene Polymorphisms with Parkinson disease patients
205	COQ2 gene variant associates with multiple system atrophy
207	CoQ2 gene in patients with dementia
214	Putaminal serotonergic fibers and levodopa-induced dyskinesias in Parkinson's disease patients
219	[18F]FDG PET and [18F]FP-CIT PET studies in Atypical Parkinsonism
222	Whole Brain Voxel Wise Study of Iron Deposits with MRI R2* in Parkinson's disease
223	Diffusion Tensor Imaging of the Brain in Parkinson's Disease: A Whole-Brain Voxel-Wise Approach

## Guided Poster Tour 8: Quality of life/caregiver burden in movement disorders

### Restless legs syndrome

### Tremor

### Wilson's disease

### This tour will also feature the Late-Breaking Abstracts

Tour Leaders: Tim Anderson (New Zealand)  
Surat Tanprawate (Thailand)

Posters featured in this tour:

Poster #	Title
231	Parkinson disease and orthotic treatment
232	Socio-economic impact on oral health-related quality of life of Parkinson's disease patients: Evidence from South India
237	Treatment of Childhood Restless Legs Syndrome
242	Feasibility study report to evaluate the safety and efficacy of unilateral thalamotomy for essential tremor with transcranial MRg focused ultrasound
250	Parathyroid imbalance in Wilson Disease
LBA1	Functional limitation and rehabilitation of Parkinson's disease: Occupational therapy intervention.
LBA2	Wilson's disease: Update on integrated Chinese and western medicine
LBA3	Alpha-synuclein in minor salivary gland as peripheral biomarkers of sporadic Parkinson's disease
LBA4	Suppression of hand tremor at rest in Parkinson's disease but not dystonic tremor by electrical muscle stimulation: A pilot study
LBA5	Access to care from neurologist and subspecialists in Movement Disorders: An analysis of travel distance by patients from the Thailand PD registry database.
LBA7	Determinates of social stigma in Parkinson's disease: A data analysis from the Thailand PD registry database.
LBA8	The effects of subthalamic nucleus Deep Brain Stimulation on cognitive function in patients with Parkinson's disease.
LBA9	Hemichorea and hemiballism in a patient with temporal-parietal lobe infarction after treatment with recombinant tissue plasminogen activator.



# Abstract Listing by Topic

Posters 1-125 to be presented on Saturday, November 29, 2014 from 11:30-12:30

## Parkinson's disease: Nursing and Allied health interventions

- 1 Cognitive impairment and depression in patients with Parkinson's disease  
*Xuedong Qu, LV Wenming (Lanzhou, Peoples Republic of China)*
- 2 Withdrawn by author
- 3 Short-term progression of non-motor symptoms in Parkinson's disease in Singapore  
*Lai Mun Chew, Prakash Kumar Manharlal, Eng-King Tan, Nivedita Vikas Nadkarni, Weng Kit Lye (Singapore)*
- 4 Nationwide survey of patient knowledge and attitudes towards human experimentation using stem cells or bee venom acupuncture for Parkinson's disease  
*Yun Kim, Sun Ju Chung, Seong Beom Koh, Young-Su Ju, Jae Woo Kim (Anyang, Gyonggi-do, Korea)*
- 5 Role of Bacopa monnieri as Neuroprotectant in MPTP induced Parkinson's disease animal model  
*Babita Singh, Rajnish Chaturvedi, Abbas Mahdi, Rajesh Verma, Shivani Pandey (Lucknow, India)*
- 6 Reach-to-Grasp Actions during ON- and OFF-state of dopaminergic medication in Parkinson's disease: Insights from a barrier task  
*Suweena Khacharoen, Jarugool Tretriluxana, Apichart Pisarnpong, Pakaratee Chaiyawat (Nakhon Pathom, Thailand)*
- 7 Effects of external cues on gait parameters of Parkinson's disease patients: A systematic review  
*Priscila Rocha, Gustavo Porfirio, Lorenna Aguiar, Henrique Ferraz, Virginia Trevisani (Preston, VIC, Australia)*
- 8 Oral health and nutritional status in patients affected with Parkinson's disease  
*Asmin Sha (Thrissur, India)*
- 9 Thai Classical Dance: From being part of the culture to being an exercise  
*Surasa Khongprasert, Roongroj Bhidayasiri, Vijit Kanungsukkasem (Bangkok, Thailand)*
- 10 Knowledge about Parkinson's disease among nurses in Thailand  
*Nonglak Boonrod, Lalita Kaewwilai, Kamolwan Boonpang, Ratanaruedee Devahastin, Onnalin Jandeaw, Priya Jagota, Onanong Jitkriksadakul, Neil Brenden, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 11 The use of a text messaging medication reminder system to enhance adherence of Parkinson's disease patients.  
*Lalita Kaewwilai, Nonglak Boonrod, Kamolwan Boonpang, Roongroj Bhidayasiri (Pathumwan, Bangkok, Thailand)*
- 12 Quality of life in Deep Brain Stimulation and Duodenal Levodopa-Carbidopa Infusion patients  
*Kamolwan Boonpang, Lalita Kaewwilai, Nonglak Boonrod, Ratanaruedee Devahastin, Onnalin Jandeaw, Onanong Jitkriksadakul, Priya Jagota, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 13 Happiness in Parkinson's disease patients and caregivers  
*Kamolwan Boonpang, Lalita Kaewwilai, Nonglak Boonrod, Priya Jagota, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 14 Knowledge about Parkinson's disease in patients with Parkinson's disease: A survey  
*Onnalin Jandeaw, Roongroj Bhidayasiri, Priya Jagota, Surat Singmaneesakulchai, Onanong Jitkriksadakul, Nonglak Boonrod, Lalita Kaewwilai, Kamolwan Boonpang, Ratanaruedee Devahastin, Neil Brenden (Bangkok, Thailand)*
- 15 Documentation of reasons for rotigotine patch withdrawal in Parkinson's disease patients  
*Xiao Deng, Eng-King Tan (Singapore)*
- 16 Contributing factors to indoor and outdoor falls in Parkinson's disease  
*Mary Danoudis, Meg Morris, Hylton Menz, Jennifer Watts, Anna Murphy, Robert Iansek, Jennifer McGinley (Bentleigh, VIC, Australia)*
- 17 Perception of the disease in patients with Parkinson's disease: past, present and future  
*Onnalin Jandeaw, Priya Jagota, Surat Singmaneesakulchai, Nonglak Boonrod, Lalita Kaewwilai, Kamolwan Boonpang, Ratanaruedee Devahastin, Neil Brenden, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 18 Drug-related problems in patients with Parkinson's disease identified by pharmacists at the outpatient pharmacy unit  
*Thanarat Suansanae, Pakawadee Wongpraprutdee, Moncahnok Duangdee, Chuthamane Suthisisang, Somehai Towanabut (Bangkok, Thailand)*
- 19 Whey protein supplementation increases plasma reduced glutathione, branched-chain amino acids and essential amino acids, but decreases plasma homocysteine in patients with Parkinson's disease  
*Piyaratana Tosukhowong, Chanchai Boonla, Thasinas Dissayabutra, Lalita Kaewwilai, Chanisa Chotipanich, Juho Joutsa, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 20 Massage therapy: What is the evidence that it is beneficial for Parkinson's patients  
*Yuka Miyahara, Lalita Kaewwilai, Nonglak Boonrod, Roongroj Bhidayasiri (Bangkok, Thailand)*



