

International Parkinson and
Movement Disorder Society
Asian & Oceanian Section

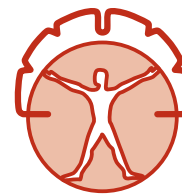
6th Asian and Oceanian Parkinson's Disease and Movement Disorders Congress

April 12-14, 2019 • Hangzhou



FINAL PROGRAM

2019 MDS-AOS Regional Education Courses



International Parkinson and
Movement Disorder Society
Asian & Oceanian Section



MDS-AOS Basic Science Summer School

August, 2019
Seoul, South Korea



MDS-AOS 2nd School for Young Neurologists

December, 2019
Kuwait City, Kuwait



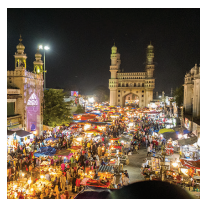
Treatment for Advanced Parkinson's Disease

August, 2019
Seoul, South Korea



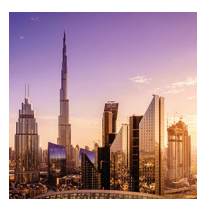
4th Middle East Camp for Parkinson's, Movement Disorders and Neuromodulation

December, 2019
Dubai, UAE



Deep Brain Stimulation in Movement Disorders

November, 2019
Hyderabad, India



3rd Allied Health Rehabilitation Course for Parkinson's Disease

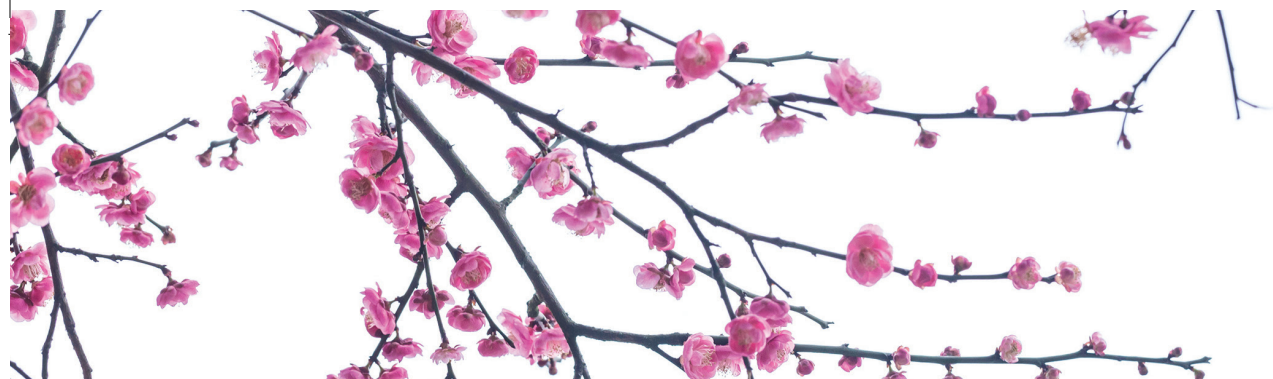
December, 2019
Dubai, UAE



SYNERGIES

December, 2019
Bangkok, Thailand

**Learn more and register online at
www.movementdisorders.org/education**



International Parkinson and
Movement Disorder Society
Asian & Oceanian Section

Final Program

6th Asian Oceanian Parkinson's Disease and Movement Disorders Congress (AOPMC)

April 12-14, 2019 • Hangzhou

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Dear Colleagues,

The International Parkinson and Movement Disorder Society (MDS) and the MDS Asian and Oceanic Section (MDS-AOS) is pleased to welcome you to the 6th Asian and Oceanian Parkinson's Disease and Movement Disorders Congress (AOPMC), April 12-14, 2019 in Hangzhou. The AOPMC occurs every two years as a forum to further develop the field of Movement Disorders in the region.

We are pleased you have chosen to join us 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, promote research and facilitate research collaborations in movement disorders and expose clinicians, researchers and healthcare professionals in the region to movement disorders initiatives.

Welcome to Hangzhou.

With kind regards,



Baorong Zhang, *Hangzhou*
Chair, 6th AOPMC Scientific Program Committee
and
Chair, 6th AOPMC Local Organizing Committee



Beomseok Jeon, *Seoul*
Chair, 6th AOPMC Oversight Committee
and
Chair, MDS-AOS, 2017-2019

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 (2017-2019)



President
Christopher Goetz,
Chicago



President-Elect
Claudia Trenkwalder,
Kassel



Secretary
Susan Fox,
Toronto



Secretary-Elect
Bastiaan Bloem,
Nijmegen



Treasurer
Victor Fung,
Sydney



Treasurer-Elect
Louis CS Tan,
Singapore



Past-President
Oscar Gershanik,
Buenos Aires

MDS International Executive Committee

Charles Adler, *Scottsdale*
Daniela Berg, *Kiel*
Shengdi Chen, *Shanghai*
Carlos Cosentino, *Lima*
Jeffrey Kordower, *Chicago*
Joaquim Ferreira, *Torres Vedras*
D. James Surmeier, *Chicago*
Ryosuke Takahashi, *Kyoto*
Pille Taba, *Tartu*
Mayela Rodriguez Violante, *Mexico City*

Past-Presidents

2015-2017 Oscar Gershanik, *Buenos Aires*
2013-2015 Matthew Stern, *Philadelphia*
2011-2013 Günther Deuschl, *Kiel*
2009-2011 Philip Thompson, *Adelaide*
2007-2009 Anthony Lang, *Toronto*
2005-2006 Andrew Lees, *London*
2003-2004 C. Warren Olanow, *New York*
2001-2002 Werner Poewe, *Innsbruck*
1999-2000 Mark Hallett, *Bethesda*
1997-1998 Eduardo Tolosa, *Barcelona*
1995-1996 Joseph Jankovic, *Houston*
1991-1994 C. David Marsden, *London*

1988-1991 Stanley Fahn, New York International Medical Society for Motor Disturbances Past-Presidents

1993-1994 C. Warren Olanow, *New York*
1991-1992 Bastian Conrad, *Munich*
1989-1990 Mark Hallett, *Bethesda*
1987-1988 Mario Manfredi, *Rome*
1985-1986 C. David Marsden, *London*

About MDS-AOS

MDS-AOS OFFICERS



Chair
Beomseok Jeon,
Seoul



Chair-Elect
Roongroj Bhidayasiri,
Bangkok



Secretary
Shen Yang Lim,
*Shah Alam,
Selangor*



Secretary-Elect
Pramod Pal,
Bangalore



Treasurer
Yasuyuki Okuma,
Izunokuni



Treasurer-Elect
Baorong Zhang,
Hangzhou



Past-Chair
Nobutaka Hattori,
Tokyo

MDS Asian and Oceanian Section

The mission of MDS-AOS is to represent and promote the International Parkinson and Movement Disorder Society (MDS) in Asia and Oceania. Membership of MDS-AOS is open to all members of MDS within the Asian and Oceanian region.

The Asian and Oceanian Section was formed in 2006 at the 10th International Congress of Parkinson's Disease and Movement Disorders in Kyoto, Japan. MDS-AOS aims to facilitate communication between clinicians and researchers in the region; disseminate updated knowledge about Movement Disorders; improve quality of life and independence of movement disorders patients and caregivers; and promote research in Movement Disorders within the region.

For further information on MDS-AOS or its educational opportunities, please visit www.movementdisorders.org/MDS-AOS.

MDS-AOS Executive Committee

Jawad Bajwa, *Riyadh*
Jin Whan Cho, *Seoul*
Vinay Goyal, *New Delhi*
Roland Jamora, *Manila*
Thomas Kimber, *Adelaide*
Simon Lewis, *Sydney*
Hui Fang Shang, *ChengDu*
Chon-Haw Tsai, *Taichung*
Yih-Ru Wu, *Taipei*
Hirohisa Watanabe, *Nagoya*

MDS-AOS Education Committee

Chair: Hui Fang Shang, *ChengDu*
Co-Chair: Jong-Min Kim, *Seongnam*
Rupam Borgohain, *Hyderabad*
Byambasuren Dayajantsan, *Ulaanbaatar*
Priya Jagota, *Bangkok*
Thien Thien Lim, *Tanjung Bunga, Penang*
Chin-Hsien Lin, *Taipei*
Arlene Ng, *Quezon City*
Win Min Thit, *Yangon*
Yoshio Tsuboi, *Fukuoka*
Zin Xiao, *Shanghai*



AOPMC Organizing Committees

Oversight Committee

Chair: Beomseok Jeon, *Seoul*
Roongroj Bhidayasiri, *Bangkok*
Shen-Yang Lim, *Shah Alam, Selangor*
Nobotaka Hattori, *Tokyo*
Raymond Rosales, *Manila*
Hui Fang Shang, *ChengDu*
Carolyn Sue, *Sydney*
Louis Tan, *Singapore*
Ruey-Meei Wu, *Taipei*
Baorong Zhang, *Hangzhou*

Scientific Program Committee

Chair: Baorong Zhang, *Hangzhou*
Vice-Chair: Shen-Yang Lim, *Shah Alam, Selangor*
Rupam Borgohain, *Hyderabad*
Piu Chan, *Beijing*
Roland Jamora, *Manila*
Beomseok Jeon, *Seoul*
Jong-Min Kim, *Seongnam*
Simon Lewis, *Sydney*
Hui-Fang Shang, *ChengDu*
Yoshio Tsuboi, *Fukuoka*
Yih-Ru Wu, *Taipei*
Qin Xiao, *Shanghai*

Local Organizing Committee

Chair: Baorong Zhang, *Hangzhou*
Haibo Chen, *Beijing*
Shengdi Chen, *Shanghai*
Mandy Au-Yeung, *Hong Kong*
Chunfeng Liu, *Suzhou*
Zhenguo Liu, *Shanghai*
Jiali Pu, *Hangzhou*
Beisha Tang, *Changsha*
Han Wang, *Beijing*
Lijuan Wang, *Guangzhou*
Xinhua Wan, *Beijing*
Pingyi Xu, *Guangzhou City*
Xinling Yang, *Xinjiang Weiwuerzizhiqu*



6th AOPMC Meeting Information A-Z

Abstracts

All accepted abstracts (including Late-Breaking) are presented as a poster at the 6th AOPMC. All regular accepted abstracts are published as a supplement to *Movement Disorders Clinical Practice*. Additionally, select abstracts are presented in a Guided Poster Tour. Please visit <https://www.aopmc.org/AOPMC-2019/Abstract-Submission.htm> for further publication information.

All registered AOPMC delegates will also receive the published abstracts on a USB, available for pickup in the registration area during regular Congress hours.

For further information regarding abstracts, poster presentation schedules and abstract publication, please see page 21.

Late-Breaking Abstracts

All accepted Late-Breaking Abstract posters are displayed outside Hangzhou Hall, 1st floor foyer, Saturday and Sunday of the 6th AOPMC. These poster presentations will take place on Saturday, April 13 from 11:30 – 13:00. The Late-Breaking Abstracts are available on the MDS website as of Friday, April 12, <https://www.aopmc.org/AOPMC-2019/Abstract-Submission.htm>.

For further information regarding Late-Breaking, poster presentation schedules and publication, please see page 31.

Badges

All AOPMC delegates will receive a name badge with their registration materials. Badges should be worn at all times as they are used to gain access into all AOPMC sessions and activities.

Certificate of Attendance

A certificate of attendance is available in the back of the AOPMC Final Program or at the registration desk.

Coffee Breaks

Coffee and tea will be available at the following times:

Friday, April 12

15:00 – 15:30: Hangzhou Hall Foyer

Saturday, April 13

9:30 – 10:00: Hangzhou Hall Foyer and International Hall Foyer

16:00 – 16:30: Hangzhou Hall Foyer

Sunday, April 14

9:30 – 10:00: Hangzhou Hall Foyer and International Hall Foyer

16:00 – 16:30: Hangzhou Hall Foyer and International Hall Foyer

Currency

The official currency of the 6th AOPMC is US Dollars and Chinese Yuan Renmibi; no other currency will be accepted.

Evaluations

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

Upon completion, evaluations may be returned to the session room attendants, or to the registration desk (located in the Hangzhou Hall Foyer, 1st Floor).

Events

Welcome Ceremony

Friday, April 12

Location: International Hall, 1st Floor

17:30 – 18:30

All AOPMC delegates are warmly invited to attend the 6th AOPMC Welcome Ceremony at the International Hall with a reception to follow. This event is open to all registered delegates.

AOPMC Video Tournament

Saturday, April 13

Location: International Hall, 1st Floor

18:30 – 20:30

This interactive tournament will challenge participants to improve diagnostic skills with unique and interesting cases. This event is open to all registered delegates.

