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)

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
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
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.
Badge: 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.

PDF abstract book can be downloaded online: www.irbd2019.dk (under “Program” page)
Log-in information is sent to symposium delegates and is required for accessing the book.
**Program Friday, October 4**

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<td>08:00 - 09:00</td>
<td>Light breakfast is served at the symposium exhibition area</td>
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<tr>
<td>08:00 - 18:00</td>
<td>Registration desk is open</td>
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<tr>
<td>09:00 - 09:45</td>
<td><strong>Plenary Session</strong> DAT-SPECT IRBDSG multicenter study, results presentation</td>
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<td>09:45 - 10:00</td>
<td>Break</td>
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<td>10:00 - 10:04</td>
<td><strong>Biomarkers Working Group</strong> Introduction: What is a biomarker, a surrogate marker or a progression marker - update 2019</td>
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<td>10:05 - 10:25</td>
<td>Autonomic biomarkers in prodromal RBD</td>
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<tr>
<td>10:25 - 11:00</td>
<td><strong>Data blitz</strong> (4 min presentation + 1 min discussion each)</td>
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<tr>
<td>11:00 - 11:05</td>
<td><strong>Introduction</strong></td>
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<tr>
<td>11:05 - 11:55</td>
<td><strong>Data blitz</strong> (4 min presentation + 1 min discussion each)</td>
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**Imaging Working Group**
Chairman: Dario Arnaldi

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**Clinical Working Group**
Chairman: Ron Postuma

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<td><strong>RBBD - a neurodevelopmental perspective</strong></td>
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<td>15:05 - 15:40</td>
<td><strong>Data blitz</strong> (4 min presentation + 1 min discussion each)</td>
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**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

**Location**
- Plenary Room
- Room Gyldensteen

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<td>13:00 - 14:00</td>
<td>Lunch &amp; Learn</td>
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<td>13:00 - 13:30</td>
<td>Odd numbered poster presenters to stand by posters</td>
</tr>
<tr>
<td>13:30 - 14:00</td>
<td>Even numbered poster presenters to stand by posters</td>
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**Plenary Session**
14:00 - 14:45 Cognitive dysfunction in RBD: qualitative aspects and clinicopathologic correlation
- Brad Boeve

**Clinical Working Group**
Chairman: Ron Postuma

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**Location**
- Plenary Room
- Room Gyldensteen

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

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

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

from 19:00
Conference Dinner at Restaurant Von Plessen
Pre-registration is required.
PROGRAM SATURDAY, OCTOBER 5

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 ambiguous 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

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)

**Location**
- Poul Jennum
- Room Gyldensteen

**Social Excursion**

14:00  Meet at the hotel lobby
14:00 - 16:30  Walking tour of Copenhagen
Pre-registration is required