# Abstract Listing by Topic

## Parkinsonism (secondary and parkinsonism-plus)

- 21 Should genetic testing for SCA be included in the diagnostic workup for MSA?  
*Han-Joon Kim, Beom Jeon, Junghwan Shin, Woong-Woo Lee, Hyeyoung Park, Yu Jin Jung, Jee-Young Lee, Gwanhee Ehm, Chae-Won Shin (Seoul, Korea)*
- 22 An uncommon case of rapid onset vascular parkinsonism following acute deep cerebral venous sinus thrombosis  
*Thanaboon Worakijthamrongchai, Sirintara Pongpech, Pakorn Jiarakongmun, Ekachat Chanthanapak, Chai Kobkitsuksakul (Bangkok, Thailand)*
- 23 Pontine and extrapontine myelinosis presenting as secondary parkinsonism  
*Lomesh Bhirud, Manmeet Kaur, Suman Kushwaha, Siddarth Maheshwari (Delhi, India)*
- 24 Autonomic function tests in multiple system atrophy: Cerebellar Type (MSA\_C) in Vietnam  
*Trang Vo, Cong Nguyen (Ho Chi Minh, Viet Nam)*
- 25 Prevalence and clinical characteristics of post-stroke movement disorders after acute ischemic stroke  
*Yong Bum Kim, Won Tae Yoon (Seoul, Korea)*
- 26 Progressive supranuclear palsy-like phenotype as the presentation of sporadic Creutzfeldt-Jakob disease  
*Pattamon Panyakaew, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 27 Clinical and MRI features of multiple system atrophy: A report on 26 patients at the Ho Chi Minh City University Medical Center, Vietnam  
*Tai Tran, Minh Le (Ho Chi Minh City, Viet Nam)*
- 28 Morphological changes in early multiple system atrophy of the cerebellar type  
*Myung Jun Lee, Joon-Kyung Seoung, Jae-Hyeok Lee, Uicheul Yoon, Eun-Joo Kim (Seoul, Korea)*
- 29 Improvement of neuropsychological test after CSF drainage in normal pressure hydrocephalus: Useful indicator for shunt operation?  
*Joon Hyun Shin (Cheong Ju Si, Chungcheongbuk-do, Korea)*
- 30 Progressive supranuclear palsy showing pure akinesia with gait freezing: Clinicopathological report of an autopsy case  
*Eu Jene Choi, Dong Goo Lee, Shin Kwang Khang, Chong Lee (Seoul, Korea)*
- 31 Brain perfusion SPECT and neuropathology of two patients with autopsy-verified Coticobasal Syndrome-Alzheimer's Disease  
*Sachiko Nakayama, Yumiko Motoi, Shi-Ei Matumoto, Masashi Takanashi, Hideo Mori, Nobutaka Hattori (Tokyo, Japan)*
- 32 The frontal lobe dysfunction and behavior changes in Chinese patients with multiple system atrophy  
*Bei Cao, Wei Ou, Jing Yang, Qian Wei, HuiFang Shang (Chengdu, Peoples Republic of China)*
- 33 Mild parkinsonian sign in the spectrum of vascular parkinsonian disorders  
*Tae-Beom Ahn, Dokyung Lee (Seoul, Korea)*
- 34 Creutzfeldt-Jakob Disease: A first case series from a Thai Hospital  
*Armed Rasheed, Chutanat Yotsarawat, Puchit Sukphulloprat, Praween Lolekha (Pathumthani, Thailand)*
- 35 Two siblings with cerebrotendinous xanthomatosis  
*Mee Park (Daegu, Korea)*
- 36 A novel mutation of PDE8B gene in a Japanese family of autosomal-dominant striatal degeneration  
*Kosei Hirata (Tokyo, Japan)*
- 37 Revisiting "Round the Houses" sign in progressive supranuclear palsy  
*Onanong Jitkriksadakul, Phopsuk Tansuhaj, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 38 Pill rolling tremor caused by critical MCA stenosis  
*Ummer Karadan, Shafi Shaik, K Salam, V Pradeep Kumar, Mohan Noone (Calicut, India)*

## Parkinson's disease: Behavioral disorders

- 39 Prevalence and risk factors of depression among Filipinos with Parkinson's disease  
*Patricia Ann Canto, Roland Dominic Jamora (Manila, Philippines)*
- 40 The impact of depression on cognitive performances and quality of life in Thai patients with Parkinson's disease  
*Praween Lolekha, Kongkiat Kulkantrakorn (Bangkok, Thailand)*
- 41 UPPS-P Impulsive Behaviour Scale in Parkinson's disease  
*Pirada Witoonpanich, Atbin Djamshidian-Tehrani, Andrew Lawrence (Bangkok, Thailand)*
- 42 Behavioral and psychological symptoms in Korean patients with early Parkinson's disease in elderly patients: Preliminary study  
*Jinyoung Ahn, Hee Tae Kim, Byung Kun Kim (Seoul, Korea)*
- 43 Reduction of motion disability in migrainous rats with Parkinson's disease  
*Ahmad Ali Lotfinia (Tehran, Iran)*
- 44 Role of astrocytes in functional compensation of the motor deficits after dopaminergic nigrostriatal system degeneration in relation to early Parkinson's disease  
*Lukasz Olech, Urszula Glowacka, Jadwiga Wardas, Katarzyna Kuter (Kraków, Poland)*