Exhibition

Location: Hangzhou Hall Foyer, 1st Floor

For more information, please refer to page 35.

Friday, April 12: 13:00 – 17:30

Saturday, April 13: 9:00 – 18:00

Sunday, April 14: 9:00 – 16:30

Floor Plan of the InterContinental 1st Floor

Please refer to page 9.



6th AOPMC Meeting Information A-Z

Guided Poster Tours

Guided Poster Tours will give small groups of delegates an opportunity to hear discussion by abstract authors on a select group of abstracts in several sub-categories let by members of the AOPMC faculty. There will be simultaneous tours each day during the regular poster sessions on Saturday, April 13 and Sunday, April 14. Anyone is welcome to attend; please meet at the first poster of the tour at the start time. Each tour will highlight approximately ten exceptional posters.

Please refer to pages 17 for further Guided Poster Tour information and schedules.

Internet

Complimentary Wi-Fi will be available throughout the InterContinental 1st Floor for all attendees.

Network ID: InterContinental

Delegates staying at the InterContinental may access by logging in with their room number and last name.

All other delegates may access by providing their mobile number to log in.

Official Language

The official language of the 6th AOPMC is English.

Registration Desk

Location: Hangzhou Hall Foyer, 1st Floor

Name badges, abstract USB's, Final Programs and AOPMC meeting bags can be collected at the 6th AOPMC Registration Area.

Registration Desk hours are as follows:

Friday, April 12: 9:00 – 17:30

Saturday, April 13: 7:00 – 18:00

Sunday, April 14: 7:00 – 18:00

Special Accessibility Needs

To ensure any special needs can be properly met, requests should have been addressed in advance with the MDS International Secretariat. Delegates requiring special arrangements in order to fully participate in the meeting should provide a written description of such needs to the registration desk upon arrival.

Speaker Ready Room

Location: Guangzhou Room, 1st Floor

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

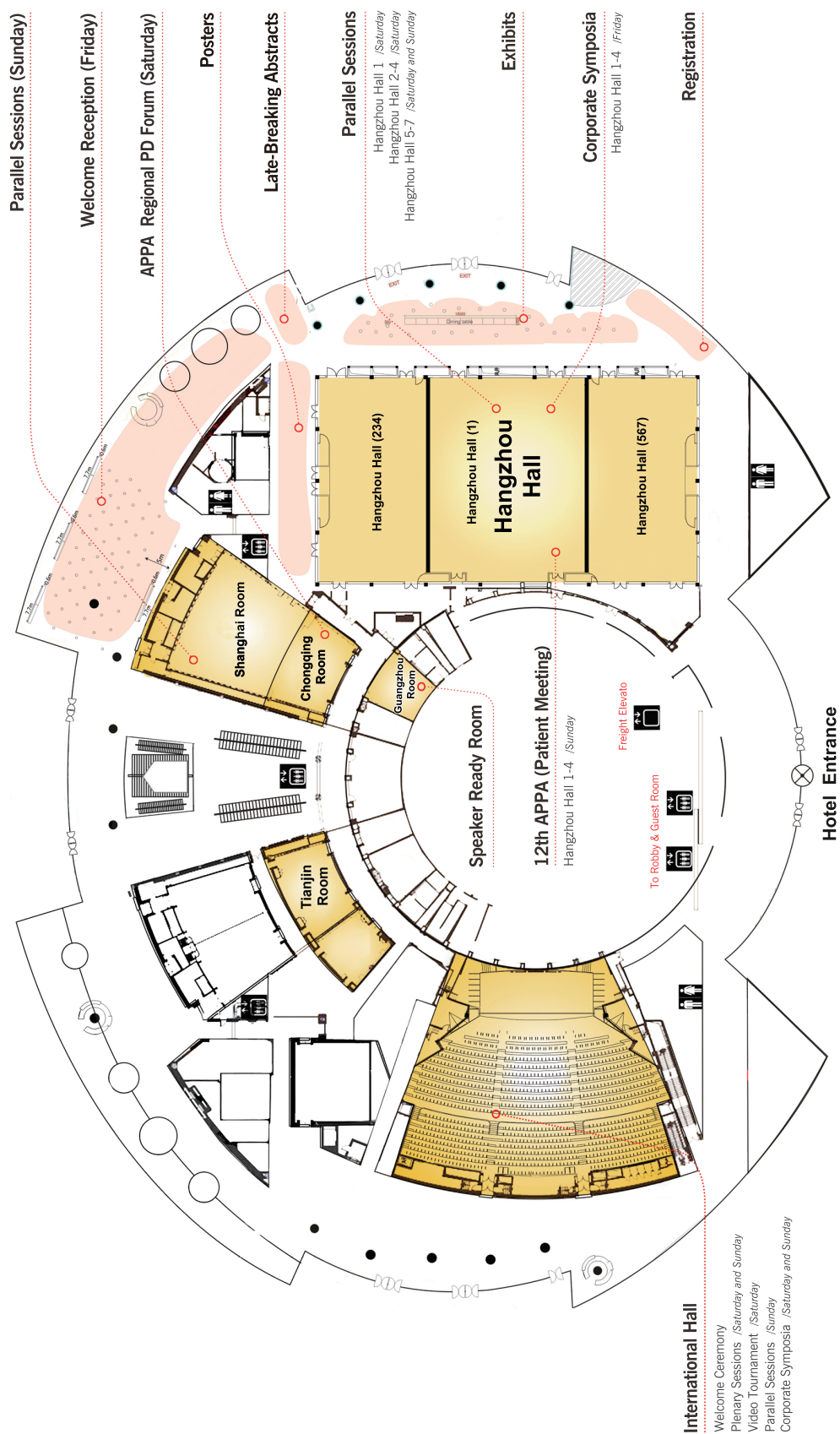
The Speaker Ready Room hours are as follows:

Friday, April 12: 14:00 – 17:00

Saturday, April 13: 7:00 – 18:00

Sunday, April 14: 7:00 – 18:00

Venue Floor Plan





MDS-AOS Lectureship Awards

Philip Thompson Lectureship Award:

Shengdi Chen, M.D., Ph.D.



Diagnostic Biomarkers of Early Parkinson's Disease: Current and Future

Professor Shengdi Chen, M.D., Ph.D. works at Department of Neurology, Ruijin Hospital affiliated to Shanghai Jiao Tong University School of Medicine, Shanghai, China. He is current director at the Institute of Neurology. His main interests are the basic and clinic studies of Parkinson's disease and Alzheimer's disease.

He graduated from the Faculty of Medicine, Shanghai Jiao Tong University School of Medicine in 1978, and got MD & PhD degrees of Neurology in 1978 and 1991, respectively. He was trained in lab research (1995-1996) and worked in clinical practice (2001) at the Baylor College of Medicine Department of Neurology, in Houston, USA as a Postdoc, Visiting Scholar, and Visiting Professor.

Since 1978, he has worked at the Department of Neurology, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, and held University appointments as Full Professor and Chief Neurologist in 1994.

He currently serves on several committees of the International Parkinson and Movement Disorder Society (MDS), is a member of the World Federation of Neurology (WFN) research committee on Parkinsonism and related disorders, Editor-in-Chief of *Translational Neurodegeneration*, Vice-Director of Chinese Neurologist Society, Chinese Doctor Association, and Director of Chinese Parkinson's Disease & Movement Disorders Society, Vice-Director of Chinese Neuroscience Society and Director of Neurodegenerative Disease Society.

He has published 250 scientific papers and more than 400 Chinese papers. Prof. Chen has also received 30 scientific awards in Parkinson's disease and Alzheimer's disease studies as well as 43 grant supports.

Yoshikuni Mizuno Lectureship Award

Ruey-Meei Wu



Application of Precision Medicine and Pharmacogenomics for Parkinson's disease

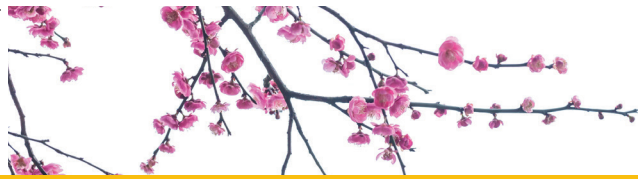
Dr. Ruey-Meei Wu is Professor of National Taiwan University (NTU), Taipei, Taiwan, and Director of "Centre of Excellence in Parkinson's Disease and Movement Disorders" at the Department of Neurology, National Taiwan University Hospital (NTUH) in Taipei. She graduated from the Medical school of Kaohsiung University in Taiwan in 1985 and finished her residency training of Neurology at NTUH in 1989. Dr. Wu attended as a guest research fellow in the Laboratory of Clinical Science at National Institutes of Health in the USA from 1992 to 1994. She obtained her MD and PhD degrees on the research of oxidative stress and neuroprotection of MAO-B inhibitors in MPTP parkinsonian rat model at the Graduate Institute of Clinical Neuroscience in NTU in 1994. Prof. Wu's research interest includes clinical genetics, cognition and pathophysiology of Parkinson's disease and related disorders. She was the translation team lead for the Traditional Chinese MDS-UPDRS and UDysRS translation programs. Using the new versions of the MDS rating scales, she verified the Cross-Cultural Differences of the Non-Motor Symptoms between Chinese and western population in Parkinson's disease.

Prof. Wu has published more than 130 original articles in board reviewed international journals. She currently serves as an Associate Editor of *Frontiers of Neurology*, Movement disorder section. She obtained Ta-You Wu Memorial Award for excellent research project on "Genetic study of familial and early-onset Parkinson's disease in Taiwan". She was awarded as "Excellent teacher" in NTU and obtained "Distinguished Clinical Teacher Award" honored by National Taiwan University College of Medicine Alumni Foundation Northern America. Prof. Wu was the Chair of the Department of Neurology, NTU and NTUH from 2004-2010. She served as Chair of Asian and Oceanian Section of the International Parkinson and Movement Disorder Society (MDS) from 2011-2013. Prof. Wu founded the Taiwan Movement Disorders Society and served as Funding President from 2007-2009. She further organized the nationwide supporting group of Parkinson's disease in Taiwan and served as funding president of "Parkinson Alliance of Taiwan" from 2011-2017. She has been a Corresponding Member of The American Neurological Association since 2008.

6th Asian and Oceanian Parkinson's Disease and Movement Disorders Congress
April 12-14, 2019 • Hangzhou

AOPMC Schedule at a Glance

	Friday, April 12	Saturday, April 13					Sunday, April 14			
8:00		Plenary Session 2101 Specific Movement Disorders in the Asian-Oceanian Region: Historical and Recent Developments 8:00 - 9:30 International Hall					Plenary Session 3101 MDS-AOS Lectureship Awards 8:00 - 9:30 International Hall			12th International Symposium of the Asian and Pacific Parkinsonism Association (APPA); <i>separate registration required</i>
8:30										
9:00										
9:30		Tea/Coffee Break Hangzhou Hall Foyer and International Hall Foyer					Tea/Coffee Break Hangzhou Hall Foyer and International Hall Foyer			
10:00		Plenary Session 2102 Genotype-Phenotype Correlation in Ataxia: An Asian Perspective 10:00 - 11:30 International Hall					Plenary Session 3102 Comprehensive Management of Parkinson's Disease 10:00 - 11:30 International Hall			
10:30										
11:00										
11:30		Poster Session / Guided Poster Tours 11:30 - 13:00 Hangzhou Hall Foyer					Poster Session / Guided Poster Tours 11:30 - 13:00 Hangzhou Hall Foyer			
12:00										
12:30										
13:00	AOPMC Lunch Symposium 12:30 - 13:30 Hangzhou Hall 1-4									
13:30	Break									
14:00	Corporate Symposium 14:00 - 15:00 Hangzhou Hall 1-4	Break			APPA Regional Leadership PD Forum <i>by invitation only</i> 14:00 - 18:00 Chongqing Room	Break			8:00 - 15:30 Hangzhou Hall 1-4	
14:30		Parallel Session 2203 Preclinical and Prodromal Parkinson's Disease: Past, Present and Future 14:30 - 16:00 Hangzhou Hall 2-4	Parallel Session 2204 Unfamiliar Symptoms in Familiar Movement Disorders 14:30 - 16:00 Hangzhou Hall 5-7	Parallel Session 2205 Focusing on New Targets for Therapy in Movement Disorders 14:30 - 16:00 Hangzhou Hall 1		Parallel Session 3203 Gastrointestinal Dysfunction, Weight Loss and Nutritional Aspects in Parkinson's Disease 14:30 - 16:00 Shanghai Room	Parallel Session 3204 Clinical Diagnostic Pointers in Making a Diagnosis of a Movement Disorder Condition 14:30 - 16:00 International Hall	Parallel Session 3205 STN-DBS for Parkinson's Disease at an Earlier Stage 14:30 - 16:00 Hangzhou Hall 5-7		
15:00	Tea/Coffee Break Hangzhou Hall Foyer									
15:30										
16:00	Corporate Symposium 16:00 - 17:00 Hangzhou Hall 1-4	Tea/Coffee Break Hangzhou Hall Foyer				14:00 - 18:00	Tea/Coffee Break Hangzhou Hall Foyer and International Hall Foyer			
		Parallel Session 2306 Hot Topics in Parkinson's Disease Non-Motor Symptoms 16:30 - 18:00 Hangzhou Hall 1	Parallel Session 2307 Nondopaminergic System in Parkinson's Disease 16:30 - 18:00 Hangzhou Hall 2-4	Parallel Session 2308 Chorea in Clinical Practice 16:30 - 18:00 Hangzhou Hall 5-7			Parallel Session 3306 Defrosting Parkinson's Disease: Understanding and Managing Freezing of Gait and Falls 16:30 - 18:00 International Hall	Parallel Session 3307 Movement Disorders in Vascular Diseases and Hydrocephalus 16:30 - 18:00 Hangzhou Hall 5-7		Parallel Session 3308 Biomarkers for Parkinson's Disease 16:30 - 18:00 Shanghai Room
16:30										
17:00										
17:30	Welcome Ceremony 17:30 - 18:30 International Hall									
18:00										
18:30	Welcome Reception 18:30 - 20:00 Shanghai Hall Foyer	Video Tournament 18:30-20:30 International Hall								
19:00										
19:30										
20:00										



