



亚洲睡眠医学会2021学术大会暨第十三届中国睡眠研究会年会

**3rd Congress of Asian Society
of Sleep Medicine**

**13th Annual Meeting of Chinese Sleep
Research Society**

Conference Program

Organized by the Asian Society of Sleep Medicine (ASSM)

Hosted by Chinese Sleep Research Society(CSRS)

Beijing, China

May, 14-17, 2021



Dear Distinguished Guests, Colleagues, and Friends,

Welcome to the ASSM 2021 Congress, the 3rd Sleep Congress of the Asian Society of Sleep Medicine. It's a special period in public health field. Considering the ongoing COVID-19 pandemic, this year's program is an offline meeting combined with online meeting.

The Asian society of sleep medicine succeeded in conducting a yearly scientific congress that brings all the brilliant minds to one place. This year in Beijing, we offer a forum for open discussion to sleep professionals all around Asia, where sleep physicians, researchers, psychologists, dentists, technologists, educators, and trainees from over 16 participating Asian society members will meet to promote knowledge about sleep including the aspects below, medicine, public health, physiology, and the diagnosis and treatment of disorders. The congress also provides an encouraging environment for communication and collaboration in both clinical and basic research in Asia.

Your involvement in this congress is highly valued. You may learn and share knowledge and skills that will advance sleep medicine and sleep research, which is the mainly mission of our organization. We are looking forward to your joining to ASSM 2021. Thank you!

Sincerely,
the ASSM organizing committee



Seung Bong Hong, M.D.

President
Asian Society of
Sleep Medicine



Fang Han, M.D.

Chair
Organizing Committee
ASSM 2021



Zhili Huang, M.D.

Co-Chair
Organizing Committee
ASSM 2021

ASSM2021 Organizing Committee

Fang HAN (Chair)

Zhili HUANG (Co-Chair)

Heming ZUO (Secretary General)

Xiangshan YUAN (Vice Secretary General)

Xuemei GAO (Treasurer)

Xilong ZHANG (Chair, Scientific Committee)

Jihui ZHANG (Co-Chair, Scientific Committee)

Ying XU (Vice Chair, Scientific Committee)

Jie SHI (Chair, Publication Committee)

Guanhua LIN (Vice Chair, Publication Committee)

Hanqiao WANG (Chair, Intl. Relations Committee)

Xiangdong TANG (Chair, Public Relations Committee)

Donghong FU (Vice Chair, Public Relations Committee)

Jing YANG (Administrative Assistant)

MEMBERS, Local Organizing Committee (Names are in alphabetical order)

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Jiyou TANG	Ke HU	Tingli LI	Weidong WANG	Xi ZHANG	Yanzhong LI
Yuanming LUO	Yunfei CHEN	Yunhui LV	Yuping WANG		

MEMBERS, Local Scientific Committee (Names are in alphabetical order)

Bin ZHANG	Chia-Mo LIN	Fengfei DING	Hsueh-Yu LI	Hua ZHAO	Jiyang PAN
Kah Lin CHOO	Liyue XU	Ning-Hung CHEN	Qingyun LI	Shankai YIN	Shuqin ZHAN
Tao WANG	Yun-Kwok WING	Yushu HUANG	Zhian HU		

Advisory Board (Names are in alphabetical order)

Chen WANG	Demin HAN	Jinxing ZHANG	Lin LU	Xizhen HUANG	Yanfang CHEN
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International Board of Organizing and Scientific Committee (Names are in alphabetical order)

Ahmed Bahammam	Aroonwan Preutthipan	Babak Amra	Iris Haimov
JC Suri	Keith Aguilera	Ki-young Jung	Manjari Tripathi
Michael Chee	Mohammed Al Abri	Rimawati Tedjasukmana	Rusdi Abd Rashid
Seockhoon Chung	Seung Bong Hong	Seung Chyul Hong	Sy Duong-Quy
Tayard Desudchit	Virginia s. Delos Reyes	Yuichi Inoue	

