

# MDS-ES Focused Workshop: Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

February 29 - March 2, 2024 — Padua, Italy



International Parkinson and  
Movement Disorder Society  
European Section



# PROGRAM

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## ABOUT MDS

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International Parkinson and  
Movement Disorder Society

**International Parkinson and Movement Disorder Society  
International Secretariat**

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Milwaukee, WI 53202 USA

Email: [education@movementdisorders.org](mailto:education@movementdisorders.org)

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The International Parkinson and Movement Disorder Society (MDS) is an international professional society of clinicians, scientists, and other healthcare professionals who are interested in Parkinson's disease, related neurodegenerative and neurodevelopmental disorders, hyperkinetic Movement Disorders, and abnormalities in muscle tone and motor control.

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## CORPORATE SUPPORT ACKNOWLEDGEMENT

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The MDS-ES Focused Workshop: *Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism* wishes to acknowledge the following commercial supporters:

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## ACKNOWLEDGEMENT

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The MDS-ES Focused Workshop: *Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism* wishes to thank:

**Società Italiana Parkinson e Disordini del  
Movimento/LIMPE-DISMOV ETS**



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## ENDORSED BY

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The MDS-ES Focused Workshop: *Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism* is endorsed by:



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

**DNS**

Department of Neuroscience



MDS-ES Focused Workshop:

## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

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### COURSE VENUES

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**Day 1: University of Padua - Palazzo Bo**  
**Lecture Hall: Aula Magna "Galileo Galilei"**  
*Via VIII Febbraio 2, 35122, Padua, Italy*

**Day 2-3: Palazzo della Salute**  
**Lecture Hall: Sala Elettra**  
*Via San Francesco 90, 35121, Padua, Italy*

### COURSE EVALUATION & CERTIFICATES

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The course evaluation survey must be completed to claim and download your certificate. Please take time to complete the online evaluation as your input and comments are essential in planning future educational programs.

#### TO ACCESS:

1. Visit <https://education.movementdisorders.org>
2. Click "**GET CERTIFICATE**"
3. Once prompted enter the certificate code: **736591**

You will be prompted to fill out your course evaluation and upon completion, you will be able to download your certificates of participation. Please contact [education@movementdisorders.org](mailto:education@movementdisorders.org) with any questions.



MDS-ES Focused Workshop:

## **Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism**

### **PROGRAM OVERVIEW & ACCREDITATION INFORMATION**

#### **COURSE DESCRIPTION**

The *MDS-ES Focused Workshop: Diagnostic and Progressive Biomarkers in Parkinson's Disease and Atypical Parkinsonism* focuses on diagnostic and progression biomarkers in Parkinson's disease and atypical parkinsonism. The topic is critical given the recent developments in seed amplification assays (SAA), neuroimaging, and the development of novel biological therapies. The Workshop will enable strong interactions between basic and clinical scientists, enabling ample opportunities for junior scientists to understand the challenges and implications regarding the use of biomarkers in the field.

#### **LEARNING OBJECTIVES**

After participating in this activity, the learner will be able to:

1. Classify available biomarkers and understand their role and significance
2. Compare the recent advances in the field of biomarker research in PD/atypical Parkinsonism
3. Associate the use of particular assays with diagnosis and monitoring disease progression
4. Demonstrate the impact of specific biomarkers on therapeutic interventions
5. Document how biomarkers could change the management landscape in PD/atypical Parkinsonism

#### **TARGET AUDIENCE**

This course is intended for Movement Disorder Specialists, Clinicians, Faculty, Clinical Research Fellows, Movement Disorder Fellows, Basic Science Researchers, Translation Researchers, Clinical Researchers and Genetic Counseling Health Professionals.

#### **OVERALL GOAL STATEMENT**

The goal of this program is to provide information and practical information on various developments and standards within the field of Movement Disorders.

#### **RECORDINGS PROHIBITED**

Audio and videotaping are not allowed during the course. Photography of the presentations and slides is not allowed during the activity. This includes mobile phone photography.