Saturday, April 13, 2019

AOPMC Lunch Symposium

12:30 – 13:30

Location: Hangzhou Hall 1-4

Please join the MDS-AOS Leadership to learn more about MDS-AOS member Society benefits, upcoming 2019 courses in the MDS-AOS region, how to become more involved with MDS and much, much more!

Corporate Symposium

14:00 – 15:00

Location: Hangzhou Hall 1-4

Coffee Break

15:00 – 15:30

Location: Hangzhou Hall 1-4

Corporate Symposium

16:00 – 17:00

Location: Hangzhou Hall 1-4

Please refer to the "Corporate Symposia" section of this Final Program for complete details.

Welcome Ceremony

17:30 – 18:30

Location: International Hall

Welcome Reception

18:30 – 20:00

Location: Shanghai Hall

2101 Plenary Session

Specific Movement Disorders in the Asian-Oceanian Region: Historical and Recent Developments

8:00 – 9:30

Location: International Hall

Chairs: Haibo Chen, *Beijing*
Beomseok Jeon, *Seoul*

8:00 X-linked Dystonia Parkinsonism: A
Filipino Disease, A Global Effort

Roland Dominic Jamora, *Manila*

8:30 Amyotrophic Lateral Sclerosis/
Parkinsonism Dementia Complex in
the Kii Peninsula

Yasumasa Kokubo, *Tsu City*

9:00 Paroxysmal Dyskinesia and Genetics
with Focus on PRRT2

Zhi-Ying Wu, *Hangzhou*

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

1. Recognize the new developments in the diagnosis and management of X-linked dystonia parkinsonism
2. Recognize the recent developments in the field of ALS/PDC in the Kii Peninsula
3. Discuss the development in the genetics of paroxysmal dyskinesias with special focus on PRRT2

2102 Plenary Session

Genotype-Phenotype Correlation in Ataxia: An Asian Perspective

10:00 – 11:30

Location: International Hall

Chairs: Chon-Haw Tsai, *Taichung*
Hirohisa Watanabe, *Nagoya*

10:00 The Pathogenesis of Hereditary
Ataxia and the Treatment Strategy

Kinya Ishikawa, *Tokyo*

10:30 Genotype-Phenotype Correlation in
Ataxia

Han-Joon Kim, *Seoul*

11:00 Treatable Ataxia, Not-to-Miss

Yih-Ru Wu, *Taipei*

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

1. Explain the pathogenesis of hereditary ataxia and how to treat
2. Describe the genotype-phenotype correlation
3. Identify the treatable ataxia

2203 Parallel Session

Preclinical and Prodromal Parkinson's Disease: Past, Present and Future

14:30 – 16:00

Location: Hangzhou Hall (2-4)

Chairs: Louis Tan, *Singapore*
Zhenfu Wang, *Beijing*

14:30 Pathophysiology of Parkinson's
Disease

Carolyn Sue, *Sydney*

15:00 Clinical Biomarkers of Parkinson's
Disease

Jing Zhang, *Seattle*

15:30 Is Diagnosis of Prodromal
Parkinson's Disease Feasible?

Anthony Lang, *Toronto*

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

1. Describe the recent progress in the understanding of pathogenesis of Parkinson's disease
2. Discuss the range of clinical markers and their application in identifying Parkinson's disease including prodromal stage
3. Integrate our understanding of the progression of Parkinson's disease from the prodromal stage

2204 Parallel Session

Unfamiliar Symptoms in Familiar Movement Disorders

14:30 – 16:00

Location: Hangzhou Hall (5-7)

Chairs: Shengdi Chen, *Shanghai*
Pramod Pal, *Bengaluru*

14:30 Under-Recognized Motor and Non-
Motor Symptoms in Parkinson's
Disease and Parkinson Plus
Syndrome

Piu Chan, *Beijing*

15:00 Extra-Cerebellar Signs and
Symptoms in Spinocerebellar
Ataxias

Jin Whan Cho, *Seoul*

15:30 Atypical Presentation of Genetic
Dystonia

Victor Fung, *Sydney*

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

1. Identify the under-recognized motor and non-motor symptoms in Parkinson's disease and Parkinson plus syndrome
2. Describe extra-cerebellar signs and symptoms in spinocerebellar ataxias
3. Describe atypical presentation of well-known genetic dystonia

Sunday, April 14, 2019

2205 Parallel Session

Focusing on New Targets for Therapy in Movement Disorders

14:30 - 16:00

- Location: Hangzhou Hall (1)
 Chairs: Simon Lewis, *Sydney*
 Zhen-Xin Zhang, *Beijing*
- 14:30 The New Frontier – Disease Modification for Parkinson's Disease
 Nobutaka Hattori, *Tokyo*
- 15:00 Advances in the Understanding and Treatment of Channelopathies
 Chon-Haw Tsai, *Taichung*
- 15:30 New Horizons for Botulinum Injections in Movement Disorders
 Raymond Rosales, *Quezon City*

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

1. Describe the landscape of disease modifying therapies in Parkinson's disease
2. Summarize the pathomechanism and emerging treatment of channelopathies
3. Discuss the expanding role of botulinum toxin injection for the treatment of movement disorders

2306 Parallel Session

Hot Topics in Parkinson's Disease Non-Motor Symptoms

16:30 - 18:00

- Location: Hangzhou Hall (1)
 Chairs: Chufeng Liu, *Suzhou*
 Jian Wang, *Shanghai*
- 16:30 Treatment of Sleep Disorders in Parkinson's Disease
 Jawad Bajwa, *Riyadh*
- 17:00 Neuropsychiatric Symptoms in Parkinson's Disease
 Jee-Young Lee, *Seoul*
- 17:30 Bladder and Sexual Dysfunction in Parkinson's Disease
 Priya Jagota, *Bangkok*

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

1. Discuss the presentation and management of sleep disorders in Parkinson's disease
2. Discuss the presentation and management of neuropsychiatric symptoms in Parkinson's disease
3. Discuss the pathophysiology and management of bladder and sexual dysfunction in Parkinson's disease

2307 Parallel Session

Nondopaminergic System in Parkinson's Disease

16:30 - 18:00

- Location: Hangzhou Hall (2-4)
 Chairs: Oscar Gershanik, *Buenos Aires*
 Baorong Zhang, *Hangzhou*
- 16:30 Norepinephrine and Parkinson's Disease
 Eng-King Tan, *Singapore*
- 17:00 Serotonin and Parkinson's Disease
 Pingyi Xu, *Guangzhou*
- 17:30 Acetylcholine and Parkinson's Disease
 Chin-Hsien Lin, *Taipei*

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

1. Understand the neuroanatomy and physiology of norepinephrine and clinical implication in Parkinson's disease
2. Understand the neuroanatomy and physiology of serotonin and clinical implication in Parkinson's disease
3. Understand the neuroanatomy and physiology of acetylcholine system and clinical implication in Parkinson's disease

2308 Parallel Session

Chorea in Clinical Practice

16:30 - 18:00

- Location: Hangzhou Hall (5-7)
 Chairs: Thomas Kimber, *Adelaide*
 Huifang Shang, *Chengdu*
- 16:30 The Most Frequent Forms of Genetic and Acquired Chorea in Clinical Practice
 Hrishikesh Kumar, *Kolkata*
- 17:00 Update on Genetics and Molecular Imaging in Huntington's Disease
 Thomas Kimber, *Adelaide*
- 17:30 New Treatment Strategies in Huntington's Disease and Other Chorea
 Hitoshi Okazawa, *Tokyo*

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

1. Recognize the phenomenology of Huntington's disease and other disorders (Huntington's disease-like syndromes) in which chorea is the main clinical feature
2. Recognize recent developments in genetics of Huntington's disease and identify a comprehensive view of molecular imaging biomarkers to study Huntington's disease
3. Define the latest pharmaceutical and surgical treatment in Huntington's disease and other chorea

Video Tournament

18:30 - 20:30

- Location: International Hall
 This interactive tournament will challenge participants to improve diagnostic skills with unique and interesting cases.
- Hosts: Victor Fung, *Sydney*
 Anthony Lang, *Toronto*
- Experts: Shen-Yang Lim, *Petaling Jaya*
 Pramod Pal, *Bengaluru*
 Baorong Zhang, *Hangzhou*

3101 Plenary Session

MDS-AOS Lectureship Awards

8:00 - 9:30

- Location: International Hall
 Chairs: Beomseok Jeon, *Seoul*
 Baorong Zhang, *Hangzhou*
- 8:00 Philip Thompson Lecture
 Diagnostic Biomarkers of Early Parkinson's Disease: Current and Future
 Shengdi Chen, *Shanghai*

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

1. Describe biomarkers in early stage of Parkinson's disease
2. Review current rule of biomarkers in early Parkinson's disease
3. Discuss proposed body fluid and tissue biomarkers as well as AI for predicting or monitoring clinical features of early Parkinson's disease

- 8:30 Yoshikuni Mizuno Lecture:
 Application of Precision Medicine and Pharmacogenomics for Parkinson's disease
 Ruey-Meei Wu, *Taipei*

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

1. To understand the definition of precision medicine
2. To learn using genetics to guide therapy
3. To learn the application of pharmacogenomics in the personalized therapy

3102 Plenary Session

Comprehensive Management of Parkinson's Disease

10:00 - 11:30

- Location: International Hall
 Chairs: Günther Deuschl, *Kiel*
 Xinhua Wan, *Beijing*
- 10:00 Evidence-Based Management of Parkinson's Disease
 Shen-Yang Lim, *Petaling Jaya*
- 10:30 Management of Parkinson's Disease: A Non-Pharmacological Perspective
 Louis Tan, *Singapore*
- 11:00 Palliative Care for Parkinsonian Disorders: Why and How?
 Vinay Goyal, *New Delhi*

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

1. Describe the pharmacological and surgical therapeutic options for Parkinson's disease from an evidence-based perspective
2. Discuss physical exercise, speech therapy, occupational therapy and other non-pharmacological management strategies for Parkinson's disease
3. Identify the principles of a palliative care approach to managing Parkinson's disease and related conditions



3203 Parallel Session

Gastrointestinal Dysfunction, Weight Loss and Nutritional Aspects in Parkinson's Disease 14:30 - 16:00

Location: Shanghai Room

Chairs: Yun Kim, *Seoul*

Lijuan Wang, *Guangzhou*

14:30 Gastrointestinal Dysfunction in
Parkinson's Disease

Ai Huey Tan, *Kuala Lumpur*

15:00 Gastrointestinal Infections and
Microbiome in Parkinson's Disease

Qin Xiao, *Shanghai*

15:30 Weight Loss and Nutrition
in Parkinson's Disease, and
Management Strategies

Yasuyuki Okuma, *Izunokuni*

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

1. Review aspects of gastrointestinal dysfunction in Parkinson's disease
2. Discuss the role of gastrointestinal infections and microbiome in Parkinson's disease
3. Review causes of weight loss and management strategies in Parkinson's disease