## Abstract Listing by Topic

- 45 Improvement of impulse control disorder in Parkinson's disease after Deep Brain Stimulation (of the subthalamic nucleus)  
*Da-eun Jeong, Hae-Won Shin (Seoul, Korea)*
- 46 The characteristics of non-motor symptoms in drug-naive Parkinson's disease: Analysis between tremor dominant and non-tremor dominant subtypes  
*Jinyoung Youn, Joon-kyu Moon, Jin Whan Cho, Eungseok Oh, Ji Sun Kim, Wooyoung Jang, Jinse Park (Seoul, Korea)*
- 47 Comparison of the prevalence of anxiety and depression between young-onset Parkinson's disease and typical onset Parkinson's disease patients  
*Nonglak Boonrod, Lalita Kaewwilai, Kamolwan Boonpang, Priya Jagota, Jirada Sringean, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 48 Depression and voice handicap in Parkinson's disease  
*Mun Kyung Sunwoo, Jin Yong Hong, Ji Eun Lee, Phil Hyu Lee, Young Sohn (Seongnam, Korea)*
- 49 Cognitive, emotional and social behavioral analysis in 6-OHDA rat model of Parkinson's disease  
*Neha Mishra, Deepak Sharma (New Delhi, India)*
- Parkinson's disease: Clinical trials**
- 50 Serum testosterone levels and symptoms of Parkinson's disease  
*Praween Lolekha, Kongkiat Kulkantrakorn (Bangkok, Thailand)*
- 51 Serum uric acid levels in Thai patients with Parkinson's disease  
*Piyatnat Wongwan, Praween Lolekha (Banglamung, Chonburi, Thailand)*
- 52 Prevalence of vitamin D insufficiency and risk of instability and falls in Thai Parkinson's disease patients  
*Praween Lolekha, Kongkiat Kulkantrakorn (Bangkok, Thailand)*
- 53 Alpha-synuclein in minor salivary glands as peripheral biomarkers of sporadic Parkinson's disease  
*Tao Feng, Yan Gao (Beijing, Peoples Republic of China)*
- 54 Comparison of Multi-directional and One-directional patterns of partial body weight support treadmill training in balance improvement in Parkinson's disease  
*Raksina Meesathien, Pitagorn Thamronglaohaphan, Teeratorn Pulkes, Pairoj Boonkongchuen (Nonthaburi, Thailand)*
- 55 Efficacy and safety of Rasagiline in levodopa-treated Korean Parkinson's disease patients with motor fluctuations: Randomized, placebo-controlled, double-blind study  
*Ji Young Yun, Beom Jeon, Jae Woo Kim, Chong Lee, Jong-Min Kim, Jin Whan Cho, Young Sohn, Jee-Young Lee, On Behalf of The PANSORI Study Group (Seoul, Korea)*
- 56 A-synuclein oligomers in human red blood cells as a potential biomarker for Parkinson's disease  
*Fangfei Li, Tao Feng (Beijing, Peoples Republic of China)*
- 57 Availability of skin biopsy in differential diagnosis between Parkinson's disease and multiple system atrophy  
*Rie Haga, Yasuo Miki, Chieko Suzuki, Kazuhiro Sugimoto, Kouichi Wakabayashi, Souroku Yagihashi, Masayuki Baba, Masahiko Tomiyama (Aomori, Japan)*
- 58 Determining the driving competency in Parkinson's disease patients  
*Onanong Jitkriksadakul, Soradech Krootjohn, Chusak Thanawattano, Chanawat Anan, Roongroj Bhidayasiri (Bangkok, Thailand)*
- 59 Lidocaine therapy for lateral truncal deviation in Parkinson's disease  
*Yoshihiko Furusawa, Takashi Isobe, Kanako Komatsu, Noritaka Wakasugi, Yukio Mizuno, Masahiro Kanai, Yohei Mukai, Takashi Sakamoto, Miho Murata (Kodaira City, Japan)*
- 60 A study of effect of zonisamide in QOL of PD patients  
*Hidemoto Saiki (Osaka, Japan)*
- 61 The availability of LSVT-BIG for Parkinson's disease patients with wearing-off  
*Masahiko Tomiyama, Jinichi Nunomura, Megumi Sasaki, Tatsuya Ueno, Rie Haga, Yukihisa Funamizu, Tomoya Kon, Haruo Nishijima, Akira Arai, Chieko Suzuki (Aomori, Japan)*
- 62 Repetitive transcranial magnetic stimulation for freezing of gait in Parkinson's disease  
*Eungseok Oh, Ji Seon Kim, Sangmin Park, Junggeol Lim, Soo-Kyung Bok, Ae Young Lee (Daejeon, Korea)*
- 63 The prospective study to evaluate the effect of Anti-PD medication on non-motor features of patients with Parkinson's disease at Neurological Clinic, Maharaj Nakorn Chiangmai Hospital: Preliminary results  
*Juksanee Woranuchkul (Chiangmai, Thailand)*
- 64 Bilateral Recording of Parkinson's Signs with the Parkinson's KinetiGraph: Assessing Its Utility to Evaluate Asymmetric Features  
*Jirada Sringean, Poonpak Taechalertpaisarn, Onanong Jitkriksadakul, Roongroj Bhidayasiri (Bangkok, Thailand)*



## Abstract Listing by Topic

65 Long-term effect of the combination therapy of lidocaine injection and neck corset for drop head in Parkinson's disease  
*Yohei Mukai, Yoshihiko Furusawa, Terunori Sano, Kana Mitsuhashi, Atsuko Nishikawa, Tomoya Taminato, Takashi Sakamoto, Miho Murata (Tokyo, Japan)*

66 Can speech of idiopathic Parkinson's disease in the early stage be prediagnosed by human hearing?  
*Pawichaya Suphinnapong, Roongroj Bhidayasiri, Nuttakorn Thubthong, Arporn Teeramongkonrasmee, Patnarin Mahattanasakul (Klong Sarn, Bangkok, Thailand)*

