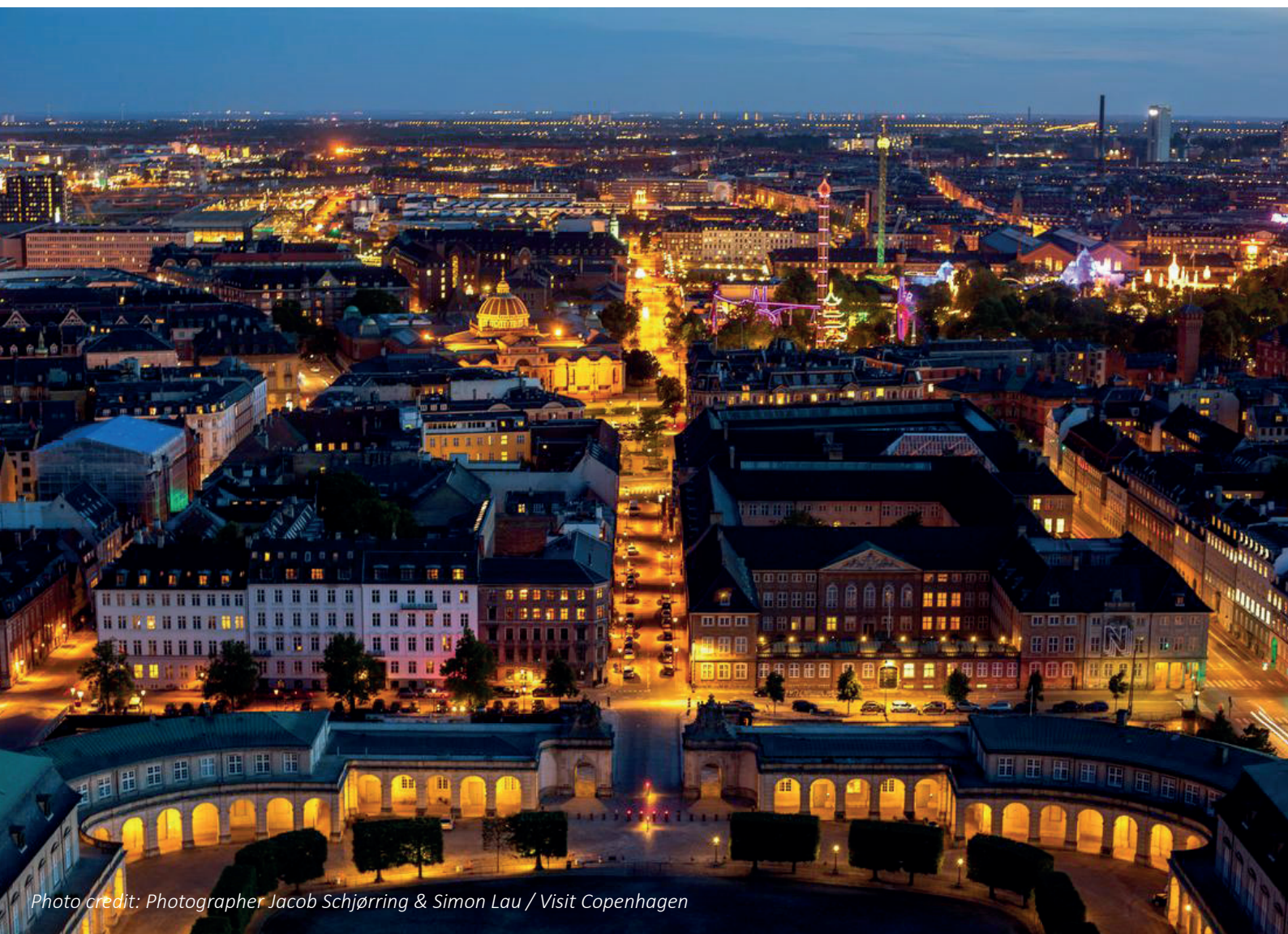


# IRBDSG SYMPOSIUM

Copenhagen Denmark • October 3 - 5, 2019

## 13th Symposium of International REM Sleep Behavior Study Group (IRBDSG)

# PROGRAM



**Symposium Venue**

The symposium will take place at the Phoenix Hotel Copenhagen for all days. ([www.phoenixcopenhagen.com](http://www.phoenixcopenhagen.com))