Using machine learning and measures of nocturnal eye movements to predict the probability of Parkinson’s disease  - Julie Anja Engelhard Christensen
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<td>REMeDio: a proof-of-concept neuroprotection study for prodromal synucleinopathies</td>
<td>Arnaldi, Dario</td>
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<td>2</td>
<td>Functional Constipation across early stages of synucleinopathy: from high-risk relatives, REM sleep behavior disorder to early Parkinson's disease</td>
<td>Bei, Huang</td>
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<td>3</td>
<td>Olfactory dysfunction and other biomarker progression in an iRBD patient cohort over a 2-year follow-up</td>
<td>Dall’Antonia, Irene</td>
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<td>4</td>
<td>Serum cytokines in REM sleep behavior disorder</td>
<td>Dusek, Petr</td>
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<td>5</td>
<td>Subtle gait and balance impairments occur in idiopathic REM Sleep Behavior Disorder</td>
<td>Ehgoetz Martens, Kaylena</td>
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<td>6</td>
<td>The neural signature of impaired dual-tasking in Idiopathic REM sleep behavior disorder patients separated using clinical phenotyping</td>
<td>Ehgoetz Martens, Kaylena</td>
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<td>7</td>
<td>Validation of divergent neural dysfunction in idiopathic REM sleep behaviour disorder</td>
<td>Ehgoetz Martens, Kaylena</td>
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<td>8</td>
<td>Does REM sleep behavior disorder change in the progression of Parkinson's disease?</td>
<td>Figorilli, Michela</td>
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<td>Brief Smell Identification Test Performance in RBD, DLB and AD</td>
<td>Forsberg, Leah</td>
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<td>10</td>
<td>Patterns of cortical thickness in idiopathic RBD: a cluster analysis study</td>
<td>Gagnon, Jean-Francois</td>
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<td>11</td>
<td>Selective neuronal spread of alpha-synuclein pathology from the pedunculopontine nucleus</td>
<td>Geibl, Fanni / Henrich, Martin</td>
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<td>12</td>
<td>Quantifying Neurodegenerative Progression without a Pre-defined Brain Atlas, an End-to-end Data-driven Approach</td>
<td>Giancardo, Luca</td>
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<td>13</td>
<td>Abnormal slow oscillation activity during non-REM sleep in patients with idiopathic REM sleep behavior disorder (RBD)</td>
<td>Jung, Ki-Young</td>
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<td>14</td>
<td>Actigraphic Screening for Rapid Eye Movement Sleep Behavior Disorder</td>
<td>Kemlink, David</td>
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<td>15</td>
<td>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</td>
<td>Kogan, Rosalie</td>
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<td>Examining the role of GBA variants E326K and N370S in REM Sleep Behavior Disorder</td>
<td>Krohn, Lynne</td>
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<td>17</td>
<td>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</td>
<td>Krumm, Lana</td>
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<td>Amygdala-related functional connectivity change in idiopathic REM sleep behavior disorder; a longitudinal study</td>
<td>Lee, Jee Young</td>
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<td>19</td>
<td>Early neurodegenerative biomarker starts in individual with spectrum of REM sleep behavior disorder</td>
<td>Liu, Yaping</td>
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<td>Lewy pathology in the REM sleep circuit triggers REM sleep behaviour disorder in mice</td>
<td>Luke, Russell</td>
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<td>21</td>
<td>Clinical and Pathological Correlates of REM Sleep Behavior Disorder in the Mild Cognitive Impairment and Dementia Stages of Lewy Body Disease</td>
<td>Miyagawa, Toji</td>
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<td>22</td>
<td>Reduced dopamine transporter uptake predicts short-term transition to Lewy body disease in Japanese patients with idiopathic rapid eye movement sleep behavior disorder</td>
<td>Miyamoto, Tomoyuki</td>
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<td>Striatal aromatic l-aminooxydase activity using FMT PET imaging in idiopathic rapid eye movement sleep behavior disorder</td>
<td>Miyamoto, Masayuki</td>
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<td>Studying the genetic contribution of the recessive PD genes PARK2, DJ1 (PARK7), PINK1 and VPS13C to REM sleep behavior disorder.</td>
<td>Mufti, Kheireddin</td>
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<td>Ioflupane-SPECT Findings Using DaTQUANT in Patients with Mild Cognitive Impairment and REM Sleep Behavior Disorder</td>
<td>Nedelska, Zuzana</td>
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<td>Simultaneous tonic and phasic RWA best predicts early phenoconversion to neurodegenerative disease in idiopathic RBD.</td>
<td>Nepozitek, Jiri</td>
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<td>Sleep without atonia correlates with abnormal vestibular-evoked myogenic potentials in isolated REM sleep behavior disorder</td>
<td>Puligheddu, Monica / Figorilli, Michela</td>
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<td>28</td>
<td>A brain signature of prodromal dementia with Lewy bodies</td>
<td>Rahayel, Shady</td>
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<td>29</td>
<td>Predicting RBD from wrist actigraphy in Parkinson’s Disease</td>
<td>Ratti, Luca</td>
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<td>Analysis of SMNP1 variants in patients with REM sleep behavior disorder</td>
<td>Rudakou, Vlad</td>
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<td>Analysis of Hand Motion in RBD Using Camera System</td>
<td>Rusz, Jan</td>
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<td>32</td>
<td>Neuropathology of RBD (prompt discussions about obtaining autopsy tissue in idiopathic RBD)</td>
<td>Shprecher, David</td>
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<td>Pilot Study Comparing Home Sleep Profiler to In-Laboratory Polysomnogram for REM Sleep Behavior Disorder Diagnosis</td>
<td>Shprecher, David</td>
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<td>Prevalence of REM Sleep Behavior Disorder in Sun City, Arizona</td>
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<td>35</td>
<td>Brain glucose metabolism in idiopathic REM sleep behaviour disorder with or without mild cognitive impairment: nigrostriatal and cognitive correlations</td>
<td>Mattioli, Pietro</td>
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<td>Is Trauma-associated Sleep Disorder a Sub-form REM Sleep Behavior Disorder? A Canadian Longitudinal Study on Aging Cohort Study</td>
<td>Yao, Chun</td>
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<td>CSF Aβ42 is associated with EMCI and LMCI in amyloid PET negative subjects</td>
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<td>A novel actigraphy biomarker of iRBD</td>
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<td>Frequency and Characteristics of Patients with Isolated REM Sleep without Atonia: A Community Based Study</td>
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<td>Quantitative motor assessments in patients with rapid eye movement (REM) sleep behavior disorder (RBD) may predict phenoconversion to alpha synucleinopathies</td>
<td>Summers, Rebekah</td>
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<td>41</td>
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