3204 Parallel Session

Clinical Diagnostic Pointers in Making a Diagnosis of a Movement Disorder Condition 14:30 - 16:00

Location: International Hall

Chairs: Shen-Yang Lim, *Petaling Jaya*

Yiming Liu, *Shandong*

14:30 Differential Diagnosis of
Parkinsonian Disorders

Baorong Zhang, *Hangzhou*

15:00 Phenomenology of Hyperkinetic
Movement Disorders

Thien Thien Lim, *Tanjung Bunga*

15:30 Diagnosis of Functional Movement
Disorders

Oscar Gershanik, *Buenos Aires*

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

1. Explain features that distinguish the different parkinsonian syndromes
2. Categorize hyperkinesia and list appropriate differential diagnoses
3. Recognize characteristics of functional movement disorders

3205 Parallel Session

STN-DBS for Parkinson's Disease at an Earlier Stage 14:30 - 16:00

Location: Hangzhou Hall (5-7)

Chairs: Vincent Mok, *Hong Kong*

Chon-Haw Tsai, *Taichung*

14:30 Knowledge, Attitude and Myths
of DBS in Patients with Parkinson's
Disease and Their Caregivers

Pramod Pal, *Bengaluru*

15:00 Non-Motor Issues in DBS:
Neuropsychiatric Effects and Long
Term Outcome

Young Eun Kim, *Anyang*

15:30 How Early STIM Study Changes
Selection Criteria

Günther Deuschl, *Kiel*

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

1. Discuss the patient perspective of neuromodulation
2. Describe the neuropsychiatric effects and long term outcome of neuromodulation
3. Discuss the recent data on early STIM study and how it may change patient selection

3306 Parallel Session

Defrosting Parkinson's Disease: Understanding and Managing Freezing of Gait and Falls 16:30 - 18:00

Location: International Hall

Chairs: Weidong Le, *Dalian*

Yasuyuki Okuma, *Izunokuni*

16:30 The Clinical Manifestations and
Impacts of Gait Disturbance,
Freezing and Falls in Parkinson's
Disease

Sue Lord, *Auckland*

17:00 Unlocking the Phenomenology of
Freezing with Novel Investigative
Techniques

Elie Matar, *Sydney*

17:30 Treating Freezing and Falls -
Strategies Old and New

Vincent Mok, *Hong Kong*

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

1. Recall the clinical associations of freezing of gait and falls in Parkinson's disease
2. Appreciate the pathophysiology underlying gait disorder in Parkinson's disease
3. Summarize the current strategies to reduce freezing and falls in Parkinson's disease

3307 Parallel Session

Movement Disorders in Vascular Diseases and Hydrocephalus 16:30 - 18:00

Location: Hangzhou Hall (5-7)

Chairs: Asha Kishore, *Trivandrum*

Qing Wang, *Guangzhou*

16:30 Stroke Induced Movement
Disorders - Spectrum and
Management

Arlene Ng, *Quezon City*

17:00 Small Vessel Disease and
Parkinsonism - Evolving Concepts

Hirohisa Watanabe, *Nagoya*

17:30 Hydrocephalus and Parkinsonism -
Manifestation and Management

Rupam Borgohain, *Hyderabad*

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

1. Discuss the spectrum and management of stroke induced movement disorders and strategic lesion locations
2. Discuss the evolving pathogenetic concepts and clinical application of small vessel disease and parkinsonism
3. Identify the optimal balance between medical and surgical management and the clinical complexity of Hydrocephalus and Parkinsonism

3308 Parallel Session

Biomarkers for Parkinson's Disease 16:30 - 18:00

Location: Shanghai Room

Chairs: Nobutaka Hattori, *Tokyo*

Ruey-Meei Wu, *Taipei*

16:30 New Biomarkers for Parkinson's
Disease

Shinji Saiki, *Tokyo*

17:00 Neuroimaging Biomarkers for
Parkinson's Disease

Jong-Min Kim, *Seongnam*

17:30 Clinical Biomarkers for Parkinson's
Disease

Roongroj Bhidayasiri, *Bangkok*

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

1. Discuss metabolome as a biomarker
2. Discuss neuroimaging as a clinical marker
3. Identify the clinical signs as a phenotypic biomarker

Faculty List

Bajwa, Jawad A, <i>Riyadh</i>	2306	Liu, Chunfeng, <i>Suzhou</i>	2306
Bhidayasiri, Roongroj, <i>Bangkok</i>	3308	Liu, Yiming, <i>Shandong</i>	3204
Borgohain, Rupam, <i>Hyderabad</i>	3307	Lord, Sue, <i>Auckland</i>	3306
Chan, Piu, <i>Beijing</i>	2204	Matar, Elie, <i>Sydney</i>	3306
Chen, Haibo, <i>Beijing</i>	2101	Mok, Vincent, <i>Hong Kong</i>	3205, 3306
Chen, Shengdi, <i>Shanghai</i>	2204, 3101	Ng, Arlene, <i>Quezon City</i>	3307
Cho, Jin Whan, <i>Seoul</i>	2204	Okazawa, Hitoshi, <i>Tokyo</i>	2308
Deuschi, Günther, <i>Kiel</i>	3102, 3205	Okuma, Yasuyuki, <i>Izunokuni</i>	3203, 3306
Fung, Victor, <i>Sydney</i>	2204	Pal, Pramrod, <i>Bengaluru</i>	2204, 3205
Gershanik, Oscar, <i>Buenos Aires</i>	2307, 3204	Rosales, Raymond, <i>Quezon City</i>	2205
Goyal, Vinay, <i>New Delhi</i>	3102	Saiki, Shinji, <i>Tokyo</i>	3308
Hattori, Nobutaka, <i>Tokyo</i>	2205, 3308	Shang, Huifang, <i>ChengDu</i>	2308
Ishikawa, Kinya, <i>Tokyo</i>	2102	Sue, Carolyn, <i>Sydney</i>	2203
Jagota, Priya, <i>Bangkok</i>	2306	Tan, Ai Huey, <i>Kuala Lumpur</i>	3203
Jamora, Roland Dominic, <i>Manila</i>	2101	Tan, Eng-King, <i>Singapore</i>	2307
Jeon, Beomseok, <i>Seoul</i>	2101, 3101	Tan, Louis, <i>Singapore</i>	2203, 3102
Kim, Han-Joon, <i>Seoul</i>	2102	Tsai, Chon-Haw, <i>Taichung</i>	2102, 2205, 3205
Kim, Jong-Min, <i>Seongnam</i>	3308	Wan, Xinhua, <i>Beijing</i>	3102
Kim, Young Eun, <i>Anyang</i>	3205	Wang, Jian, <i>Shanghai</i>	2306
Kim, Yun, <i>Seoul</i>	3203	Wang, Lijuan, <i>Guangzhou</i>	3203
Kimber, Thomas, <i>Adelaide</i>	2308	Wang, Qing, <i>Guangzhou</i>	3307
Kishore, Asha, <i>Trivandrum</i>	3307	Wang, Zhenfu, <i>Beijing</i>	2203
Kokubo, Yasumasa, <i>Tsu City</i>	2101	Watanabe, Hirohisa, <i>Nagoya</i>	2102, 3307
Kumar, Hrishikesh, <i>Kolkata</i>	2308	Wu, Ruey-Meei, <i>Taipei</i>	3101, 3308
Lang, Anthony, <i>Toronto</i>	2203	Wu, Yih-Ru, <i>Taipei</i>	2102
Le, Weidong, <i>Dalian</i>	3306	Wu, Zhi-ying, <i>Hangzhou</i>	2101
Lee, Jee-Young, <i>Seoul</i>	2306	Xiao, Qin, <i>Shanghai</i>	3203
Lewis, Simon, <i>Sydney</i>	2205	Xu, Pingyi, <i>Guangzhou City</i>	2307
Lim, Shen-Yang, <i>Petaling Jaya</i>	3102, 3204	Zhang, Baorong, <i>Hangzhou</i>	2307, 3101, 3204
Lim, Thien Thien, <i>Tanjung Bunga</i>	3204	Zhang, Jing, <i>Seattle</i>	2203
Lin, Chin-Hsien, <i>Taipei</i>	2307	Zhang, Zhen-Xin, <i>Beijing</i>	2205



AOPMC 2019 Poster Schedule

Saturday, April 13, 2019

Poster Session: 11:30-13:00

Poster Viewing: 8:00-16:00

Location: InterContinental Hangzhou, Hangzhou Hall Foyer

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Parkinsonism, MSA, PSP (Secondary and Parkinsonism-Plus)	88-93
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Pediatric Movement Disorders	106-107
Phenomenology and Clinical Assessment of Movement Disorders	108-114

Sunday, April 14, 2019

Poster Session: 11:30-13:00

Poster Viewing: 8:00-16:00

Location: InterContinental Hangzhou, Hangzhou Hall Foyer

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Parkinson's Disease: Neuroimaging and Neurophysiology	134-149
Parkinson's Disease: Non-Motor Symptoms	150-164
Parkinson's Disease: Pathophysiology	165-201
Parkinson's Disease: Psychiatric Manifestations	202-205
Quality of Life/Caregiver Burden in Movement Disorders	206-214
Rare Genetic and Metabolic Diseases	215
Restless Legs Syndrome and Other Sleep Disorders	216-217
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Surgical Therapy: Other Movement Disorders Technology	219-222
Surgical Therapy: Parkinson's Disease	223-226
Therapy in Movement Disorders: Gene and Cell-Based Therapies	227-229
Tremor	230-232

Guided Poster Tours

Saturday, April 13, 2019

11:30-13:00

Location: InterContinental Hangzhou, Hangzhou Hall Foyer

Guided Poster Tour 1: Ataxia
Clinical Trials and Therapy in Movement Disorders
Drug-Induced Movement Disorders
Dystonia
Education in Movement Disorders

Tour Leader: Jin Whan Cho

Posters featured in this tour:

Poster #	Title
1	Assessment of sleep spindle density among genetically positive SCA1, SCA2 and SCA3 patients: a comparative study
3	Insulin/diabetes pathways are directly targeted by miRNAs leading to severe SCA2 phenotype
10	Using smartphones to deliver intensive voice therapy for individuals with Parkinson's disease
12	The effects of combined low frequency repetitive transcranial magnetic stimulation and motor imagery on upper extremity motor recovery following stroke
20	Interaction between mGluR5 and NR2B is increased in 6-OHDA parkinsonian rats with L-dopa-induced dyskinesia
27	Knowledge and perception of Parkinson's disease among patients and caregivers.

Guided Poster Tour 2: Epidemiology
Genetics (Non-PD)
Huntington's Disease
Neuropharmacology
Parkinsonism: MSA, PSP (Secondary and Parkinsonism-Plus)

Tour Leader: Huifang Shang

Posters featured in this tour:

Poster #	Title
33	Proline-rich transmembrane protein 2-negative paroxysmal kinesigenic dyskinesia: clinical and genetic analyses of 163 patients
34	Systemic injection of exosomal siRNA significantly reduced huntingtin expression in transgenic mice of Huntington's disease
40	Discovery of Pyrazole (PP-41) as dual A2A antagonists/MAO-B inhibitors for the treatment of Parkinson's disease
89	Prevalence and associated factors of postural deformities in Chinese patients with multiple system atrophy
90	Frontal lobe function, behavioral changes and quality of life in patients with multiple system atrophy
91	Detection of microbial 16s rRNA gene in the feces and blood of Chinese patients with multiple system atrophy
92	Oromandibular manifestations in Parkinson's disease and atypical parkinsonian disorders: A video case-series analysis



Guided Poster Tours

Guided Poster Tour 3: Neurophysiology (Non-PD) Parkinson's Disease: Clinical Trials, Pharmacology, and Treatment

Tour Leader: Oscar Gershanik

Posters featured in this tour:

Poster #	Title
44	Temporal fluctuation of tremor magnitude is the promising physiological parameter for diagnosis of mild Parkinson disease tremor
65	Low frequency repetitive transcranial magnetic stimulation of right dorsolateral prefrontal cortex for Parkinson's disease: a randomized, single-blind, sham-controlled study
66	Three-dimensional gait analysis in festination gait of patients with Parkinson's disease
67	East Indian sandalwood oil reduced Parkinson's disease associated pathologies in vitro and in vivo: a role of PI3K/Akt/Nrf2/HO-1 signaling axis
69	Neuromechanism of acupuncture on Parkinson's disease tremor: a resting state fMRI study
71	HDAC inhibitors might not upregulate DJ-1 protein expression
72	Baicalein prevents dopaminergic neuron degeneration via inducing autophagy and a-synuclein clearance in neuronal cells.
74	Retinal nerve fiber layer thickness may predict cognitive progression in Parkinson's disease: a longitudinal study
83	The systematic review on cannabinoids as a treatment of Parkinson's disease
87	The rehabilitation effect of gating-pad and healthy exercise on the balance and motor function of Parkinson's disease