Plenary Room: Frederik V Salon (basement)

Food and beverages: Foyer in front of Frederik V Salon (basement)

Poster boards: Frederik III (basement)

Breakout sessions: Decided by the working group leaders but 2 rooms are reserved: Frederik V (basement) and Gyldensteen (Ground floor)

**Registration desk opening hours**

Thursday October 3, 2019: 17:00 - 19:00

Friday October 4, 2019: 08:00 - 18:00

Saturday October 5, 2019: 08:30 - 13:00

**Wi-Fi access in Phoenix Hotel Copenhagen**

Network name: WPA

Password: Phoenixcopenhagen

**Lunch and refreshments**

Light breakfast, lunch and coffee servings are included in the registration fees and served during the symposium period (evening on the 3rd to lunch time on the 5th). The serving time can be found in the detailed program.

**Badges**

Name badge is required for accessing lectures, lunch and coffee servings, exhibition area and social events. Please wear your name badge throughout the symposium.

**City information**

Official tourist information site: [www.visitcopenhagen.com](http://www.visitcopenhagen.com)

Insider's guide to Copenhagen: <http://www.aok.dk/english>

Plan your trip in Copenhagen: <http://www.journeyplanner.dk/>

**Emergency contacts**

Emergency: 112

Police emergency: 114

Copenhagen Police: +45 3314 8888

Medical assistance: 118

**Congress agency**

The Meeting Planners

[www.meetingplanners.dk](http://www.meetingplanners.dk)

[reg@meetingplanners.dk](mailto:reg@meetingplanners.dk)

Telephone: +45 6021 7421

**Welcome Dinner**

Date/Time: 19:00-21:00, October 3, 2019

Location: Von Plessen Restaurant, Phoenix Hotel Copenhagen (basement)

Badge: Please remember to bring your name badge

**Conference Dinner**

Date/Time: 19:00, October 4, 2019

Location: Von Plessen Restaurant, Phoenix Hotel Copenhagen (basement)

Badge: Please remember to bring your name badge

**Social Excursion**

Date/Time: 14:00-16:30, October 5, 2019

Meeting point: Phoenix Hotel Copenhagen lobby

Info: 2.5 hours walking tour with English speaking guides.

Please dress after the weather and bring the necessary gear in case of the rain.

Badge: Please remember to bring your name badge

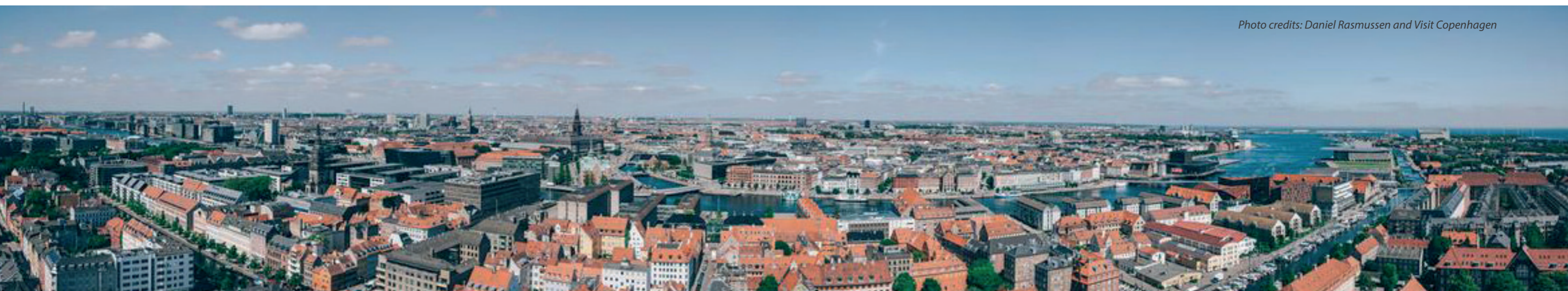
*Pre-registration is required for all social events. Please contact the registration desk if you have not signed up.*

## ABSTRACT BOOK

PDF abstract book can be downloaded online: [www.irbd2019.dk](http://www.irbd2019.dk) (under "Program" page)

Log-in information is sent to symposium delegates and is required for accessing the book.