#### **EDUCATION DISCLAIMER**

The primary purpose of MDS programming is to provide educational opportunities that enhance patient care. Information presented, as well as publications, technologies, products and/or services discussed are intended to inform attendees about the knowledge, techniques and experiences of physicians who are willing to share such information with colleagues. A diversity of opinions exists in the medical field, and the views of the workshop's faculty are offered solely for educational purposes. Faculty members' views do not represent those of the MDS and do not constitute endorsement by MDS.



MDS-ES Focused Workshop:

## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

### ACCREDITATION STATEMENT



The **MDS-ES Focused Workshop: Diagnostic and Progressive Biomarkers in Parkinson's Disease and Atypical Parkinsonism, Padova, Italy, 29/02/2024-02/03/2024** has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with **17** European CME credits (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME® credit to AMA credit can be found at [www.ama-assn.org/education/earn-credit-participation-international-activities](http://www.ama-assn.org/education/earn-credit-participation-international-activities).

Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMEC®s are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

### HOW TO CLAIM CREDITS

If you are interested in claiming credits for EACCME, you must sign-in at the beginning of the course. A certificate will be provided electronically following completion of the course.

To claim Italian CME credits, you must sign in daily at the beginning and end of the course day. Additional information will be emailed to all delegates from Italy with more information on the Italian CME process.

For further questions, please stop by the Registration Desk.

### MDS-ES EXECUTIVE COMMITTEE

Christine Klein Lübeck, Germany <i>MDS-ES Chair</i>	Kailash Bhatia London, United Kingdom <i>MDS-ES Chair-Elect</i>	Regina Katzenschlager Vienna Austria <i>MDS-ES Secretary</i>	Maria Stamelou Athens, Greece <i>MDS-ES Treasurer</i>
Maria Fiorella Contarino Leiden, Netherlands <i>MDS-ES Secretary-Elect</i>	Tiago Outeiro Gottingen, Germany <i>MDS-ES Treasurer-Elect</i>	Pille Taba Tartu, Estonia <i>MDS-ES Past Chair</i>	Iva Stankovic Belgrade, Serbia <i>MDS-ES Education Chair</i>
Esther Cubo Burgos, Spain	Yildiz Degirmenci Istanbul, Turkey	Margherita Fabbri Toulouse, France	Alessandra Fanciulli Innsbruck, Austria
Norbert Kovács Pecs, Hungary	Francesca Morgante London, United Kingdom	Matej Skorvanek Kosice, Slovakia	Michele Tinazzi Verona, Italy



## WORKSHOP DIRECTORS

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**Angelo Antonini, MD, PhD**  
University of Padua  
Padua, Italy



**Tiago Outeiro, PhD**  
University Medical Center  
Goettingen, Germany

## FACULTY

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**Erwan Bezard, PhD**  
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Nijmegen, Netherlands



**Matteo Bologna, MD, PhD**  
Sapienza University  
Roma, Italy



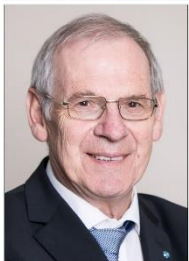
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Padua, Italy



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Christian-Albrechts University  
Kiel, Germany



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Institute, HBKU, Qatar  
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**Günter Höglinger, MD**  
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**Olivier Rascol, MD, PhD**  
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**Timothy Rittman, PhD, FRCP**  
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Bologna, Italy



**Maria Teresa Pellecchia,  
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and CEITEC, Masaryk  
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Stockholm, Sweden



**Nadia Stefanova, MD, PhD**  
Medical University of  
Innsbruck  
Innsbruck, Austria



**Wilma D.J. Van de Berg, PhD**  
Amsterdam UMC, Vrije  
University  
Amsterdam, Netherlands

## SESSION CHAIRS

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**Luigi Bubacco, PhD**  
University of Padua  
Padua, Italy



**Elisa Greggio, PhD**  
University of Padua  
Padua, Italy



**Fabrizio Stocchi, MD, PhD**  
University San Raffaele  
Rome, Italy



**Michele Tinazzi, MD, PhD**  
University of Verona  
Verona, Italy



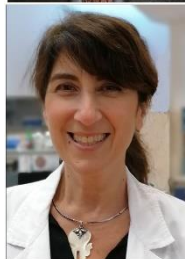
**Paolo Calabresi, MD**  
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Rome, Italy