Guided Poster Tour 4: Parkinson's disease: Cognition Phenomenology and Clinical Assessment

Tour Leader: Eng-King Tan

Posters featured in this tour:

Poster #	Title
94	Effect of erythropoietin on cognitive function in Parkinson's disease
97	Cortical reorganization with cognitive restructuring & visual-feedback in Freezing of Gait
98	Mild cognitive impairment in de novo Parkinson's disease: a neuromelanin MRI study in locus ceruleus
99	Factors Associated with Brittle Response of Patients in Parkinson disease
100	The cognitive dysfunction in early Parkinson's disease with obstructive sleep apnea hypopnea syndrome
101	Association of apolipoprotein E gene polymorphism, serum uric acid, homocysteine level with cognitive impairment of Parkinson's disease
103	No significant correlation between hyposmia and visuospatial functions in Parkinson's disease by event-related potential study
109	Study on the clinical and genetic association in Parkinson's disease risk of diabetes mellitus patients with high cholesterol level
113	A pilot study to evaluate the severity of motor dysfunction in patients with Parkinson's disease based on AI non-wearable motion capture of video analysis
114	Detection of impaired finger dexterity by objective keyboard typing test in Parkinson's disease: A feasibility study

Guided Poster Tours

Sunday, April 14, 2019

11:30-13:00

Location: InterContinental Hangzhou, Hangzhou Hall Foyer

Guided Poster Tour 5: **Parkinson's Disease: Genetics**
 Parkinson's Disease: Neuroimaging and Neurophysiology
 Parkinson's Disease: Non-Motor Symptoms
 Parkinson's Disease: Pathophysiology

Tour Leader: Nobutaka Hattori

Posters featured in this tour:

Poster #	Title
136	EEG source analysis can distinguish differential effects of NeuroEPO in Parkinson disease
137	Quantifying iron deposition within the substantia nigra of Parkinson's disease by quantitative susceptibility mapping
139	Brain microstructural abnormalities in relation to serotonergic terminals density in Parkinson's disease: a combined DTI and 11C-DASB PET study
151	Using measurement of the current perception threshold to assess the effect of levodopa on peripheral nerve function in patients with Parkinson's disease
155	Bone mineral density, osteoporosis and fracture risk in Parkinson's disease
192	The Parkinson's disease associated protein DJ-1 is critical for the integrity and function of ER and mitochondria tethering
200	MPTP-driven miRNA-425 deficiency promotes necroptosis and dopaminergic neurodegeneration

Guided Poster Tour 6: **Parkinson's Disease: Psychiatric Manifestations**
 Quality of Life/Caregiver Burden in Movement Disorders
 Restless Leg Syndrome and Other Sleep Disorders

Tour Leader: Anthony Lang

Posters featured in this tour:

Poster #	Title
204	Psychiatric symptoms in association with orthostatic hypotension in Parkinson's disease and the change of them after one year
208	Health-related quality of life and strain among caregivers of Chinese patients with Parkinson's disease
210	Perceptions of care and access to services in the Western Pacific Region
211	Caregiver burden and quality of life among carers of patients with Parkinson disease
213	Reason of hospitalization of Parkinson's disease patients in a tertiary hospital of Nepal
216	Abnormal resting-state metrics in REM sleep behavior disorder
217	Studies of polysomnography in patients with Parkinson's disease depression



Guided Poster Tours

Guided Poster Tour 7: Surgical Therapy: Other Movement Disorders Technology Surgical Therapy: Parkinson's Disease Therapy in Movement Disorders: Gene and Cell Based Tremor

Tour Leader: Günther Deuschl

Posters featured in this tour:

Poster #	Title
219	Globus pallidus internus versus subthalamic nucleus deep brain stimulation in isolated dystonia
220	Deep brain stimulation in central post-traumatic dystonia
221	The safety and efficacy of PSA deep brain stimulation in essential tremor: A pilot study
222	Bilateral nucleus basalis of meynert deep brain stimulation for dementia with lewy bodies a randomised clinical trial
223	A study of bilateral stn dbs in Parkinson disease on motor and non-motoric axial symptoms using levodopa and with microelectrode recording
224	Deep brain stimulation of the subthalamic nucleus and globus pallidus for apathy in PD patients
228	The neuroprotection of AAV8-MANF on 6-OHDA-induced PD model
229	The generation and characterization of Dopaminergic Precursor-like Cells from mouse and cynomolgus monkeys fibroblasts
230	Volumetric abnormalities of hippocampal subfields in essential tremor
232	Inter-rater and intra-rater agreement on the 2018 consensus statement on classification of tremors

Abstract Listing by Topic

Ataxia

- 1 **Assessment of sleep spindle density among genetically positive sca1, sca2 and sca3 patients: a comparative study**
Ragasudha Botta (Bangalore)
- 2 **Adult onset cerebellar ataxia after influenza vaccination: A case report**
Chayasak Wantaneeawong (Chiang Mai)
- 3 **Insulin/diabetes pathways are directly targeted by miRNAs leading to severe SCA2 phenotype**
Vishnu Swarup, Himanshu Singh, Mohammed Faruq, Achal Srivastava (New Delhi)
- 4 **Oral trehalose improves neurological symptoms in patients with spinocerebellar ataxia 3**
Noorasyikin Mohamed Arifin, Norlinah Ibrahim, Elena Aisha Azizan, Teh Chiek, Farah Waheeda Tajurudin, Siti Binti Mat Desa, Long Kha Chin, Tan Hui Jan, Wan Nur Nafisah Wan Yahya (Kuala Lumpur)
- 5 **Extra-cerebellar signs and non-motor features in Chinese patients with spinocerebellar ataxia type 3**
Xiaoqin Yuan, Ruwei Ou, Yanbing Hou, Xueping Chen, Huifang Shang (Chengdu Shi)
- 6 **Usefulness root mean square (RMS) analysis using wearable sensors for assessing balance in neurodegenerative disorders**
Pan-Woo Ko, Ho-Won Lee, Bo-Woo Jung, Jieun Kim, Yong-Hyun Lim (Daegu)
- 7 **The CAG repeat correlates with autonomic function in spinocerebellar ataxia type-2 (SCA-2) in India population**
Akhilesh Sonakar, Mohammed Faruq, Achal Srivastava (New Delhi)
- 233 **Clinical assessment of balance in ataxic patients with mean velocity using a triaxial accelerometer.**
Pan-Woo Ko, Ho-Won Lee, Bo-Woo Jung, Jieun Kim (Daegu)

Choreas (Non-Huntington's Disease)

- 8 **Nemaline rods in a patient of chorea-acanthocytosis with a novel pathogenic mutation of VPS13A gene**
Qian Zheng, Chunlin Zhang, Ling Jiao (Guiyang Shi)
- 9 **A review on hemichorea caused by nonketotic hyperosmolar state**
Hafiz Khuram Raza, Jie Zu, Xinxin Yang, Wei Zhang, Chenchen Cui, Chuan-Ying Xu, Qihua Xiao, Guiyun Cui (Xuzhou)

Clinical Trials and Therapy in Movement Disorders

- 10 **Using smartphones to deliver intensive voice therapy for individuals with Parkinson's disease**
Chan Yen, Kartini Ahmad, Chu Shin Ying, Norlinah Ibrahim (Kuala Lumpur)

- 11 **Treatment of synkinesis of primary and postparalytic hemifacial spasm with botulinum neurotoxin type a**
Junhui Su, Yang Na, Xiaolong Zhang, Yougui Pan, Libin Xiao, Yijing He, Lixi Li, Lingjing Jin (Shanghai)
- 12 **The effects of combined low frequency repetitive transcranial magnetic stimulation and motor imagery on upper extremity motor recovery following stroke**
Wenxiu Pan, Pu Wang, Qing Xie (Shanghai)

Cognitive Disorders

- 13 **Molecular aspects of movement disorders, and its association with consanguinity in Pakistani population**
Shoaib Rehman (Bannu)
- 14 **Translating the MMSE into assamese: suggestion for culture and language appropriate sentence prompt**
Madri Kakoti (Lucknow)
- 15 **The correlation between cholinergic system related cognitive impairment of Parkinson's disease and the cortical thickness of brain**
Siming Rong (Guangzhou)
- 16 **Retrospective study of cognitive dysfunction and dyskinesia, mental disorders, and other related factors in patients with Parkinson's disease**
Wei Zhang (Nanjing)

Drug-Induced Movement Disorders

- 17 This abstract has been withdrawn.
- 18 This abstract has been withdrawn.
- 19 **Naringenin restores motor and non-motor deficits and enhances antioxidant status in rotenone-induced rat model of Parkinson's disease more effectively following pre-treatment than post-treatment**
Syeda Madiha, Saida Haider (Karachi)
- 20 **Interaction between mGluR5 and NR2B is increased in 6-OHDA parkinsonian rats with L-dopa-induced dyskinesia**
Jingya Lin (Shanghai)
- 21 **ALDH1A1 regulates postsynaptic μ -opioid receptor expression in the dorsal striatal projection neurons and dyskinesia through transsynaptic retinoic acid signaling**
Jing Pan, Shengdi Chen (Shanghai)

Dystonia

- 22 **Familial Dystonia in patients with pantothenate kinase-associated neurodegeneration and magnetic resonance imaging eye-of-tiger sign: two case reports.**
Tuan-Anh Nguyen, Tran Thanh, Thi-Hung Nguyen (Ho Chi Minh City)



Abstract Listing by Topic

- 23 **Dystonic storm following battery depletion in the subthalamic nuclei stimulation for dystonia secondary to pantothenate kinase-associated neurodegeneration**
Li Xia, Zhang Cheng, Li You, Wu Wen (Shanghai)
- 24 This abstract has been withdrawn.
- 25 **Therapeutic effect of repetitive transcranial magnetic stimulation on writer's cramp**
Lin Wang, Yingmai Yang, Xinhua Wan (Beijing)
- 26 **A case of neck and upper limb movement disorder onset static encephalopathy starts with delayed dystonia.**
Yixi He

Education in Movement Disorders

- 27 **Knowledge and perception of Parkinson's disease among patients and caregivers.**
Xing Yan Choo, Yan Jing Tan, Yong Wei, Jia Lun Lim, Mohamad Azhan, Kar Foo Lau, Chong-Tin Tan, Karuthan Chinna, Shen-Yang Lim, Ai Huey Tan (Johor Bahru)

Epidemiology

- 28 **Prevalence of restless legs syndrome among Parkinson's disease in the Asian population: a systematic review and meta-analysis of real world studies**
Md Azharuddin, Mohammad Adil, Pinaki Ghosh, Manju Sharma (New Delhi)
- 29 **High serum total cholesterol level decreases the risk of Parkinson's disease: a systematic review and meta-analysis**
Gaurav Nepal (Kathmandu)
- 30 **Parkinson's distribution by age, gender, occupation and motor, non-motor symptoms in Pakistani population.**
Saima Naureen, Nafees Ahmad (Rawalpind)

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- 31 **Co-expression network-based analysis of genome wide association data and disease genes links polyglutamine neurodegenerative diseases with depression**
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- 32 **Association of SLC1A2 and PPARGC1A with essential tremor in southern Chinese**
Gen Li, Pei Huang, Shishuang Cui, Shengdi Chen (Shanghai)
- 33 **Proline-rich transmembrane protein 2-negative paroxysmal kinesigenic dyskinesia: clinical and genetic analyses of 163 patients**
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- 34 **Systemic injection of exosomal siRNA significantly reduced huntingtin expression in transgenic mice of Huntington's disease**
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- 35 **Objective evaluation of bradykinesia in Huntington's disease using machine learning.**
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- 234 This abstract has been withdrawn.