*Photo credits: Daniel Rasmussen and Visit Copenhagen*



08:00 - 09:00 Light breakfast is served at the symposium exhibition area  
 08:00 - 18:00 Registration desk is open

**Plenary Session**

09:00 - 09:45 **DAT-SPECT IRBDSG multicenter study, results presentation** - Dario Arnaldi

09:45 - 10:00 Break

**Biomarkers Working Group**

Chairman: Wolfgang Oertel

10:00 - 10:04 **Introduction: What is a biomarker, a surrogate marker or a progression marker - update 2019** - Wolfgang Oertel

10:05 - 10:25 **Autonomic biomarkers in prodromal RBD** - Mitchell Miglis

10:25 - 11:00 **Data blitz**  
 (4 min presentation + 1 min discussion each)

Abnormal brain metabolic network and clinical progression in REM sleep behavior disorder - Dallah Yoo

A 4-Year Follow-Up of [18F]FDG-PET Parkinson's Disease-Related Metabolic Brain Pattern Expression in a Cohort of 20 REM Sleep Behavior Disorder Patients - Rosalie Kogan

Rhythmic disorders in idiopathic RBD: a potential new marker for future PD? - Valerie Cochen de Cock

Simultaneous tonic and phasic RWA best predicts early phenoconversion to neurodegenerative disease in idiopathic RBD. - Jiri Nepozitek

Biomarkers for REM sleep behavior disorder in idiopathic and narcoleptic patients. - Elena Antelmi

&  
 Skin biopsy: a sensitive and specific biomarker for idiopathic REM sleep behavior disorder versus secondary RBD and periodic limb movement disorder.

A machine learning approach to identify Parkinson's disease based on sleep spindle characteristics and to investigate the progression of iRBD patients to alpha-synucleinopathies - Lana Krumm

**Imaging Working Group**

Chairman: Dario Arnaldi

11:00 - 11:05 **Introduction** - Dario Arnaldi

11:05 - 11:55 **Data blitz**  
 (4 min presentation + 1 min discussion each)

Ioflupane-SPECT Findings Using DaTQUANT in Patients with Mild Cognitive Impairment and REM Sleep Behavior Disorder - Zuzana Nedelska

Altered resting-state thalamo-occipital connectivity is associated with cognition in idiopathic rapid eye movement sleep behavior disorder - Jung-Ick Byun

Cerebral metabolic correlates of RSWA and slow wave sleep in isolated RBD - Andrea Galbiati

A brain signature of prodromal dementia with Lewy bodies - Shady Rahayel

Patterns of cortical thickness in idiopathic RBD: a cluster analysis study - Jean-Francois Gagnon

PE2I-PET tracer in RBD - Rune Frandsen

Olfactory function predicts the rate of decline in dopamine transporter reduction in iRBD: a prospective 4-year follow-up - Junghwan Shin

Striatal aromatic L-amino acid decarboxylase activity using FMT PET imaging in idiopathic rapid eye movement sleep behavior disorder - Masayuki Miyamoto

The neural signature of impaired dual-tasking in Idiopathic REM sleep behavior disorder patients - Kaylena Ehgoetz Martens

Characterization of the resting state fMRI global signal in RBD - Timothy Ellmore

11:55 - 12:00 Open discussion

**Breakout Session 1**

12:00 - 13:00 Working groups will meet individually to review progress in past year, discuss goals for year ahead, and develop action plans

Working Groups

Working Group: Biomarkers, Imaging, Clinical, Epidemiology

Working Group: Treatment & Trials, Basic Science, Neurophysiology

Location

Plenary Room

Room Gyldensteen

13:00 - 14:00 **Lunch & Learn**  
 Buffet lunch and poster presentations at Frederik III and it's foyer (both in the cellar floor)

13:00 - 13:30 Odd numbered poster presenters to stand by posters

13:30 - 14:00 Even numbered poster presenters to stand by posters

**Plenary Session**

14:00 - 14:45 **Cognitive dysfunction in RBD: qualitative aspects and clinicopathologic correlation** - Brad Boeve