### Parkinson's disease: Cognition

67 Comparing cerebral perfusion of Parkinson's disease according to cognitive status using arterial spin labeling perfusion MRI  
*Joong-Seok Kim, Hyun Seok Choi, Hyung-Eun Park, In-Seok Park (Seoul, Korea)*

68 Study of executive dysfunction in non-demented Parkinson's disease  
*Suman Kushwaha, Anju Jaiswal, Hardeep Malhotra, Vibha Sharma (Dehli, India)*

69 A comparative study of cognitive profiles using the Montreal Cognitive Assessment (MoCA) and Thai Mental State Examination (TMSE) in Thai Parkinson's disease and general elderly subjects  
*Netnapa Hommanee, Praween Lolekha (Samuthprakarn, Thailand)*

70 Brain neurotransmitters in Parkinson's induced rats  
*Pankaj Pandey, S. Sharma (New Delhi, India)*

71 Cognitive impairment in Idiopathic Parkinson's disease in a tertiary care centre in Kolkata  
*Kalyan Bhattacharyya, Dhiman Das, Arijit Roy, Atanu Biswas, Paramita Bose, Asit Senapati (Kolkata, India)*

72 Effect of olfactory impairment and white matter hyperintensities on cognition in non-demented Parkinson's disease  
*Jee Hyun Ham, Young Sohn, Phil Hyu Lee (Seoul, Korea)*

73 Prevalence and treatment pattern of Parkinson's disease dementia in Korea  
*Joong-Seok Kim, Yong Duk Kim, Kwang-Soo Lee, Yong-Soo Shim, In-Uk Song, Jeong Wook Park, Phil Hyu Lee, Chul-Hyung Lyoo, Tae-Beom Ahn, Hyeo-Il Ma (Seoul, Korea)*

74 Cross-cultural adaptation of the Montreal Cognitive Assessment retains its validity for use in patients with Parkinson's disease  
*Syam Krishnan, Sunitha Justus, Radhamani M, Ramshekhar Menon, P Sankara Sarma, Asha Kishore (Thiruvananthapuram, India)*

75 Empirically-derived cognitive subtypes of Parkinson's disease confirm suitability of the abbreviated criteria of MCI  
*Ilona Laskowska, Szymon Leski, Jakub Kowalski, Dariusz Kozirowski, Andrzej Koczorowski, Simone Dalla Bella (Warsaw, Poland)*

76 Cognitive dysfunction in Parkinson's disease with SWEDDs  
*Seok-Jae Kang, Byung Kun Kim, Hojin Choi, Jinyoung Ahn, Hee Tae Kim (Seoul, Korea)*

77 Relationship between apathy, and cognition /QOL in patients with PD  
*Aya Kumon, Megumi Saruwatari, Motoichiro Kato, Noriko Kawashima, Kazuko Hasegawa (Kanagawa, Japan)*

77 Withdrawn by author

### Parkinson's disease: Dysautonomia

79 Leptin and ghrelin concentrations and cardiovascular dysautonomia in Parkinson's disease  
*Tomohiko Nakamura, Masashi Suzuki, Akinori Okada, Junichiro Suzuki, Satoru Hasegawa, Masaaki Hirayama, Gen Sobue (Nagoya City, Japan)*

80 Chilblain in Parkinson's disease  
*Nobuyuki Araki, Masato Asahina, Hiroshi Arai, Akira Katagiri, Anupama Poudel, Yoshikatsu Fujinuma, Yoshitaka Yamanaka, Satoshi Kuwabara (Chiba, Japan)*

### Parkinson's disease: Electrophysiology

81 Contribution of phase reorganization to somatosensory evoked dynamics in thalamus following median nerve stimulation in Parkinson's disease and essential tremor patients  
*Katsushige Watanabe, Sumito Sato, Futaba Maki, Yasushi Okamura, Fusako Yokochi, Makoto Taniguchi (Tokyo, Japan)*

82 Prevalence of small fiber neuropathy in idiopathic Parkinson's disease evaluated by Quantitative Sensory Testing: The cross sectional investigational study  
*Natthiya Siritham, Parnsiri Chairangaris, Pasiri Sittinamsuwan, Chesda Udommongkol (Rayong, Thailand)*

83 Efficacy of high-frequency repetitive transcranial magnetic stimulation on depression in Parkinson's disease: A randomized sham-controlled study  
*Hae-Won Shin, Sun Ju Chung, Young Sohn (Seoul, Korea)*

84 Voltage adjustment effects more on limb symptoms than axial symptoms in Parkinson's disease patients treated with subthalamic nucleus stimulation  
*Wenbiao Xian, Jinlong Liu, Zhong Pei, Lulu Jiang, Chao Yang, Yanmei Liu, Yifan Zheng, Ling Chen (Guangzhou, Peoples Republic of China)*