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- 36 **Myoclonic tic in a patient with long standing psoriasis; unusual case presentation and review of literature**
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- 37 **Relapsed hemichorea-hemiballism syndrome with diabetic striatopathy: MRI volumetric analysis for a case**
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- 38 **Humming bird sign in craniovertebral junction anomaly leading to misdiagnosis of progressive supranuclear palsy.**
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- 39 **Medication errors in hospitalized Parkinson's disease patients**
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- 40 **Discovery of Pyrazole (PP-41) as dual A2A antagonists/MAO-B inhibitors for the treatment of Parkinson's disease**
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- 41 **An experimental study about neurotoxic potency of a novel botulinum toxin a free of neurotoxin-associated proteins based on muscle strength measurement**
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- 42 **Neuroproductive of kolli hills wild plant centella asiatica extract on experimentally induced Parkinsonism in aged zebra fish**
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- 43 **Effects of Parkinson's disease on nerve conduction studies**
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- 44 **Temporal fluctuation of tremor magnitude is the promising physiological parameter for diagnosis of mild Parkinson disease tremor**
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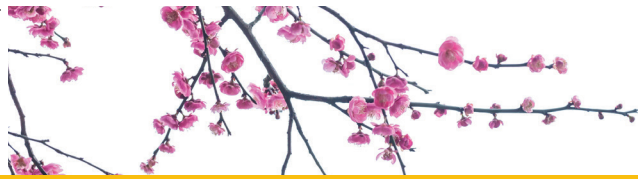
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- 45 **Acute Parkinsonism in a young adult following streptococcal infection: possible adult variant of PANDAS**
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- 46 This abstract has been withdrawn.
- 47 **Computational model based analysis of multi-electrode-arrays placement and pulse amplitude for brain stimulation through neuromodulation**
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- 48 **Nurse-led telephone consultation for patients with Parkinson disease and Parkinsonism**
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- 49 This abstract has been withdrawn.
- 50 **Comorbid cervical and Lumbar spondylosis amongst patients with Parkinson's disease in a rural western Indian medical teaching hospital**
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- 51 **Parkinson pharmacological problem in Indonesia's universal health coverage era**
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- 52 **Prevalence and risk factors for early-morning off in Chinese patients with Parkinson's disease**
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- 53 **cannabinoids and parkinson disease with depression**
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- 54 **Altered expression levels of microRNA-132 and Nurr1 in peripheral blood of Parkinson's disease: a potential disease biomarker**
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- 55 **Symptom of hemifacial spasm remained in a comatose patient**
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- 56 **Differential diagnosis of bradykinesia in Parkinson's Disease and Huntington's disease using machine learning**
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- 57 This abstract has been withdrawn.
- 236 **Role of non-dopaminergic system following repeated exposure to restraint stress and lambda-cyhalothrin on the movement disorders in rats**
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- 237 **Alterations of NURR1 and cytokines in the peripheral blood lymphocytes: combined biomarkers for Parkinson's disease**
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- 58 **Role of antidiabetic drug as anti-Parkinson's potential**
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- 59 **Design and discovery of quinazoline-triazine derivatives as adenosine A2A receptor antagonist against Parkinson Disease**
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- 60 **Hypotension and Bradycardia, a serious adverse effect of piribedil, a case report and literature review**
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- 61 This abstract has been withdrawn.
- 62 This abstract has been withdrawn.
- 63 **Osteocalcin ameliorates motor dysfunction in a 6-hydroxydopamine hydrobromide-induced Parkinson's disease rat model through AKT/GSK3 β signaling**
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- 64 This abstract has been withdrawn.
- 65 **Low frequency repetitive transcranial magnetic stimulation of right dorsolateral prefrontal cortex for Parkinson's disease: a randomized, single-blind, sham-controlled study**
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- 66 **Three-dimensional gait analysis in festination gait of patients with Parkinson's disease**
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- 67 **East Indian sandalwood oil reduced Parkinson's disease associated pathologies in vitro and in vivo: A role of PI3K/Akt/Nrf2/HO-1 signaling axis**
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- 68 **Assessment of balance and functional status in patients with Parkinson's disease: Reliability and validity of the Russian version of the Berg Balance Scale**
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- 69 **Neuromechanism of acupuncture on Parkinson's disease tremor: A resting state fMRI study**
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- 70 **The impact of early-morning off on quality of life in early PD patients**
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- 71 **HDAC inhibitors might not upregulate DJ-1 protein expression**
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- 72 **Baicalein prevents dopaminergic neuron degeneration via inducing autophagy and a-synuclein clearance in neuronal cells.**
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- 73 **Evaluation of therapeutic efficacy in treating depression in patients with Parkinson's disease by Wu Ling powder: a randomized, double-blind, placebo controlled study**
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- 74 **Retinal nerve fiber layer thickness may predict cognitive progression in Parkinson's disease: a longitudinal study**
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- 75 **A symptom-based approach using unilateral subthalamic nucleus and contralateral globus pallidus interna deep brain stimulation for Parkinson disease treatment**
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- 76 **The efficacy of STN-DBS in patients with early-onset PD after 13 years of stimulation**
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- 77 **Enhancing the astrocytic clearance attenuates neural cell death induced by extracellular a-synuclein aggregates**
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- 78 **Serum lipid levels are associated with Parkinson's Disease in Chinese populations**
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- 79 **Clinical analysis of serum uric acid levels in patients with Parkinson's disease and Parkinsonism**
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- 80 **Synthesis of L-DOPA-containing linear dipeptides as anti-Parkinson prodrugs**
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- 81 **L-DOPA-Containing oligopeptides as Anti-Parkinson prodrugs**
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- 82 **Bioactivity study of DOPA-Containing cyclo-dipeptides**
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- 83 **The systematic review on cannabinoids as a treatment of Parkinson's disease**
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- 84 This abstract has been withdrawn.
- 85 **Analysis of clinical characteristics of patients with Parkinson's disease with mood disorders as the first-episode symptom**
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- 86 **Analysis of risk factors of freezing gait effective drug treatment of Parkinson's disease**
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- 87 **The rehabilitation effect of gaiting-pad and healthy exercise on the balance and motor function of Parkinson's Disease**
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- 94 **Effect of erythropoietin on cognitive function in Parkinson's disease**
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- 95 This abstract has been withdrawn.
- 96 This abstract has been withdrawn.
- 97 **Cortical reorganization with cognitive restructuring & visual-feedback in freezing of gait**
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- 98 **Mild cognitive impairment in de novo Parkinson's disease: a neuromelanin MRI study in locus ceruleus**
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- 99 **Factors associated with brittle response of patients in Parkinson disease**
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- 100 **The cognitive dysfunction in early Parkinson's disease with obstructive sleep apnea hypopnea syndrome**
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- 101 **Association of apolipoprotein E gene polymorphism, serum uric acid, homocysteine level with cognitive impairment of Parkinson's disease**
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- 102 **Study on functional near infrared spectroscopy imaging of the frontal cortex executive function in Parkinson's disease**
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- 103 **No significant correlation between hyposmia and visuospatial functions in Parkinson's disease by event-related potential study**
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- 104 **The diagnostic value of visual and auditory evoked potentials in Parkinson with dementia and without dementia**
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- 105 **The factors influencing the cognition of patients with Parkinson's disease in the northeast of China**
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- 115 **Novel DJ-1/PARK7 mutation and its relation to Lewy body accumulation**
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- 116 **The involvement of long non-coding RNA of microglia derived exosomes in Parkinson's disease**
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- 117 **A meta-analysis of phenome and microarray data identifies gene regulatory networks in Parkinson disease (PD)**
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- 118 **PDE8B mutation is not associated with Parkinson's disease in a Taiwanese population**
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- 119 **Substantia nigra hyperechogenicity of Parkinson's disease with LRRK2 variants in Chinese Han population**
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- 120 **Study on the genetic material alteration in the exposure of fluoride content drinking water and adverse risk of neurological disorders - A case control study**
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- 121 **Cytogenetic, gene mutation (alpha-synuclein (SNCA) and parkin (PRKN) gene) and gene expression analysis of chewing tobacco exposures and the risk of Parkinson's disease**
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- 122 **Association of BDNF rs6265 polymorphism with mental disorders in Parkinson's disease**
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- 123 **PGC-1a promoter methylation in peripheral blood leukocytes of patients with Parkinson's disease**
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- 124 **Gender differences in prevalence of LRRK2 associated Parkinson disease: A meta-analysis**
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- 125 **Variants in SNCA gene are associated with Parkinson's Disease risk and progression in China: A 3.5-years follow-up study**
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- 126 **Association between HNMT C314T polymorphisms and the risk of Parkinson's disease: a meta-analysis**
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- 127 **Genetic association of GAK rs1564282 polymorphism and Parkinson's disease susceptibility in Asian populations: a meta-analysis**
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- 128 **Combined Klinefelter syndrome and hereditary early-onset Parkinson's disease: a case report**
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- 129 **Haplotype analysis on the relationship of the DNAJC6 gene with early-onset Parkinson's disease risk in a Chinese population**
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- 130 **LAG3 is associated with Parkinson disease in Chinese people.**
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- 131 **Relationship between polymorphisms of 17 newly discovered loci and risk of Parkinson's disease in a Chinese population**
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- 133 **Early-onset Parkinson disease with cervical dystonia caused by exon 6 homozygous multiplication in PARK2 gene: A case report**
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- 235 **Association of various genetic polymorphisms with Parkinson's disease in Indian Population**
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- 134 This abstract has been withdrawn.
- 135 **Uneven disruptive patterns in the striatum of young-onset Parkinson's disease: a dual-tracer PET imaging study.**
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- 136 **EEG source analysis can distinguish differential effects of NeuroEPO in Parkinson disease**
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- 137 **Quantifying iron deposition within the substantia nigra of Parkinson's disease by quantitative susceptibility mapping**
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- 138 **High iron content in the substantia nigra differentiates Parkinson's disease patients from healthy controls**
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- 139 **Brain microstructural abnormalities in relation to serotonergic terminals density in Parkinson's disease: A combined DTI and 11C-DASB PET study**
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- 140 **Parkinson disease: diagnostic utility of iron deposition quantification in the lateral-ventral substantia nigra pars compacta**
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- 141 **Regulatory mechanism of α -lipoic acid on iron efflux in Parkinson's disease model**
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- 142 **Abnormal effective connectivity within and between several brain networks in Parkinson's disease: a spectral dynamic causal modeling study**
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- 143 **Influence of regional iron deposition on the clinical motor symptoms of Parkinson's disease**
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- 144 **Alterations of left prefrontal lobe, limbic system and sensory cortex in white matter network topology contribute to depression in Parkinson's disease**
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- 145 **Altered global synchronization of spontaneous brain activity in Parkinson's disease patients: a resting-state fMRI study**
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- 146 **Localization of stimulating electrodes in post-DBS surgery PD patients using MRI**
Yan Li, Ewart Haacke, Naying He, Fuhua Yan (Shanghai)
- 147 **fMRI imaging changes in Parkinson's disease patients treated with MAO-I**
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- 148 **Characteristics of spontaneous brain activity in left- and right-onset Parkinson's disease patients**
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- 149 **Alterations of regional homogeneity in Parkinson's disease patients with freeze of gait: a resting-state fMRI study**
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- 150 **Types of dysautonomic disorders in Parkinson's disease patients**
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- 151 **Using Measurement of the Current Perception Threshold to assess the effect of levodopa on peripheral nerve function in patients with Parkinson's disease**
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- 152 **α -synuclein-inducing instability of BMAL1 mRNA leads to circadian rhythm disruption in Parkinson's disease animal model**
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- 153 **Sleep disorders in Parkinson's disease, depending on the form, stage and level of the neuron specific protein S100B.**
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- 154 **Assessment of pain and its correlation with quality of life in Parkinson's disease – An experience from tertiary care centre in India**
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- 155 **Bone mineral density, osteoporosis and fracture risk in Parkinson's disease**
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- 156 **The clinical research of Parkinson's disease with rapid eye movement sleep behavior disorder**
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- 157 **Evaluation of olfactory function and related factors in patients with Parkinson's disease**
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- 158 **Body fat, sarcopenia and frailty in Parkinson's Disease**
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- 159 **Clinical study of twenty-four hour non-invasive ambulatory blood pressure and heart rate monitoring in hospitalized patients with Parkinson's disease**
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- 160 **A clinical analysis of the pain associated with Parkinson disease in 120 patients**
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- 161 **The risk factor and correlation analysis of Fatigue and apathy in Parkinson's disease**
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- 162 **The characteristics of autonomic dysfunction in Parkinson's disease patients with different motor subtypes**
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- 163 **Neuroinflammation induces olfactory deficits in Thy1-aSyn transgenic mice**
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- 164 This abstract has been withdrawn
- 166 **Analysis of stn dbs in PD – a study with microelectrode recording**
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- 167 **Neuroprotection effects of probiotics strains on a chronic MPTP-induced mouse model of Parkinson's disease**
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- 168 **Neuroprotective propensity of FUPB, a dual inhibitor of sEH and COX-2 against rotenone induced neurotoxicity in cell line and Drosophila model of Parkinson disease**
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- 169 **Modulating effects of MDMA on spontaneous firing of the subthalamic nucleus neurons: a quantitative study**
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- 170 **Neuron-specific protein S100B as a differentiated marker of Parkinson's disease and an essential tremor.**
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- 171 **Evaluation of the OX40L serum levels in the patients with the Parkinson compared with the controls**
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- 172 **Construction of SHSY-5Y cell lines stably overexpressing a-synuclein mediated by lentivirus**
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- 173 This abstract has been withdrawn.
- 174 **A critical role of autophagy in regulating microglia polarization in neurodegeneration**
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- 175 **A cross sectional study of optical coherence tomography in parkinson's disease: newer insights**
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- 176 **GO-SHA-JINKI-GAN (GJG) prevent inflammation in MPTP induced Parkinson's disease model mice**
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- 177 **The research of inhibiting Glucocerebrosidase leads to Parkinson's disease in mice via decreasing cathepsin D**
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- 178 **Elevated serum pesticide levels and risk for Parkinson's disease**
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- 179 **Study on Serum differential proteomics in Parkinson's disease**
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- 165 **Rifampicin inhibits the toxicity of rotenone-induced PC12 cells by sumoylation modification of a-synuclein**
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- 180 **Auricular vagus nerve stimulation exerts anti-inflammatory effects and immune regulatory function in a 6-OHDA model of Parkinson's disease**
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- 181 **SNX16 regulates intracellular a-synuclein trafficking in microglia**
Yuan Li, Wenyan Kang, Yiwen Wu, Qiong Yang, Jun Liu (Shanghai)
- 182 **Freezing of gait in Parkinson's disease: a deterministic model classification objective method for tracking and predicting preventing fog episodes in PDs (Prognostic Diagnosis)**
Venkateshwarla Rama Raju, Borgohain Rupam, Rukmini Kandadai (Hyderabad)
- 183 **Prion-like mechanisms in Parkinson's disease**
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- 184 **Dopaminergic neuron injury in Parkinson disease is mitigated by interfering lncRNA SNHG14 expression through miR-133b/a-Synuclein pathway**
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- 185 This abstract has been withdrawn.
- 186 **Idebenone alleviates neuro-inflammation and modulates microglial polarization in LPS-stimulated BV2 cells and MPTP-induced Parkinson's disease mice**
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- 187 **Effect of 5-BDBD on expression of NLRP3 and caspase-1 in Parkinson's disease rat model**
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- 188 **Hydralazine protects nigrostriatal dopaminergic neurons from MPP+ and MPTP induced neurotoxicity: Roles of NRF2-ARE signaling pathway**
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- 189 **VPS35 interacts with DAT and disrupts dat recycling pathway**
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- 190 **LRRK2 interacts with AQP4 and regulates the glymphatic pathway**
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- 191 **Oral P. gingivalis activate microglia and upregulate LRRK2 of the DA neuron and PBMC in LRRK2R1441G mice.**
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- 192 **The Parkinson's Disease associated protein DJ-1 is critical for the integrity and function of ER and mitochondria tethering**
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- 193 **Source identification of abnormally increased hsa-miR-4639-5p in plasma of PD patients and preliminary exploration on its transcriptional regulation**
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- 194 **Exosomes from patients with Parkinson's disease are pathological in mice**
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- 195 **Role of microglia in the transmission of a-syn-containing exosomes**
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- 196 **Reduced VMAT2 expression aggravate the hyposmia and depression in the MPTP model of Parkinson's disease**
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- 197 **Analysis of gut microbiota in patients of Parkinson's disease with or without constipation**
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- 198 **Hitting the brakes: freezing of gait in Parkinson's disease derives from pathological activity in the subthalamic nucleus**
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- 199 **Effect of oxidative stress on autophagy-related protein expression in the substantia nigra in rat models of Parkinson's disease**
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- 200 **MPTP-driven miRNA-425 deficiency promotes necroptosis and dopaminergic neurodegeneration**
Yong-bo Hu, Gang Wang (Shanghai)
- 201 **Novel antibody for detecting Ser129 phosphorylated a-synuclein in Thy1 h-a-syn transgenic mice**
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- 202 **behavioral profile of an early post-natal stressed Parkinsonian rat model on a 29 day treatment regimen with fluvoxamine maleate**
Ernest Dalle, William Daniels, Musa Mabandla (Pietermaritzburg)
- 203 **Study of prevalence of Axis-1 DSM-4 psychiatric disorders in patients with parkinsonism in a rural movement disorder clinic in Western India**
Soaham Desai, Devangi Desai, Sidharth Singh (Anand)
- 204 **Psychiatric symptoms in association with Orthostatic Hypotension in Parkinson's disease and the change of them after one year**
Yanlei Mu, Haibo Chen, Wen Su, Li Shuhua, Huijing Liu, Liying Jin (Beijing)