**Clinical Working Group**

Chairman: Ron Postuma

14:45 - 15:05 **RBD - a neurodevelopmental perspective** - Suresh Kotagal

15:05 - 15:40 **Data blitz**  
 (4 min presentation + 1 min discussion each)

Clinical and Pathological Correlates of REM Sleep Behavior Disorder in the Mild Cognitive Impairment and Dementia Stages of Lewy Body Disease - Toji Miyagawa

Subtle gait and balance impairments occur in idiopathic REM Sleep Behavior Disorder - Kaylena Ehgoetz Martens

Impaired visual tracking in REM sleep behavior disorder with altered functional connectivity and brain microstructure - Lijun Wang

Brief Smell Identification Test Performance in RBD, DLB and AD - Leah Forsberg

Reduced dopamine transporter uptake predicts short-term transition to Lewy body disease in Japanese patients with idiopathic rapid eye movement sleep behavior disorder - Tomoyuki Miyamoto

REM sleep behavior disorder (RBD) and REM sleep without atonia (RWA) are progression markers in Parkinson's disease (PD) patients: data from the DeNoPa cohort - Larissa Zimansky

Evolution of prodromal Parkinson's disease and dementia with Lewy bodies: a prospective study - Ron Postuma

15:40 - 15:45 Open discussion

15:45 - 16:00 Break

**Epidemiology Working Group**

Chairman: Yun-Kwok Wing

16:00 - 16:08 **Future epidemiological studies on RBD** - Markku Partinen

16:08 - 16:15 **Prodromal RBD** - YK Wing

16.15-16.55 Data blitz  
(4 min presentation + 1 min discussion each)

Is Trauma-associated Sleep Disorder a Sub-form REM Sleep Behavior Disorder? - Chun Yao

UMRBDQ in post-traumatic stress disorder (PTSD) population - Don Bliwise

Trauma-related sleeping disorder vs. iRBD - Renata Riha

Prevalence of REM sleep behavior disorder in major depression - Jing Wang

Prevalence of REM Sleep Behavior Disorder in Sun City, Arizona - David Shprecher

Morbidity, mortality and conversion in the Danish RBD population - Cresta Asah

Update of studies on RBD in Parkinson related to mortality - Eemil Partinen

RBD GWAS - combining data from IRBDSG, 23andMe and IPDGC - Ziv Gan-Or

16:55 - 17:00 Open discussion

**Treatment & Trials Working Group**

Chairman: Aleksandar Videnovic

17:00 - 17:10 **Introduction and presentation of updated white paper on recommendations for clinical trials in RBD** - Aleksandar Videnovic

17:10 - 17:20 **NAPS Consortium: Overview and progress** - Yo-El Ju

17:20-18.00 Data blitz  
(6 min presentation + 2 min discussion each)

REMeDio: a proof-of-concept neuroprotection study for prodromal synucleinopathies - Dario Arnaldi

Efficacy of melatonin versus clonazepam for patients with idiopathic REM sleep behavior disorder. - Jung-Ick Byun

Comparison of motor tests with UPDRS part 3 & Orthostatic hypotension protocols - Yo-El Ju

Sodium oxybate in patients with isolated RBD: long-term follow-up - Giuseppe Plazzi

Neuropathology of RBD (discussion of obtaining autopsy in RBD) - David Shprecher

**Business Meeting**

All members welcome to attend

- 18:00 - 19:00
- Finances update
  - Election of new board members
  - Discussion of working groups and leaders' roles
  - Discussion of membership process
  - Selection of 2020 meeting location and host(s)
  - Other topics TBD

- Brad Boeve

from 19:00 **Conference Dinner at Restaurant Von Plessen**  
Pre-registration is required.