## Abstract Listing by Topic

### Parkinson's disease: Neuropharmacology

- 85 Hemiballismus due to acute stroke in a Parkinson's disease patient  
*Shyam Jaiswal, Nilesh Chaudhary, JMK Murthy (Hyderabad, India)*
- 86 Apocyanin, a microglia PHOX inhibitor prevents dopaminergic neuronal degeneration in Lipopolysaccharide induced Parkinson's disease model  
*Neha Sharma, Neha Sharma, Bimla Nehru (Chandigarh, India)*
- 87 Neuroprotective effects of Withania Someniferais on mice brain: A therapeutic potential drug for Parkinson's disease  
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- 102 Prevalence, characteristics and risk factors of Idiopathic Parkinson's disease related pain in Parkinson's clinic: A cross-sectional study, Faculty of Medicine, Chiang Mai University  
*Pisut Chunchongkolkul (Nakornsawan, Thailand)*
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- 112 The Asian perspectives of perceived burden of Parkinson's patients with sleep disorders: An assessment of spousal vs. offspring caregivers  
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*Jitendriya Mishra, Anil Kumar (Chandigarh, India)*
- 116 Pharmacological modulation of behavioral and biochemical effects resembling Huntington's disease utilizing Sildenafil and Ro-20-1724  
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*He Huang, Erwin Montgomery, Jason Moyer, Fred Haer, Leland Albright (Greenville, PA, United States)*
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- 127 Vestibular performance during high acceleration stimuli correlates with clinical decline in SCA6  
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- 135 Extracellular prefibrillar forms of alpha-synuclein induced ER stress, autophagic and apoptotic pathways in mouse dopaminergic cells  
*Amir Tayaranian Marvian, Masoome Khalife, Dina Morshedi, Farhang Aliakbari (Mashhad, Iran)*
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- 137 Carrier mediated delivery system bearing dopamine for effective management of parkinsonism  
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- 138 Optimizing CNS-delivery by lactyl stearate-coupled liposomes  
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*Norihito Uemura, Ryosuke Takahashi, Masato Koike, Masato Kinoshita, Tomoko Fujiwara-Ishikawa, Hideaki Matsui, Hodaka Yamakado, Yasuo Uchiyama, Takeshi Todo, Shun-ichi Takeda (Kyoto, Japan)*
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- 223 Diffusion tensor imaging of the brain in Parkinson's disease: A whole-brain voxel-wise approach  
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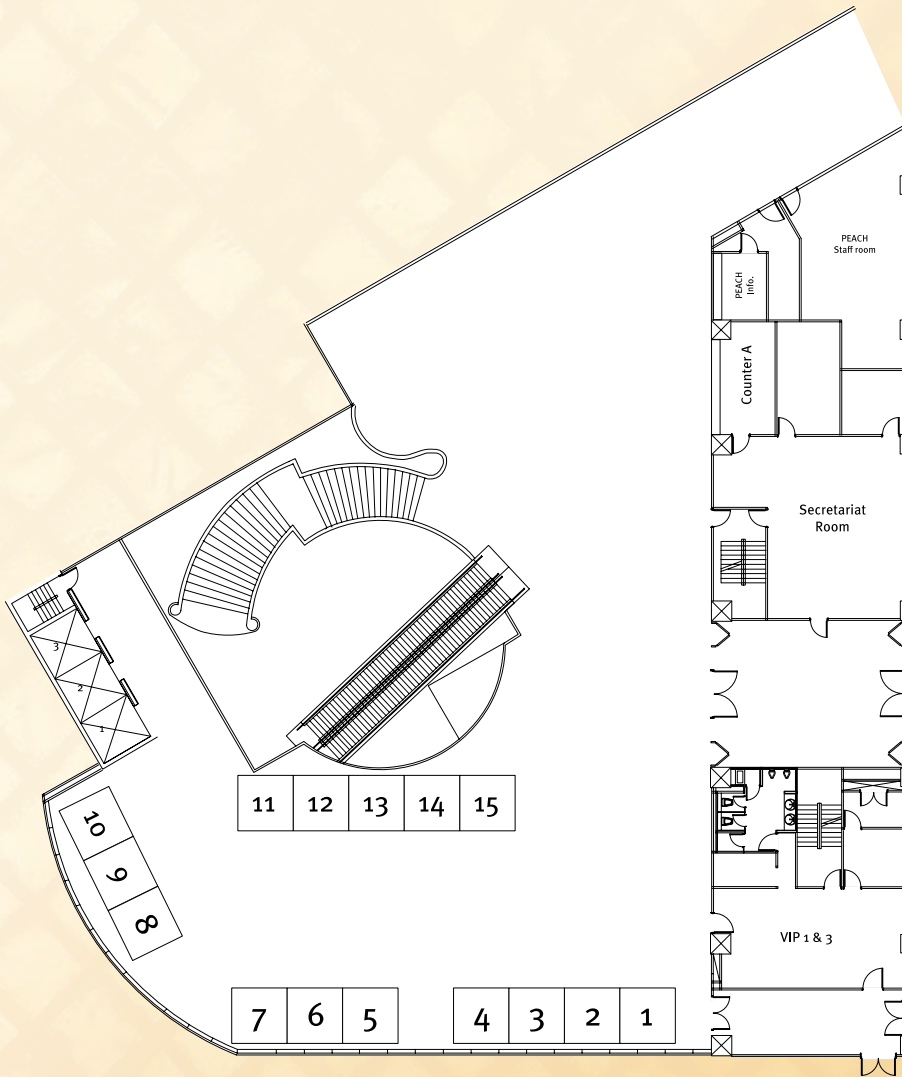
## Late-Breaking Abstracts

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*Wang XP. (Shanghai, China)*
- LBA3** Alpha-synuclein in minor salivary glands as peripheral biomarkers of sporadic Parkinson's disease  
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- LBA4** Suppression of hand tremor at rest in Parkinson's disease but not dystonic hand tremor by electrical muscle stimulation: A Pilot study  
*Onanong Jitkriksadakul, Chusak Thanawattano, Chanawat Anan, Roongroj Bhidayasiri, (Bangkok, Thailand)*
- LBA5** Access to care from neurologists and subspecialists in Movement Disorders: An analysis of travel distance by patients from the Thailand PD registry database  
*Roongroj Bhidayasiri, Onanong Jitkriksadakul, Natnipa Wannachai, Lalita Kaewwilai, Kamolwan Boonpang (Bangkok, Thailand)*
- LBA6** Withdrawn by author
- LBA7** Determinates of social stigma in Parkinson's disease: A data analysis from the Thailand PD registry database  
*Roongroj Bhidayasiri, Natnipa Wannachai, Onanong Jitkriksadakul, Lalita Kaewwilai, Kamolwan Boonpang (Bangkok, Thailand)*
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*Bin Wu-Xiao-Wu Hu-Rong Wu-Chen Chen-Xiao-Ping Wang (Shanghai, China)*
- LBA9** Hemichorea and hemiballism in a patient with temporal-parietal lobe infarction after treatment with recombinant tissue plasminogen activator  
*Takenobu Murakami, Tomohiro Wada, Itaru Sasaki, Kenji Yoshida, Mari Segawa, Suguru Kadowaki, Akihiro Yoshihara, Shunsuke Kobayashi, Akihiko Hoshi, Yoshikazu Ugawa (Fukushima, Japan)*



# Exhibit Hall Floor Plan

Location: PEACH Hall A Foyer, Level 3



1. Medtronic
2. Ipsen Pharma
3. UCB
4. Britannia
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6. Novartis
7. Lee Wattananan Trading Ltd. and h/p/cosmos
8. GSK
9. inomed Medzintech
10. Roche
11. Boehringer Ingelheim
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## Acknowledgement of Support