**Elena Moro, MD, PhD, FEAN**  
**EAN President-Elect**  
Grenoble Alpes University  
Grenoble, France



**Alessandro Tessitore, MD, PhD**  
University Hospital "Luigi  
Vanvitelli"  
Napoli, Italy



**Enza Maria Valente, MD, PhD**  
University of Pavia and IRCCS  
Mondino Foundation  
Pavia, Italy



## DISCLOSURE OF FINANCIAL RELATIONSHIPS

All individuals in control of content for this activity are required to disclose all financial relationships with ineligible companies (as defined by the EACCME) over the last 24 months. Disclosure information is available below. All relevant financial relationships have been mitigated in advance of this program.

First Name	Last Name	Role in Activity	Disclosure(s)
Angelo	Antonini	Planner, Speaker, Chair	Consultant: UCB, Bial, AbbVie
Erwan	Bezard	Speaker	Nothing to Disclose
Kailash	Bhatia	Planner	Consultant: Ipsen, Bial, Neuroderm Stipend: MDCP Editorship
Bas	Bloem	Speaker	Nothing to Disclose
Matteo	Bologna	Speaker	Consultant: Blinktbi
Per	Borghammer	Speaker	Consultant: Novo Nordisk, Curium Speaker: Infucare, Eisai
Luigi	Bubacco	Chair	Nothing to Disclose
Paolo	Calabresi	Chair	Nothing to Disclose
Miryam	Carecchio	Speaker	Nothing to Disclose
Esther	Cubo	Planner	Consultant: AbbVie, Esteve Grant: Sacyl 2023
Maria Fiorella	Contarino	Planner, Speaker	Consultant: AbbVie, Inbrain, Medtronic, Boston Scientific
Yildiz	Degirmenci	Planner	Nothing to Disclose
Günther	Deuschl	Speaker	Nothing to Disclose
Omar	El-Agnaf	Speaker	Nothing to Disclose
Margherita	Fabbri	Planner	Consultant: AbbVie, Bial, Orkyn, LVL Medical, Convatec Grants: MSA Coalition, French Ministry of Health
Alessandra	Fanciulli	Planner	Consultant: Broadview Ventures, Theravance Biopharma, GE Healthcare, Healthware, AbbVie Grants: Medical University of Innsbruck, Parkinsons Fond Österreich, Dr. Johannes und Herta Tuba Foundation, MSA Coalition, Austrian Exchange Programme, Austrian Science Fund
Elisa	Greggio	Chair	Nothing to Disclose
Günter	Höglinger	Speaker	Nothing to Disclose
Regina	Katzenschlager	Planner	Consultant: AbbVie, AOP, Bial, Britannia, Cynopus, EVERPharma, Merz, Neuroderm, Novartis, Stada, Supernus, UCB, Zambon Grants: Britannia, Stada
Christine	Klein	Planner, Speaker, Chair	Speaker: Desitin, Bial Consultant: Retromer Therapeutics, Centogene Grant: Centogene
Norbert	Kovács	Planner	Consultant: Abbott, AbbVie, Boston Scientific Grants: Abbott
Wassilios	Meissner	Speaker	Consultant: Biohaven, Lundbeck, Roche, Alterity, Servier, Inhibikase, Takeda and Teva
Francesca	Morgante	Planner	Consultant: Boston Scientific, Medtronic, Bial, Merz, AbbVie, International PD and Movement Disorders Society Grants: NIHR, Innovate UK, Global Kynetic
Elena	Moro	Chair	Nothing to Disclose
Tiago	Outeiro	Planner, Speaker, Chair	Speaker: Bial
Piero	Parchi	Speaker	Nothing to Disclose
Lucilla	Parnetti	Speaker	Nothing to Disclose
Maria Teresa	Pellecchia	Speaker	Nothing to Disclose
Andrea	Pilotto	Speaker	Nothing to Disclose