08:30 - 09:00 Light breakfast is served at the symposium exhibition area  
 08:30 - 14:00 Registration desk is open

**Plenary Session**

09:00 - 09:45 **Pathological Alpha-Synuclein spread in Lewy Body Disease – Seeding is Believing** - Kelvin Luk

09:45 - 10:00 Break

**Basic Science Working Group**

Chairman: John Peever

10:00 - 10:05 **Introduction** - John Peever

10:05 - 10:49 **Data blitz**  
 (8 min presentation + 3 min discussion each)

Circuits mediating REM sleep and REM atonia - Jimmy Fraigne

Selective neuronal spread of alpha-synuclein pathology from the pedunculopontine nucleus - Marten Henrich

Lewy pathology in the REM sleep circuit triggers REM sleep behaviour disorder in mice - Russell Luke

Alpha-synuclein transport from noradrenergic locus coeruleus neurons to the nucleus ambiguus and its target esophagus - Bolam Lee

10:49 - 11:00 Panel discussion: Mechanisms of synucleinopathy in RBD  
 Discussants: Kelvin Luk, John Peever, Ron Postuma, Michael Silber

**Neurophysiology Working Group**

Chairman: Poul Jennum

11:00 - 11:10 **Introduction: New neurophysiologic frontiers in RBD** - Poul Jennum

11:10 - 11:25 **Facilitatory/inhibitory intracortical imbalance in REM-sleep Behavior Disorder: early electrophysiological marker of neurodegeneration** - Raffele Ferri

11:25 - 11:55 **Data blitz**  
 (4 min presentation + 1 min discussion each)

Sleep without atonia correlates with abnormal vestibular-evoked myogenic potentials in isolated REM sleep behavior disorder - Monica Puligheddu

A data-driven model to identify RBD and to predict its progression in Parkinson's disease based on sleep EEG and EOG signals - Matteo Cesari

Abnormal slow oscillation activity during non-REM sleep in patients with idiopathic REM sleep behavior disorder (RBD) - Ki-Young Jung

Actigraphic Screening for Rapid Eye Movement Sleep Behavior Disorder - Kemlink, David

Evaluation of micro-sleep stability in patients with neurodegeneration using an automated algorithm - Maria-Lucia Muntean

Using machine learning and measures of nocturnal eye movements to predict the probability of Parkinson's disease - Julie Anja Engelhard Christensen

11:55 - 12:00 Open discussion

**Breakout Session 2**

12:00 - 12:20 Working groups will meet separately

12:20 - 13:00 Each working group will present annual progress and plans for year ahead (5 min each)

Working Groups

Working Group: Biomarkers, Imaging, Clinical, Epidemiology  
 Working Group: Treatment & Trials, Basic Science, Neurophysiology

Location

Plenary Room  
 Room Gyldensteen

13:00 - 14:00 **Lunch**

**Social Excursion**

14:00 **Meet at the hotel lobby**

14:00 - 16:30 **Walking tour of Copenhagen**

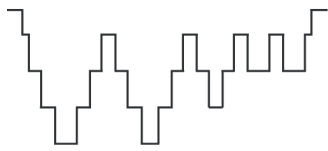
Pre-registration is required

## POSTER PRESENTATION

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Poster #	Abstract Title	Author/Presenter
1	REMeDio: a proof-of-concept neuroprotection study for prodromal synucleinopathies	Arnaldi, Dario
2	Functional Constipation across early stages of synucleinopathy: from high-risk relatives, REM sleep behavior disorder to early Parkinson's disease	Bei, Huang
3	Olfactory dysfunction and other biomarker progression in an iRBD patient cohort over a 2-year follow-up.	Dall'Antonia, Irene
4	Serum cytokines in REM sleep behavior disorder	Dusek, Petr
5	Subtle gait and balance impairments occur in idiopathic REM Sleep Behavior Disorder	Ehgoetz Martens, Kaylena
6	The neural signature of impaired dual-tasking in Idiopathic REM sleep behavior disorder patients	Ehgoetz Martens, Kaylena
7	Validation of divergent neural dysfunction in idiopathic REM sleep behaviour disorder patients separated using clinical phenotyping	Ehgoetz Martens, Kaylena
8	Does REM sleep behavior disorder change in the progression of Parkinson's disease?	Figorilli, Michela
9	Brief Smell Identification Test Performance in RBD, DLB and AD	Forsberg, Leah
10	Patterns of cortical thickness in idiopathic RBD: a cluster analysis study	Gagnon, Jean-Francois
11	Selective neuronal spread of alpha-synuclein pathology from the pedunculopontine nucleus	Geibl, Fanni / Henrich, Martin
12	Quantifying Neurodegenerative Progression without a Pre-defined Brain Atlas, an End-to-end Data-driven Approach	Giancardo, Luca
13	Abnormal slow oscillation activity during non-REM sleep in patients with idiopathic REM sleep behavior disorder (RBD)	Jung, Ki-Young
14	Actigraphic Screening for Rapid Eye Movement Sleep Behavior Disorder	Kemlink, David
15	A 4-Year Follow-Up of [18F]FDG-PET Parkinson's Disease-Related Metabolic Brain Pattern Expression in a Cohort of 20 REM Sleep Behavior Disorder Patients	Kogan, Rosalie
16	Examining the role of GBA variants E326K and N370S in REM Sleep Behavior Disorder	Krohn, Lynne
17	A machine learning approach to identify Parkinson's disease based on sleep spindle characteristics and to investigate the progression of iRBD patients to alpha-synucleinopathies	Krumm, Lana
18	Amygdala-related functional connectivity change in idiopathic REM sleep behavior disorder: a longitudinal study	Lee, Jee Young
19	Early neurodegenerative biomarker starts in individual with spectrum of REM sleep behavior disorder	Liu, Yaping
20	Lewy pathology in the REM sleep circuit triggers REM sleep behaviour disorder in mice	Luke, Russell