*The International Parkinson and Movement Disorder Society–Asian and Oceanian Section (MDS-AOS) wishes to acknowledge and thank the following companies for their support:*

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# Complementing clinical examinations in targeting muscles for botulinum toxin injection: Methods of localization by using cervical dystonia as a model

**Moderator:**

Prof.Niphon Pongvarin, M.D. (Thailand)

**Injecting botulinum toxin  
accurately in cervical dystonia-The basics of  
botulinum toxin therapy and muscle localization**

Dr.Priya Jagota, M.D. (Thailand)

**Injecting botulinum toxin accurately in cervical  
dystonia-Complementing with  
advanced techniques**

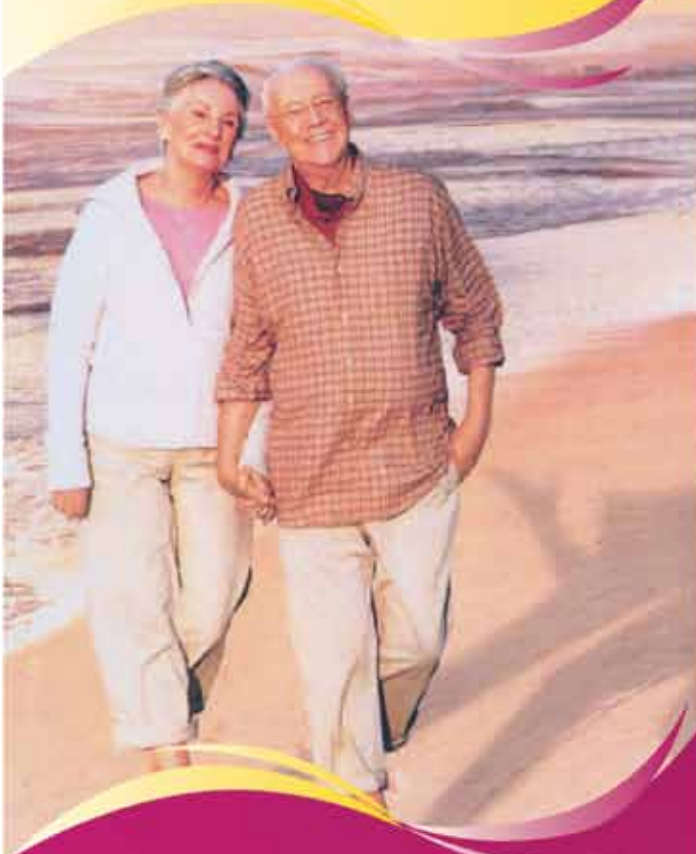
Assoc.Prof.Erle Lim, M.D. (Singapore)

**Friday, November 28, 2014**

**14.00 – 15.00**

**Hall A, PEACH Pattaya Exhibition And Convention Hall  
Pattaya, Chonburi, Thailand**

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## 3 Weeks Doses



**References:**  
 1. Laitinen, A et al. *Neurology* 1997; 49: 102-9  
 2. Moller, JC et al. *Med Resour* 2006; 35: 803-10  
 3. Reichhorn, R et al. *CNS Drugs* 2009; 17 (10): 860-70

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**Composition:** 1 tablet contains 0.125, 0.25, 0.5, 1, 2, 3, 4.5 mg pramipexole base (Sifrol®). Treatment of signs and symptoms of idiopathic Parkinson's disease and idiopathic Restless Legs Syndrome. **Dosage and administration:** Parkinson's disease: Dosages should be increased gradually from a starting dose of 0.375 mg per day and then increased every 5-7 days. If a further dose increase is necessary the daily dose should be increased by 0.375 mg at weekly intervals up to a maximum dose of 4.5 mg per day. **Restless Legs Syndrome:** The recommended starting dose is 0.125 mg taken once daily 2-3 hours before bedtime, the dose may be increased every 4-7 days to a maximum of 0.75 mg per day. **Special precautions:** Patients with renal impairment a reduced dose is suggested. Interactions and confusion are known side effects of treatment with dopamine agonists and levodopa in Parkinson's disease patients. Patients and caregivers should be aware of the fact that abnormal behaviour such as binge eating, compulsive shopping, hypersexuality and pathological gambling have been reported in patients treated with dopaminergic drugs. Patients should be alerted to the potential sedating effects associated with SIFROL®, including somnolence and the possibility of falling asleep while engaged in activities of daily living. **Interactions:** Caution may interact with SIFROL® resulting in reduced clearance of either or both medication. With amantadine, an interaction is possible. Because of possible additive effects, caution should be advised when patients are taking other sedating medication or alcohol in combination with SIFROL®. **Side Effects:** Abnormal behaviour such as binge eating, compulsive shopping, hypersexuality and pathological gambling, abnormal dreams, anxiety, confusion, vertigo/dizziness, delirium, dizziness, headache, hypotension, fatigue, hallucinations, insomnia, hyperkinesia, hyperreflexia, hyperosmia, incontinence, libido disorders, nausea, paranoia, peripheral oedema, pruritus, rash and other hypersensitivity reactions, somnolence, sudden onset of sleep, syncope, visual disturbances including double vision and visual evoked hallucinations, weight decrease, weight increase.