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- 205 **Follow-up study of relationship between Depression and quality of life in middle aged and elderly patients with Parkinson's disease**
Jiang Yanyan, Wen Su, Haibo Chen (Beijing)

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- 88 **A case of progressive supranuclear palsy from the geriatric perspective**
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- 89 **Prevalence and associated factors of postural deformities in Chinese patients with multiple system atrophy**
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- 90 **Frontal lobe function, behavioral changes and quality of life in patients with multiple system atrophy**
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- 91 **Detection of microbial 16s rRNA gene in the feces and blood of Chinese patients with multiple system atrophy**
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- 92 **Oromandibular manifestations in Parkinson's disease and atypical parkinsonian disorders: A video case-series analysis**
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- 93 **Whether symptoms of levodopa intolerance during acute levodopa challenge test can predict MSA in early years of Parkinsonism**
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- 106 **Movement disorders in pediatric anti-NMDAR encephalitis: Myanmar experience**
Ayemu Saan, Eihnin Kyu (Yangon)
- 107 This abstract has been withdrawn.

Phenomenology and Clinical Assessment of Movement Disorders

- 108 **Mimics and chameleons presenting as blepharospasm**
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- 109 **Study on the clinical and genetic association in Parkinson's disease risk of diabetes mellitus patients with high cholesterol level**
Sithagounder Mekala, Ramachandran Chandirasekar, Venkatachalam Uthayakumar, Rajan Mathivanan, Matheswaran Ragadevi, Eswaran Anitha, Kalimuthu Loganathan (Erode)

- 110 **Validating the Vietnamese version of wearing – off 19 questionnaire for patients with Parkinson's disease**
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- 111 **Impaired fine motor function of the asymptomatic hand in unilateral Parkinson's disease**
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- 113 **A pilot study to evaluate the severity of motor dysfunction in patients with Parkinson's disease based on AI non-wearable motion capture of video analysis**
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- 114 **Detection of impaired finger dexterity by objective keyboard typing test in Parkinson's Disease: A feasibility study**
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- 206 This abstract has been withdrawn.
- 207 **Caregiver and the person with Parkinson's: maintaining mental and physical health.**
Nabanita Mandal (East Medinipur)
- 208 **Health-related quality of life and strain among caregivers of Chinese patients with Parkinson's disease**
Ying Chen, Yanran Liang, Jing Xiuna, Sudan Peng, Enxiang Tao (Guangzhou)
- 209 This abstract has been withdrawn.
- 210 **Perceptions of care and access to services in the western Pacific region**
Christine Wools, Jian Wang, Shen-Yang Lim, Shahrul Azmin, Andrew Evans, Xiaoniu Liang, Ai Huey Tan (Brighton)
- 211 **Caregiver burden and quality of life among carers of patients with Parkinson disease**
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- 212 **Retrospective analysis of inpatients Parkinson's disease patients from 2002 to 2014**
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- 213 **Reason of hospitalization of Parkinson's disease patients in a tertiary hospital of Nepal**
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- 214 **Variability of gait parameters in Parkinson's disease population – A Comparative Study**
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- 215 **A case of cerebrotendinous xanthomatosis with movement disorders**
Jun Li, Xu Erhe, Shanshan Mei, Piu Chan (Beijing)

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- 216 **Abnormal resting-state metrics in REM sleep behavior disorder**
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- 217 **Studies of polysomnography in patients with Parkinson's disease depression**
Hengfeng Qiu (Guangzhou)

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- 218 This abstract has been withdrawn.

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- 219 **Globus pallidus internus versus subthalamic nucleus deep brain stimulation in isolated dystonia**
Lin Zhen, Li Xia, Li You, Wu Wen (Shanghai)
- 220 **Deep brain stimulation in central post-traumatic dystonia**
Li Xia, He Lu, Wu Wen, Li You (Shanghai)
- 221 **The safety and efficacy of PSA deep brain stimulation in essential tremor: a pilot study**
Wu Wen, Huang Ke, Pan Xin, Sun Ming, Zhang Cheng, Wang Tao, Li You (Shanghai)
- 222 **Bilateral nucleus basalis of meynert deep brain stimulation for dementia with lewy bodies a randomized clinical trial**
James Gratwicke, Ludvic Zrinzo, Joshua Kahan, Tarek Yousry, Harith Akram, Jonathan Hyam, Ashwini Oswal, Brian Day, Sebastian Crutch, Thornton John, Jonathan Schott, Patricia Limousin, Martin Rossor, David Burn, Marwan Hariz, John-Paul Taylor, Ian McKeith, Lynn Rochester, Marjan Jahanshahi, Thomas Foltynie (London)

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- 223 **A study of bilateral stn dbs in Parkinson disease on motor and non-motoric axial symptoms using levodopa and with microelectrode recording**
Venkateshwarla Rama Raju, Rupam Borgohain, Rukmini Kandadai (Hyderabad)
- 224 **Deep brain stimulation of the subthalamic nucleus and globus pallidus for apathy in PD patients**
Xue Zhang, Xie Anmu (Qingdao)

- 225 **Psychiatric and cognitive effects of STN-DBS in PD**
Rukmini Kandadai, Maruthi Kesani, Rajesh Alugolu, Tazeem Syed, Sai Sri Lakshmi Meka, Swetha Tandra, Suryaprabha Turaga, Rupam Borgohain (Hyderabad)
- 226 **2 cases of fatal PHS in PD patients while actively treated with deep brain stimulation**
Tao Li, Ziyi Huang, Shuzhao Ge, Shanshan Fu, Zhanhua Liang (Dalian)

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- 227 **Astrocyte-like cells differentiated from dental pulp stem cells protect dopaminergic neurons against 6-hydroxydopamine toxicity**
Indrani Datta, Kavina Ganapathy (Bengaluru)
- 228 **The neuroprotection of AAV8-MANF on 6-OHDA-induced PD model**
Jingxing Zhang, Ming Jiang, Liting Jiang, Jia Guo, Yanxin Yin, Jianmin Fang, Lingjing Jin (Shanghai)
- 229 **The generation and characterization of dopaminergic precursor-like Cells from mouse and cynomolgus monkeys fibroblasts**
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- 230 **Volumetric abnormalities of hippocampal subfields in essential tremor**
Shweta Prasad, Apurva Shah, Ketaki Bhalsing, Keshav Kumar, Jitender Saini, Madhura Ingalkar, Pramod Pal (Bangalore)
- 231 **Early-onset Holmes' tremor with bilateral hypertrophic olivary degeneration after midbrain infarction: a case report**
Ye Li, Yiming Liu (Qingdao)
- 232 **Inter-rater and intra-rater agreement on the 2018 consensus statement on classification of tremors**
Roopa Rajan, Sanjay Pandey, R. Anandapadmanabhan, Achal Srivastava (Kerala)