Poster #	Abstract Title	Author/Presenter
21	Clinical and Pathological Correlates of REM Sleep Behavior Disorder in the Mild Cognitive Impairment and Dementia Stages of Lewy Body Disease	Miyagawa, Toji
22	Reduced dopamine transporter uptake predicts short-term transition to Lewy body disease in Japanese patients with idiopathic rapid eye movement sleep behavior disorder	Miyamoto, Tomoyuki
23	Striatal aromatic l-amino acid decarboxylase activity using FMT PET imaging in idiopathic rapid eye movement sleep behavior disorder	Miyamoto, Masayuki
24	Studying the genetic contribution of the recessive PD genes PARK2, DJ1 (PARK7), PINK1 and VPS13C to REM sleep behavior disorder.	Mufti, Kheireddin
25	Ioflupane-SPECT Findings Using DaTQUANT in Patients with Mild Cognitive Impairment and REM Sleep Behavior Disorder	Nedelska, Zuzana
26	Simultaneous tonic and phasic RWA best predicts early phenoconversion to neurodegenerative disease in idiopathic RBD.	Nepozitek, Jiri
27	Sleep without atonia correlates with abnormal vestibular-evoked myogenic potentials in isolated REM sleep behavior disorder	Puligheddu, Monica / Figorilli, Michela
28	A brain signature of prodromal dementia with Lewy bodies	Rahayel, Shady
29	Predicting RBD from wrist actigraphy in Parkinson's Disease	Ratti, Luca
30	Analysis of SMPD1 variants in patients with REM sleep behavior disorder	Rudakou, Vlad
31	Analysis of Hand Motion in RBD Using Camera System	Rusz, Jan
32	Neuropathology of RBD (prompt discussions about obtaining autopsy tissue in idiopathic RBD)	Shprecher, David
33	Pilot Study Comparing Home Sleep Profiler to In-Laboratory Polysomnogram for REM Sleep Behavior Disorder Diagnosis	Shprecher, David
34	Prevalence of REM Sleep Behavior Disorder in Sun City, Arizona	Shprecher, David
35	Brain glucose metabolism in idiopathic REM sleep behaviour disorder with or without mild cognitive impairment: nigrostriatal and cognitive correlations	Mattioli, Pietro
36	Is Trauma-associated Sleep Disorder a Sub-form REM Sleep Behavior Disorder? A Canadian Longitudinal Study on Aging Cohort Study	Yao, Chun
37	CSF Aβ42 is associated with EMCI and LMCI in amyloid PET negative subjects	Wang, Lijun
38	A novel actigraphy biomarker of iRBD	Stefani, Ambra
39	Frequency and Characteristics of Patients with Isolated REM Sleep without Atonia: A Community Based Study	Teigen, Luke
40	Quantitative motor assessments in patients with rapid eye movement (REM) sleep behavior disorder (RBD) may predict phenoconversion to alpha synuclein pathologies	Summers, Rebekah
41	Autonomic disturbances may serve as biomarkers in REM Sleep behavior disorder	Hermann, Wiebke



# **IRBDSG** SYMPOSIUM

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