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apomorphine hydrochloride

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**APO-go** Apomorphine hydrochloride  
**PRESCRIBING INFORMATION** Contact Summary of Product Characteristics from prescribing. Uses: Treatment of acute fluctuations ("on/off") phenomena in patients with Parkinson's disease which are not sufficiently controlled by oral anti-Parkinson medication. **Dosage and Administration** Apomorphine hydrochloride is administered subcutaneously, either as an intermittent bolus injection or as continuous subcutaneous infusion. In each case it is given in divided doses of 1 hour, may extend to 12-18 hours, and is necessary to give treatment. Patients should be monitored for apomorphine associated adverse reactions. It is necessary to give a bolus injection when extending a patient's inter-dose regime. Please refer to the Summary of Product Characteristics for full details before initiating therapy. Treatment with continuous subcutaneous infusion (over 24 hours) and during apomorphine (AC) therapy is essential. The optimal dosage of apomorphine (AC) has to be determined on an individual patient basis. Whether bolus injections should be allowed during and/or outside acute fluctuations ("on/off") therapy, do not use if the patient has turned "off". The solution should be injected slowly over 10-15 sec. Long chain, polymeric and particle free solution should be used. **Contraindications** Children and adolescents up to 18 years of age. Known sensitivity to apomorphine or any other ingredients of the product. **Respiratory depression, dementia, psychotic disorder or rapid heart failure** Intermittent apomorphine (AC) treatment is not suitable for patients who have an "on" response to levodopa which is masked by severe dyskinesia or psychosis. **Pregnancy and lactation** Apomorphine should not be used in pregnancy unless strictly necessary. **Drug interactions** should be avoided during apomorphine (AC) therapy. **Interference** Patients should be monitored for potential interactions during other stages of apomorphine therapy. **Particular caution** should be given when apomorphine is used with other medications that take a longer time to reach the system. It should be noted that there is potential for interaction with levodopa and anti-hypertensive agents. It is recommended to avoid the administration of apomorphine with other drugs known to cross the GI barrier. Apomorphine can increase the anticholinergic effects of anticholinergics. **Precautions** Use with caution in patients with renal, pulmonary or cardiovascular disease or who are prone to falls or to dizziness. Extra caution is recommended during initiation of therapy in elderly and/or debilitated patients. Some apomorphine (AC) systems incorporate a catheter. Care should be exercised in patients with cardiac disease or who are taking vasoactive drugs, particularly when pre-existing postural hypotension is present. **Wearers of C.V.C. catheters and catheters in Parkinson's patients** APO-go should be used with special caution in these patients. Apomorphine has been associated with somnolence and apnoea or sudden sleep onset, particularly in patients with Parkinson's disease. Patients must be advised of the risk advised to ensure caution whilst driving or operating machinery during treatment with apomorphine. Neuroleptics may affect or interfere with regular intervals, as with levodopa with given concomitantly with apomorphine. Patients should be regularly monitored for the development of impulse control disorder. Patients and carers should be made aware that behavioural symptoms of impulse control disorder including pathological gambling, excessive food, hypersexuality, compulsive shopping or buying, binge eating and compulsive driving may occur in patients treated with dopamine agonists including apomorphine.

## APO-go PUMP: Continuous, Reliable, ON.

Use reduction-based discontinuation should be considered if such symptoms develop. Some apomorphine, especially at high dose, may have the potential for GI prolongation. Caution should be exercised when treating patients at risk for torsades de pointes arrhythmia. Apomorphine has been associated with acute subcutaneous effects that may be relieved by rotation of injection sites in case of discomfort or signs of irritation and reactions. Similar to other dopamine agonists which may cause acute weight reduction and emaciation. **Side Effects** Local reactions and systemic effects are common after doses of subcutaneous site of injection leading to areas of redness, numbness, stinging and pruritus. Irritation, itching, stinging and pain may also occur. Some injection site reactions and reactions have been reported. Pruritus may occur at the site of injection. Drug misuse has been reported. "on" periods can be severe and in a few patients may result in cessation of therapy. Postural hypotension is seen frequently and is usually transient. Rapid reduction following each dose of apomorphine may occur at the start of therapy, but this usually reverses after a few weeks of treatment. Dizziness and light-headedness have also been reported. Swelling and vomiting may occur, particularly when APO-go treatment is initiated, usually as a result of the cessation of apomorphine. Neuroleptic drug-induced, including levodopa and levodopa, and acute hallucinations have occurred during apomorphine therapy and neuroleptic drug-induced may be exacerbated by apomorphine. **Psychic Disorder** Hallucinations, delirium, and psychosis have been reported in patients receiving apomorphine and levodopa. Like and prokinetic effects have been reported. **Compulsive** has occurred in only a few patients being treated with apomorphine (AC). Patients treated with dopamine agonists, including apomorphine, have been reported exhibiting signs of pathological gambling, increased food and hypersexuality propensity at high doses. Apomorphine is associated with somnolence, yawning and sleeping difficulties have been reported at the peripheral events. **Precautions** should consult for Summary of Product Characteristics in relation to other side effects.

Adverse events should be reported. Reporting forms and information can be found at [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard). Adverse events should also be reported to Medicines Information on 0800 631 0207 or [ma@genuspharma.com](mailto:ma@genuspharma.com)

Product Name: APO-go (PEN)

Date of preparation: June 2011

APO-0614-0482

1. AM IMPAKT Study interim results. Presented at International Parkinson and Movement Disorder Society, Treatment of Parkinson's Disease: Past, Present and Future, March 2014, Miami, Florida, USA

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MAD-1-04-2010-5000



# Optimising Parkinson's disease pharmacotherapy

Chaired by Somchai Towanabut, Thailand

**Date:** Friday 28<sup>th</sup> November 2014

**Time:** 19:30–20:30

**Venue:** Hall A2, A3

19:30–19:35	Chairman's introduction	Somchai Towanabut <i>Thailand</i>
19:35–19:55	Rasagiline as monotherapy and adjunct therapy to treat Parkinson's disease: two randomised, double-blind studies in China	Zhen-Xin Zhang <i>China</i>
19:55–20:20	What do we do when the honeymoon is over?	Heinz Reichmann <i>Germany</i>
20:20–20:30	Panel discussion	Led by Chairman

## Satellite symposium at the 4<sup>th</sup> Asian and Oceanian Parkinson's Disease and Movement Disorders Congress

28<sup>th</sup>–30<sup>th</sup> November 2014

Pattaya Exhibition and Convention Hall, Pattaya, Thailand

With educational financial support provided by H. Lundbeck A/S





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Friday 28<sup>th</sup> November 2014, 15:30–16:30

Pattaya Exhibition and Convention Hall (PEACH), Royal Cliff Hotel, Pattaya, Thailand

- 15:30 **Welcome and introduction**
- 15:35 **Tackling the problem of levodopa-induced motor complications**  
**Chair:** Assoc. Prof. Louis Tan (Singapore)  
**Speaker:** Prof. Werner Poewe (Austria)
- 15:55 **Research update and clinical management of Parkinson's disease dementia**  
**Chair:** Assoc. Prof. Vorapun Senanarong (Thailand)  
**Speaker:** Prof. Nobutaka Hattori (Japan)
- 16:15 **Q&A session**
- 16:25 **Summary and close**



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Mood/apathy<sup>9</sup>

ON time<sup>3</sup>

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ADLs/motor function<sup>1,7</sup>

 **Neupro**

Neupro<sup>®</sup> is indicated for the treatment of the signs and symptoms of early-stage idiopathic Parkinson's disease as monotherapy or in combination with levodopa, over the course of the disease through to late stages when the effect of levodopa wears off or becomes inconsistent and fluctuations of the therapeutic effect occur (end of dose or on-off fluctuations). Please see Global Abbreviated PI before prescribing.