First Name	Last Name	Role in Activity	Disclosure(s)
Werner	Poewe	Speaker	Consultant: AC Immune, Alterity, BIAL, Britannia, Boehringer, Contera, Lundbeck, Neuroderm, Roche, Stada, Takeda, UCB Speaker: AbbVie, BIAL, Eisai, Britannia, Boehringer, Lundbeck, Neuroderm, Stada, Zambon
Olivier	Rascol	Speaker	Nothing to Disclose
Irena	Rektorova	Speaker	Nothing to Disclose
Timothy	Rittman	Speaker	Nothing to Disclose
Marina	Romero-Ramos	Speaker	Nothing to Disclose
Jens	Schwamborn	Speaker	Nothing to Disclose
Matej	Skorvanek	Planner	Nothing to Disclose
Maria	Stamelou	Planner	Consultant: USB, Roche Grant: PROATYP
Iva	Stankovic	Planner	Nothing to Disclose
Nadia	Stefanova	Speaker	Consultant: Inhibikase Therapeutics
Fabrizio	Stocchi	Chair	Nothing to Disclose
Per	Svenningsson	Speaker	Nothing to Disclose
Pille	Taba	Planner	Nothing to Disclose
Alessandro	Tessitore	Chair	Nothing to Disclose
Michele	Tinazzi	Planner, Chair	Consultant: AbbVie, Zambon, Bial Grant: Zambon
Enza Maria	Valente	Chair	Nothing to Disclose
Wilma D.J.	Van de Berg	Speaker	Grants: Roche, Genentech, Discoveric Bio, ZonMW, AbbVie



International Parkinson and Movement Disorder Society

# International Congress of Parkinson's Disease and Movement Disorders®

[mdscongress.org](https://mdscongress.org)

## Philadelphia, PA, USA

September 27 - October 1, 2024





MDS-ES Focused Workshop:

## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

### FINAL PROGRAM

#### DAY 1: Thursday, February 29, 2024

**Venue:** University of Padua - Palazzo Bo  
**Lecture Hall:** Aula Magna "Galileo Galilei"  
*Via VIII Febbraio 2, 35122, Padua, Italy*

**Registration: 12:00 – 13:30**

#### Opening Session & Welcome

**13:30 – 14:00**

*Angelo Antonini, Tiago Outeiro, MDS-ES Focused Workshop Chairs*  
*Michele Tinazzi, LIMPE-DISMOV President*

#### Session 1: Emerging Biomarkers

**Chair: Paolo Calabresi**

14:00 – 14:30	<b>Premotor Parkinson</b> <i>Per Svenningsson</i>
14:30 – 15:00	<b>Synuclein quantification</b> <i>Omar El Agnaf</i>
15:00 – 15:30	<b>Synuclein detection</b> <i>Lucilla Parnetti</i>
15:30 – 16:00	<b>Panel Discussion</b> - Moderated by Paolo Calabresi <i>Per Svenningsson, Omar El Agnaf, Lucilla Parnetti</i>

16:00 – 16:30 **COFFEE BREAK**

#### Session 2: Update on Models Reporting Aggregation

**Chair: Luigi Bubacco**

16:30 – 17:00	<b>Parkinson's Disease in Cell models</b> <i>Tiago Outeiro</i>
17:00 – 17:30	<b>Non-Human Primate Models</b> <i>Erwan Bezard</i>
17:30 – 18:00	<b>MSA in Animal Models</b> <i>Nadia Stefanova</i>
18:00 – 18:30	<b>Panel Discussion</b> - Moderated by Luigi Bubacco <i>Tiago Outeiro, Erwan Bezard, Nadia Stefanova</i>

#### Plenary Lecture

**Chairs: Angelo Antonini, Tiago Outeiro**

18:30 – 19:15	<b>Progressive Supranuclear Palsy Biomarkers and Future Treatment</b> <i>Guenter Hoeglinger</i>
19:30 – 20:30	<b>Welcome Reception – La Basilica di Palazzo Bo</b> <i>Drinks and light appetizers served</i>



MDS-ES Focused Workshop:

## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

### DAY 2: Friday, March 1, 2024

**Venue: Palazzo della Salute**

**Lecture Hall: Sala Elettra**

Via San Francesco 90, 35121, Padua, Italy

**Registration: 8:00 – 8:30**

#### Session 3: Genetic Markers

**Chair: Enza Maria Valente**

8:30 – 9:00	<b>Parkinson's Disease</b> <i>Christine Klein</i>
9:00 – 9:30	<b>Atypical Parkinsonism</b> <i>Miryam Carecchio</i>
9:30 – 10:00	<b>Panel Discussion - Moderated by Enza Maria Valente</b> <i>Christine Klein, Miryam Carecchio</i>