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Guidance notes

Notice to local participants

各位代表、参展商及与会相关人员：

COVID-19防疫提示

亚洲睡眠医学会第三届睡眠学术大会如期召开。为了切实做好疫情防控工作，现就会议防控要求做如下通知：

1. 为做好会议期间的疫情防控工作，根据北京市疫情防控相关要求，大会特制定防控指南，请所有参会人员严格遵守疫情防控有关规定，及时如实报告个人健康状况，自觉接受疫情防控管理。

2. 参会人员请全程科学合理佩戴口罩(若忘戴口罩会议期间提供充足口罩进行分发)，勤洗手，不聚集，不扎堆，做好会前 14 天个人健康检测，会议期间，自测体温，如出现发热、乏力、咳嗽、咽痛、打喷嚏、腹泻、呕吐、黄疸、皮疹、结膜充血等疑似症状不得参会，应立即留宿酒店并向会务组报告。

3. 所有参会人员请报到及会议期间入馆前提前准备“行程码”或“健康码”绿码，办理注册报到须根据组委会防疫措施要求填写并签署“健康承诺书”及“14天体温测量表”方可参会。健康码为黄码或红码的人员按照疫情防控要求不得参会。

此次会议实名认证入场，会议期间请务必随身携带好本人身份证与参会胸牌入场。

会议安全提示

1) 会议主办、承办单位对参会代表的任何意外和事故概不负责，请注意自己的人身安全和财物安全。会议期间进出会场时注意安全，有序出入，避免拥挤，间隔就坐。

2) 主办单位拥有会议所有内容的版权，未经允许严格禁止拍摄会议演讲幻灯片、视频演示或展示图片。

3) 会议期间，禁止在会场、展厅内外，代表下榻饭店内散发或摆放未经会务组允许的任何学术或产品资料或展架广告。

4) 5月初的北京早晚温差较大，请注意及时增减衣服，避免着凉。

5) 住宿期间请及时关注酒店退房时间，以避免产生不必要的费用。

6) 请注意查看各场所的安全通道。会场、餐区、展区等都有详细的安全疏散指示，一旦发生紧急情况，请按门上和墙边下方的指示牌寻找安全通道有序疏散。请注意逃生疏散门的开启方向，发生火灾不要乘坐电梯。

7) 请参展商遵守展馆安全用电管理规定，并确保展馆内安全通道畅通。展品应采用非易燃物品非危险物品、模型或图片替代。参展商须对自己的展品及财物负责，对于贵重物品或小件物品展商自行保管，如若遗失，责任自负。

General Information

• Registration time

13th May 14:00-20:00

14th-17th May 8:00-20:00

• Registration site

Beijing International Hotel Convention Centre (No.9 Jianguomen Nei Street, Dongcheng District, Beijing, China)

• Website

www.assm2021.com

• Registration Fee

Category	Online Registration (Form March 2, 2021 to May 1, 2021)	On-Site Registration (After May 1, 2021)
Delegate	US\$125	US\$150
Trainee/Student Fellow/Technician	US\$60	US\$75
Accompanying Persons	US\$30	US\$30

Trainee/Student Fellows/Technicians/are requested to present a student certificate verifying their status with the Secretariat during registration onsite.

注册类别	在线注册 (2021年3月2日至5月1日)	现场注册 (2021年5月1日后)
大会代表	¥1,500	¥1,800
学生/实习生/技师	¥600	¥750

The registration fee will be collected by the China Sleep Research Society (CSRS) and an invoice for the registration fee will be issued at the conference site. The registration fee includes conference bag, badges for entrance to scientific sessions, exhibition and electronic poster area, and conference lunch.

Instructions for Chairs

1. The chairs arrive 10 minutes in advance and sit at the reserved seats in the first row of the conference room. Chairs need to make sure whether the meeting schedule has changed, whether there is a speaker absent and whether the slideshow equipment and other conference equipment are ready.
2. The chairs need to strictly control the timetable to ensure that the academic report is completed within the prescribed time and will not affect other meeting arrangements.
3. If any speaker is absent, start the following report directly.