Late-Breaking Abstracts

- LBA 1** This abstract has been withdrawn.
- LBA 2** **Transcranial direct current stimulation for limb-kinetic apraxia in Parkinson's Disease – a randomized, double-blinded, sham-controlled trial**
J.E. Park, H.R. Jang, L.U. Kim, G.J. Park, S.K. Kim, J.E. Bae, J.Y. Hong, M. Hallett (Goyang)
- LBA 3** **The nigral hyperintensity on 3 Tesla susceptibility-weighted MRI in patients with vascular parkinsonism**
K.J. Kim, Y.J. Bae, J.M. Kim (Goyang-Si)
- LBA 4** **Clinical and radiological analysis of Progressive Supranuclear Palsy cases in Kazakhstan**
N. Zharkynbekova, R. Kaiyrzhanov, M. Saifullayeva, C. Shashkin, G. Kaishybayeva (Shymkent)
- LBA 5** **Differential coding and spatial clustering of reward and movement information in the striatal direct and indirect pathways**
J.H. Shin, D.H. Kim, M.W. Jung (Seoul)
- LBA 6** **GluRdelta2-regulated climbing fiber pathology generates rhythmic movements in essential tremor**
M.K. Pan W.C. Liu, Y.S. Li, C.L. Ni, S.H. Kuo (Taipei)
- LBA 7** **Clinical motor outcomes immediately after repetitive transcranial magnetic stimulation (rTMS) for Parkinson Disease in a Filipino cohort**
J.A.K. Torres, S.D. Abou Zaki, R. Rosales (Manila)
- LBA 8** **Does gastrectomy delay nigral dopaminergic loss in Parkinson's disease?**
P.H. Lee, S.J. Chung, J.S. Baik, J.H. Yoon, J.S. Kim, Y.H. Sohn (Seoul)
- LBA 9** **Type 1 Sialidosis patient with a novel deletion mutation in the NEU1 Gene: case report and literature review**
J.H. Ahn, A.R. Kim, C. Lee, N.K.D. Kim, W.Y. Park, M. Kim, J. Youn, J.W. Cho, J.S. Kim (Seoul)
- LBA 10** **Primary familial brain calcification in China: prevalence, severe phenotypes with biallelic variants**
S. Chen, Z.D. Cen, Y. Chen, F. Fu, Q.Q. Pan, X.H. Chen, D.H. Yang, H.T. Wang, H.W. Wu, X.S. Zheng, F. Xie, Z.Y. Ouyang, J.Y. Liu, W. Luo, (Hangzhou)
- LBA 11** **Alteration of brain functional connectivity in Parkinson's disease patients with dysphagia**
J.X. Gao, X.J. Guan, Z.D. Cen, Y. Chen, X.P. Ding, Y.T. Lou, S. Wu, B. Wang, Z.Y. Ouyang, M. Xuan, Q.Q. Gu, X.J. Xu, P.Y. Huang, M.M. Zhang (Hangzhou)
- LBA 12** **Evaluation of MYORG mutations as a novel cause of primary familial brain calcification**
Y. Chen, F. Fu, S. Chen, Z.D. Cen, F. Xie, X.S. Zheng, D.H. Yang, H.T. Wang, W. Luo (Hangzhou)
- LBA 13** **Analysis of the characteristic changes of macular thickness in patients with Parkinson's disease**
J.H. Zhao, N. Wu, Y. Wan, L. Song, J. Gan, Z.G. Liu, (Shanghai)
- LBA 14** **The efficacy and safety of STN-DBS under general anesthesia for PD patients**
C.W. Chen (Gunagzhou)
- LBA 15** **LRP10 mutations in Chinese patients with familial Parkinson's disease**
Y. Chen Z.D. Cen, X.S. Zheng, X.H. Chen, S. Chen, H.T. Wang, D.H. Yang, L.B. Wang (Hangzhou)
- LBA 16** **REM sleep behavior disorder in Parkinson's disease patients with and without freezing of gait: Polysomnographic evaluation**
Y.H. Sung, J.W. Yang (Incheon)
- LBA 17** **Bone mineral density and 25-hydroxyvitamin D levels in patients with Parkinson's disease: a clinical study from plateau area**
Y. Cao (Xining)



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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 conduct teaching seminars in local hospitals or institution, participate in grand rounds and/or provide input to further the understanding of movement disorders in the host country.

Ambassador Program

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The MDS Virtual Professor Program supports the virtual attendance of one or two international movement disorders experts to an area of need that does not allow the physical attendance of such specialists (i.e. countries on the U.S. travel warnings list or hard to travel regions). In addition, sponsored speakers develop materials relevant and comprehensible to participants and deliver these materials virtually using a webinar software.





International Parkinson and
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Friday, April 12

Corporate Symposium presented by Qilu Pharmaceutical

14:00-15:00

Hangzhou Hall 1-4

Corporate Symposium presented by Eisai Pharmaceutical

16:00-17:00

Hangzhou Hall 1-4

Saturday, April 13

Corporate Lunch Symposium presented by Lundbeck China

13:00-14:00

International Hall

Sunday, April 14

Corporate Lunch Symposium presented by SANOFI China

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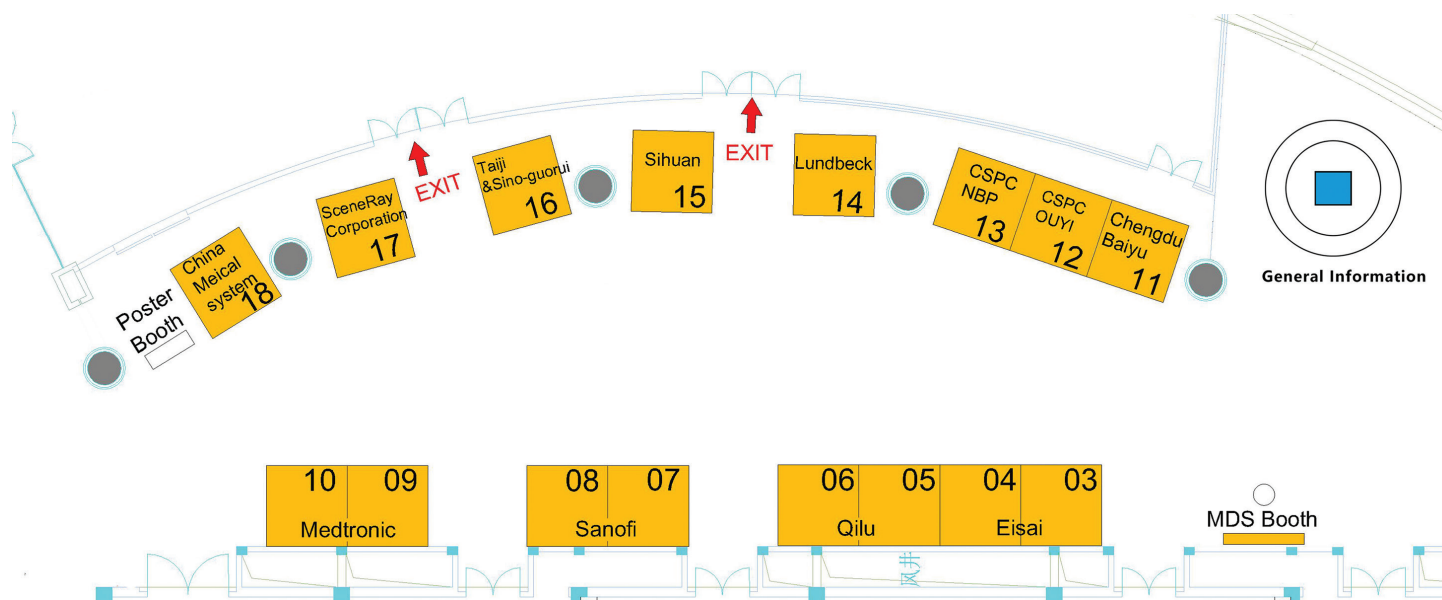
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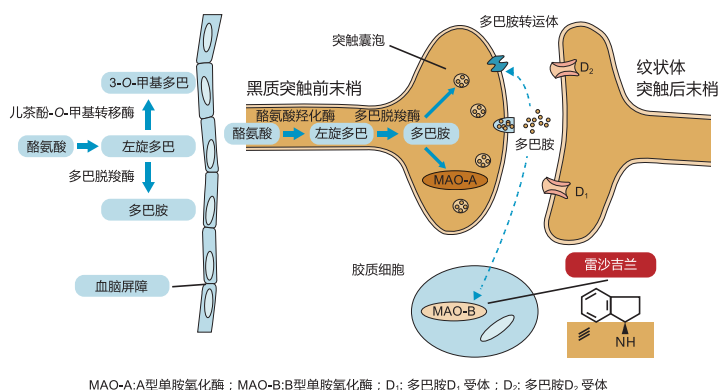
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2006 AAN ¹²	•伴运动波动PD患者，推荐雷沙吉兰以减少关期时间	A级推荐/I级证据

2018 MDS指南中的推荐等级定义为：有效，可能有效，可能无效，无效，证据不足。

-代表未标明推荐级别和证据级别

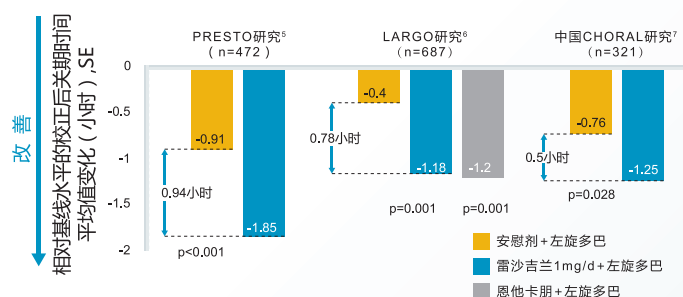
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- ★ 2017年营业规模约53.49亿人民币,净利润规模约16.7亿人民币；总资产约103亿人民币，净资产约80亿人民币。现有员工约3700名。
- ★ 深圳康哲多次入选并蝉联“深圳百强企业”、“南山区纳税百强企业”、“自主创新行业龙头企业”。



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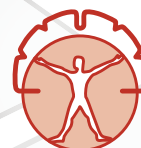








MDS Education ROADMAP



International Parkinson and
Movement Disorder Society

Your Guide to MDS Educational Resources

www.movementdisorders.org/roadmap

Navigate educational content according to three levels of Movement Disorders experience:



Beginner



Intermediate



Advanced



International Parkinson and
Movement Disorder Society

Certifies that

has attended the 6th Asian and Oceanian Parkinson's Disease
and Movement Disorders Congress on April 12-14, 2019
located in Hangzhou, China.

Christopher Goetz
Christopher Goetz
President,
International Parkinson and
Movement Disorder Society,
2017-2019

Beomseok Jeon
Beomseok Jeon
Chair,
6th AOPMC Oversight Committee

Baorong Zhang
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Chair,
6th AOPMC Scientific Program Committee

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Trastal® Piribedil Sustained-release Tablets

泰舒达®吡贝地尔缓释片

- Strong effective in controlling tremor¹
强效控制震颤¹
- Improve cognitive function²
改善认知功能²
- Reduces daytime sleepiness³
缓解日间嗜睡³



【Drug names】Generic name: Piribedil SR Tablets Trade name: Trastal®

【Indications】Treatment of Parkinson's disease:
• either as monotherapy • or in association with dopamimetic from the outset, or secondarily.

【Strength】50mg

【Dosage and administration】Oral route - as monotherapy: 150 mg to 250 mg, i.e. 3 to 5 tablets per day, to be divided into 3 to 5 administrations per day, as a supplement to dopamimetic: 1 to 3 tablets per day (approximately 50 mg of piribedil per 250 mg of L. Dopa).

【Adverse reactions】Common: minor gastrointestinal disorders (nausea, vomiting, flatulence), psychiatric disorders (JCD, dizziness. Please refer to full PI for uncommon, rare, very rare adverse reactions.

【Contraindications】hypersensitivity to piribedil, or to any of the excipients; cardiovascular shock; acute phase of myocardial infarction; in association with anti-emetic neuroleptics

【Pregnancy and Lactation】In the absence of relevant data, the use of this drug during pregnancy or breastfeeding is not recommended.

【Use in children】The efficacy and safety has not been established in children.

【Approval No.】国药准字 J20140064
进口药品注册证号 H20140105

【Precautions】1. Piribedil has been associated with somnolence and episodes of sudden sleep onset, particularly in patients with Parkinson's disease.

2. Patients should be regularly monitored for the development of impulse control disorders, including pathological gambling, hypersexuality, increased libido, compulsive spending or buying, binge eating and compulsive eating.

Dose reduction/ tapered discontinuation should be considered if such symptoms develop.

3. This medicine is contra-indicated in case of fructose intolerance, glucose and galactose malabsorption syndrome or sucrose-isomaltase deficiency

4. Effect on ability to drive and use machines:

Patients treated with piribedil presenting somnolence and/or sudden sleeping fits, must be told not to drive vehicles or perform an activity in which an alteration of alertness could expose them or other persons to a risk of serious accident or death (for example the use of machinery) until the disappearance of such effects.

【Manufacturer】Les Laboratoires Servier Industrie
905, route de Saran, 45520 Gidy-France
Please carefully refer to PI approved by China before prescription

References:

1. Rondot P et al. J Neurol. 1992;239 Suppl 1:28-S34.
2. Castro-Caldas A, et al. Mov Disord. 2006;21(4):500-509.
3. Eggert K, et al. Clin Neuropharmacol. 2014;37(4):116-122.

SACN.TTL19.02.0834(1) 有效期至 2020 年 8 月, 非广告用途, 仅供相关医学人士参考。

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IMPORTANT DATES

July 18, 2019:
Early Registration Deadline

August 22, 2019:
Final Pre-Registration Deadline



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