10:00 – 10:30 **COFFEE BREAK**

#### Session 4: Inflammation and Organoid Models

**Chair: Elisa Greggio**

10:30 – 11:00	<b>Neuroinflammation in Parkinson's Disease</b> <i>Marina Romero Ramos</i>
11:00 – 11:30	<b>Neuroinflammation in MSA</b> <i>Wassilios Meissner</i>
11:30 – 12:00	<b>Modeling of PD with patient specific organoids and assembloids</b> <i>Jens Schwamborn</i>
12:00 – 12:30	<b>Panel Discussion - Moderated by Elisa Greggio</b> <i>Marina Romero Ramos, Wassilios Meissner, Jens Schwamborn</i>

#### Plenary Lecture

**Chair: Tiago Outeiro**

12:30 – 13:15	<b>Update on Neuropathology</b> <i>Wilma van de Berg</i>
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13:15 – 15:00 **LUNCH BREAK**

13:45 – 14:45 **POSTER SESSION**  
Poster detail can be found on page 12

#### Session 5: Neuroimaging

**Chair: Alessandro Tessitore**

15:00 – 15:30	<b>Molecular</b> <i>Per Borghammer</i>
15:30 – 16:00	<b>Functional</b> <i>Irena Rektorová</i>
16:00 – 16:30	<b>Atypical Parkinsonian Syndromes</b> <i>Timothy Rittman</i>
16:30 – 17:00	<b>Panel Discussion - Moderated by Alessandro Tessitore</b> <i>Per Borghammer, Irena Rektorová, Timothy Rittman</i>

17:00 – 17:30 **COFFEE BREAK**



Session 6: Seeding Amplification Assays Chair: Christine Klein	
17:30 – 18:00	<b>Skin and CSF</b> <i>Piero Parchi</i>
18:00 – 18:30	<b>Blood Markers</b> <i>Andrea Pilotto</i>
18:30 – 19:00	<b>Panel Discussion</b> - Moderated by Christine Klein <i>Piero Parchi, Andrea Pilotto</i>
Plenary Lecture Chair: Tiago Outeiro	
19:00 – 19:45	<b>Biological Definition of Parkinson's Disease</b> <i>Angelo Antonini</i>
19:45 – 20:00	<b>Day 2 Closing Remarks</b> <i>Angelo Antonini, Tiago Outeiro</i>

DAY 3: Saturday, March 2, 2024	
<p style="text-align: center;"><b>Venue: Palazzo della Salute</b>  <b>Lecture Hall: Sala Elettra</b>  Via San Francesco 90, 35121, Padua, Italy</p> <p><b>Registration: 8:00 – 8:30</b></p>	
Session 7: The Impact of Biomarkers on Biological Treatments Chair: Fabrizio Stocchi	
8:30 – 9:00	<b>Immunotherapies in Parkinson's Disease</b> <i>Werner Poewe</i>
9:00 – 9:30	<b>Gene Therapy and Cell Transplantation</b> <i>Olivier Rascol</i>
9:30 – 10:00	<b>Therapeutic Targets in Multiple System Atrophy</b> <i>Maria Teresa Pellecchia</i>
10:00 – 10:30	<b>Panel Discussion</b> - Moderated by Fabrizio Stocchi <i>Werner Poewe, Olivier Rascol, Maria Teresa Pellecchia</i>
10:30 – 11:00	<b>COFFEE BREAK</b>
MDS-ES & EAN JOINT SESSION: The Impact of Biomarkers on Non-Pharmacological Treatments Chairs: Elena Moro, President Elect, European Academy of Neurology (EAN) Michele Tinazzi, President, LIMPE-DISMOV	
 	