\*\*Patients using Neupro<sup>®</sup> across both the indications of Parkinson's disease and moderate to severe restless legs syndrome. Data include US, Europe, Australia, Korea, and Mexico, through to July 2014. Source: IMS/MIDAS <sup>1</sup>; Trenkwalder C, Kies B, Ruzdzinski M, et al, and RECOVER Study Group. Rotigotine effects on early morning motor function and sleep in Parkinson's disease: a double-blind, randomized, placebo-controlled study (RECOVER). *Mov Disord*. 2011; 26(1): 90-99. <sup>2</sup>; Watts RL, Jankovic J, Waters C, Rajput A, Boroojerdi B, Rao J. Randomized, blind, controlled trial of transdermal rotigotine in early Parkinson disease. *Neurology* 2007; 68(4): 272-276. <sup>3</sup>; LeWitt PA, Lyons KE, Pahwa R, for SP 650 Study Group. Advanced Parkinson disease treated with rotigotine transdermal system. *PREPES study*. *Neurology* 2007; 68(16): 1262-1267. <sup>4</sup>; Neupro<sup>®</sup> [summary of product characteristics]. European Medicines Agency Website. [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/EPAR\\_-\\_Product\\_information/human/000265/WC500026397.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_information/human/000265/WC500026397.pdf). Updated August 2012. Accessed October 19, 2012. <sup>5</sup>; IMS/MIDAS data; <sup>6</sup>; Trenkwalder C, Kies B, Dioszeghy E, et al. Rotigotine transdermal system for the management of motor function and sleep disturbances in Parkinson's disease: results from a 1-year, open-label extension of the RECOVER study. *Basal Ganglia*. 2012; 2(2): 39-85. <sup>7</sup>; Elmer LW, Summann E, Boroojerdi B, Jankovic J. Long-term safety and tolerability of rotigotine transdermal system in patients with early-stage idiopathic Parkinson's disease: a prospective, open-label extension. *Parkinsonism Relat Disord*. 2012; 18(5): 488-493. <sup>8</sup>; Cetálicos-Baumhain A, Hack H-J. Rotigotine transdermal patch in combination therapy for Parkinson's disease - observations in routine clinical practice. *Curr Med Res Opin*. 2011; 27(11): 1899-1905. <sup>9</sup>; Chaudhuri KR, Martinez-Martin J, Antonini A, et al. Rotigotine and specific non-motor symptoms of Parkinson's disease: post hoc analysis of RECOVER. *Parkinsonism Relat Disord*. 2013; 19(7): 660-665.

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**International Parkinson and  
Movement Disorder Society**

**Certifies that**

**has attended the 4th Asian and Oceanian Parkinson's Disease and Movement  
Disorders Congress in Pattaya, Thailand on November 28-30, 2014.**

**Matthew Stern**  
President,  
International Parkinson and  
Movement Disorder Society,  
2013 - 2015

**Louis Tan**  
Chair,  
4th AOPMC Oversight Committee  
2013 – 2015

**Roongroj Bhidayasiri**  
Chair,  
4th AOPMC Scientific Program Committee  
2013-2015



# 2014-2015 MDS Educational Calendar



International Parkinson and  
Movement Disorder Society



## Deep Brain Stimulation for Movement Disorders – Milan

December 5-6, 2014  
Milan, Italy



## Sleep in Movement Disorders

January 30-31, 2015  
Barcelona, Spain



## MDS-PAS School for Young Neurologists

February 21-22, 2015  
Atlanta, GA, USA



## Deep Brain Stimulation for Movement Disorders – Barcelona

March 5-6, 2015  
Barcelona, Spain



## Deep Brain Stimulation for Movement Disorders

March 13-14, 2015  
Seoul, Korea



## 2nd Middle East Camp for Parkinson's, Movement Disorders and Neuromodulation

April 2-4, 2015



## Fostering New Directions in Parkinson's Research

May 4-9, 2015  
White Plains, NY, USA



## Diagnosis and Treatment of Cognitive Dysfunction in Movement Disorders

Coming in 2015  
Newcastle Upon Tyne, UK



## MDS Dystonia Educational Course for Industry Professionals

January 13, 2015  
Lisbon, Portugal



## Alpha-Synuclein: The Gateway to Parkinsonism – Innsbruck

February 11-13, 2015  
Innsbruck, Austria



## MDS-ES Winter School for Young Neurologists

February 25-27, 2015  
Tel-Aviv, Israel



## Evidence Based Medicine Update on Treatments for Parkinson's Disease

March 13, 2015  
Salvador da Bahia, Brazil



## Bridges and Boundaries in Movement Disorders: The Role of Neuroimaging

March 20-21, 2015  
Pisa, Italy



## The China Continuing Education Classes for Parkinson and Movement Disorders

April 11-12, 2015  
Hangzhou, China



## Deep Brain Stimulation for Movement Disorders – Grenoble

September 10-11, 2015  
Grenoble, France

For our full list of courses, visit [www.movementdisorders.org/MDS/education.htm](http://www.movementdisorders.org/MDS/education.htm)

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International Parkinson and  
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## IMPORTANT DATES

DECEMBER 3, 2014  
Registration Opens

JANUARY 8, 2015  
Abstract Submission Closes

APRIL 17, 2015  
Early Registration Deadline

MAY 15, 2015  
Final Pre-Registration Deadline

JUNE 14-18, 2015  
19th International Congress of Parkinson's  
Disease and Movement Disorders

19TH INTERNATIONAL CONGRESS OF PARKINSON'S  
DISEASE AND MOVEMENT DISORDERS

JUNE 14-18

2015

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