Instructions for Speakers

1. Presenting speakers can use the Speaker Ready Room to upload their PowerPoint presentations, and verify or make changes and adjustments to their presentations. Speakers are required to upload their presentation in the Speaker Ready Room 4 hours prior to their session. The staff at the conference meeting will not accept any external memory device.
2. Speakers should be present 10 minutes before the session starts, report to the chairs, and be seated in the reserved seat in the first row of the conference room.
3. The speaker must speak within the scheduled time and shall not overtime. When the time is up, the staff will stop showing the slides.
4. If the speaker is unable to speak on time for some reason, he must notify the staff of the Speaker Ready Room or chairs in advance.

Speaker Ready Room

Function Room 7, 2F, Beijing International Hotel Convention Center

13th	May	14:00-18:00
14th-17th	May	07:30-18:00

Badge Identification

This meeting requires real-name admission. During the conference, all congress participants and guests must bring their IDs and wear a congress badge. Badges allow entrance to the scientific sessions, and access to the exhibition hall and other related venues. Those who do not have a badge or who do not wear it will not be admitted.

Red Badge: special guests, conference speakers, chairs, Sleep Research Committee member, standing committee member, and youth committee member

Blue Badge: registered participants

Green Badge: corporate participants

Yellow Badge: conference staff

Exhibition

The sponsors and exhibitors of ASSM 2021 are located on the 2nd and 3rd floors of the Convention Center. All participants are welcome to visit and communicate.

14th-16th May 08:00-18:00

Lunch

During the conference, lunch will be provided from May 14th to 16th. Please refer to the lunch coupon for detailed information. It is required to wear masks to pick up lunch and take scattered seats.

Continuing Education Credits

Officially registered participants in this conference can be awarded six credits for National Continuing Education Level I. Please complete the registration information and confirm the submission. After the meeting, the acquisition of electronic awards will be announced on the conference website.

Invoice

The electronic invoice will be sent to the participant' s registered email address within seven working days after the receipt of the registration fee.

Contact

Manager	Heming Zuo	13901008227
Registration Site	Chunyang Li	15811172797
Speaker Ready Room	Xiaopeng Zhao	18033870625
Assembly Hall	Beilei Ma	18501600189
Webcast	Weiwei Pi	15210098415
Hotel Booking	Jihong Pan	13651333076