11:00 – 11:30	<b>Focused Ultrasound</b> <i>Guenter Deuschl</i>
11:30 – 12:00	<b>Deep Brain Stimulation</b> <i>Maria Fiorella Contarino</i>
12:00 – 12:30	<b>Non-invasive Brain Modulation</b> <i>Matteo Bologna</i>
12:30 – 13:00	<b>Panel Discussion</b> - Moderated by Elena Moro & Michele Tinazzi <i>Guenter Deuschl, Maria Fiorella Contarino Matteo Bologna</i>
13:00 – 13:15	<b>EAN Activities &amp; Opportunities</b> <i>Elena Moro, EAN President-Elect</i>
Plenary Lecture Chairs: Angelo Antonini, Tiago Outeiro	
13:15 – 14:00	<b>Dealing with Parkinson's Disease Pandemic</b> <i>Bas Bloem</i>
14:00	<b>Closing Remarks</b> <i>Angelo Antonini, Tiago Outeiro</i>



MDS-ES Focused Workshop:

## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

### POSTER SESSION INFORMATION

**FRIDAY, MARCH 1: 13:45 – 14:45**

Poster Number	Title
1	Levodopa Equivalent Daily Dose Changes and Comparison of Subtypes in Early-Stage Parkinson's Disease: A Single-Center Investigation
2	The presence of REM sleep behavior disorder at the time of Parkinson's disease diagnosis, and its relationship to distinct cognitive deficits and potential autonomic dysfunction
3	Serum GFAP and neurofilament light as potential markers of PD cognitive decline
4	Detection of $\alpha$ -synuclein deposits in the skin and GI tract in subjects with prodromal Parkinson's disease
5	Skin calcium deposits in primary familial brain calcification: a novel potential biomarker
6	Immunohistochemical $\alpha$ -synuclein detection in colonic mucosa and skin in Parkinson's disease, idiopathic REM Sleep Behavior Disorder and controls
7	Alpha-Synuclein pathology in the enteric nervous system is a potential biomarker for Parkinson's Disease
8	GDF-15 as a Potential Stratification Biomarker for Mitochondrial Dysfunction in Idiopathic Parkinson's Disease
9	Lipopolysaccharide binding protein, zonulin, and calprotectin as potential risk markers for sporadic Parkinson's disease: a case-control study
10	Loss of cortical compensation determines clinical progression in Parkinson's disease
11	Cholinergic crisis as a cause of delayed extrapyramidal hyperkinesia in suicidal attempt patient
12	The Phosphorylated-alpha-synuclein Co-localized with Autophagosome Marker p62
13	Role of neuroinflammation on biomarker levels in the cerebrospinal fluid and blood serum of multiple system atrophy patients
14	Role of inflammatory biomarkers in LBD neurodegeneration
15	Selective lipid alterations during alpha synuclein aggregation using label-free Raman confocal microscopy
16	The role of cerebrospinal fluid and blood serum inflammatory biomarkers in the pathophysiology of primary tauopathies
17	Magnetic resonance imaging evidence of sequential involvement of pathological patterns of progressive supranuclear palsy by diffusion tensor imaging
18	Alzheimer's disease biomarkers in diagnosis of corticobasal syndrome in clinical practice

Scan the QR code to view Abstract Book.  
Abstracts available through June 1, 2024.





MDS-ES Focused Workshop:

## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

### ACKNOWLEDGEMENTS

The MDS-ES Focused Workshop wishes to acknowledge the following supporters:





International Parkinson and  
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## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

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## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

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MDS-ES Focused Workshop:  
**Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism**

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## Diagnostic and Progression Biomarkers in Parkinson's Disease and Atypical Parkinsonism

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# Upcoming Courses



International Parkinson and  
Movement Disorder Society  
European Section



## Parkinson's Disease Management: A Travel Throughout the Disease Course

June 14-15, 2024, Toulouse, France

**Register now:** [movedis.link/pd-progression](https://movedis.link/pd-progression)

## Registration opening soon

Sign up to be notified when these courses open



## Affiliate & National Society Video Case Discussion Series

May 22, 2024 – Online



## MDS-ES School for Young Neurologists

September 5-7, 2024 – Bologna, Italy



## Advanced DBS for Movement Disorders

October 17-18, 2024 – Grenoble, France



## Dysautonomia in Movement Disorders

December 6-7, 2024 – Innsbruck, Austria



## Train the Trainer for Health Professionals Program

To be announced – In-person and online