Overview diagram

Program at a Glance 日程概览											
Date	Time	Workshop	Technical Training Course	Oral Presentation	Educational Session	Keynote Lecture	Symposium	Lunch Seminar	Event	Case Discussion	
14-May 5月14日(周五)	08:00-10:00	Workshop 失眠的多学科诊治	Function Room 8, 2F 多功能厅8 二层 Technical Training Course 人机对抗睡眠分期大赛	Function Room 9, 2F 多功能厅9 二层 Oral Presentation 论文交流1	Function Room 2A, 1F 多功能厅2A 一层 Oral Presentation 论文交流3	Function Room 2B, 1F 多功能厅2B 一层 Oral Presentation 论文交流9	Function Room 3, 1F 多功能厅3 一层 Oral Presentation 论文交流5	Function Room 5A, 1F 多功能厅5A 一层 Oral Presentation 论文交流7	Function Room 6, 1F 多功能厅6 一层 Close-Door Meeting 发作性睡病多中心研究启动	Function Room 5C, 1F 多功能厅5C 一层 Oral Presentation 论文交流17	
	10:00-12:00	Workshop 夜间发作性事件的诊断挑战	Technical Training Course 人机对抗睡眠分期大赛	Oral Presentation 论文交流2	Oral Presentation 论文交流4	Oral Presentation 论文交流10	Oral Presentation 论文交流6	Oral Presentation 论文交流8		Oral Presentation 论文交流18	
	12:00-13:00	Lunch Symposium 卫星会：广州莱科									
	13:00-13:30										
	13:30-15:30	Case Discussion 病例讨论	Technical Training Course 睡眠技能大赛	Traditional Medicine Sleep Disorders: Young Investigators Symposium 睡眠障碍的传统医学青年学者研讨会	Workshop 睡眠健康论坛	Oral Presentation 论文交流11	Oral Presentation 论文交流13	Educational Session 睡眠中心建设运营实践讨论	Oral Presentation 论文交流15		
	15:30-16:35			Tea Break							
	15:45-17:45	Case Discussion 病例讨论	Technical Training Course 睡眠技能大赛	Traditional Medicine Sleep Disorders: Young Investigators Symposium 睡眠障碍的传统医学青年学者研讨会	Workshop 睡眠健康论坛	Oral Presentation 论文交流12 (飞利浦冠名)	Oral Presentation 论文交流14	Educational Session 睡眠中心建设运营实践讨论	Oral Presentation 论文交流16		
	18:00-19:00										
	19:00-21:00										
	Opening (紫金厅 三层) Gala Dinner (扬子厅)										
15-May 5月15日(周六)	08:00-08:35	Keynote Lecture 主旨发言	Function Room 8, 2F 多功能厅8 二层 Keynote Lecture 主旨发言	Function Room 9, 2F 多功能厅9 二层	Function Room 2A, 1F 多功能厅2A 一层	Function Room 2B, 1F 多功能厅2B 一层	Function Room 3, 1F 多功能厅3 一层	Function Room 5A, 1F 多功能厅5A 一层	Function Room 6, 1F 多功能厅6 一层	Function Room 5C, 1F 多功能厅5C 一层	
	08:40-10:40	International Sleep Research Training Program & Scientific Work from ISRTP Trainees 国际睡眠研究培训计划与培 训生科研工作专题会	Precision Medicine in OSA OSA中的精准医疗	Circadian Rhythms and Circadian Medicine 生物节律与时间医学	Traditional and Complementary Medicine for Insomnia 治疗失眠的传统和补充药物	Wearable Devices and Telemedicine in Sleep 睡眠中的可穿戴设备和远程 医疗	Surgical Intervention for Obstructive Sleep Apnea Based on Phenotype Classification 基于表型的阻塞性睡眠呼吸 暂停的外科干预	Various Sleep Disordered Breathing Derived From Various Diseases 各种疾病的睡眠呼吸障碍	Pediatric Sleep Breathing Disorder, Growth, Development and Targeted Treatment 小儿睡眠呼吸障碍、生长、发育 和靶向	Advances in neural circuitry of wakefulness 觉醒脑神经网络新进展 觉醒脑神经网络新进展	
	10:45-11:20	Keynote Lecture 主旨发言	Keynote Lecture 主旨发言								The Interaction of Upper- Lower Airways and OSA: The Role of Multidisciplinary Healthcare Actors in Contemporary Century 上下气道与OSA的相互作用: 当代多学科医疗行为者的作 用
	11:25-12:00	Keynote Lecture 主旨发言	Keynote Lecture 主旨发言								
	12:00-13:00	Lunch Seminar 卫星会：飞马牌	Lunch Seminar 卫星会：上海联坤								

Poster&Exhibition Viewing												
13:00-14:00	Sleep in Professionals 职业人士的睡眠问题	New Techniques of Sleep Research 睡眠研究新技术	Smart Sensing for Sleep Health 基于智能感知的睡眠健康	Sleep Problems in Youth – What's New? 青少年的睡眠问题——有什么新发现?	Update on Comorbidities of Sleep 发作性睡病合并症的最新进展	Pediatric Sleep Hypoventilation Syndrome 儿童睡眠低通气综合征	Sleep Deprivation in Asian Children and Adolescents – Any Evidence? What Should We Do? 亚洲儿童和青少年睡眠不足——什么证据?要做什么?	Fatigue – State of Art, Epidemiology and Therapeutic Interventions 疲劳: 争鸣, 流行病与防治				
14:00-16:00	Treatment of Sleep Disorders 不同寻常的睡眠呼吸障碍的治疗	Impact of Eveningness and Efficacy of Bright Light Therapy 夜晚的影响和亮疗法的疗效	Smart Sensing for Sleep Health 基于智能感知的睡眠健康	Sleep Problems in Youth – What's New? 青少年的睡眠问题——有什么新发现?	Update on Comorbidities of Sleep 发作性睡病合并症的最新进展	Pediatric Sleep Hypoventilation Syndrome 儿童睡眠低通气综合征	Sleep Deprivation in Asian Children and Adolescents – Any Evidence? What Should We Do? 亚洲儿童和青少年睡眠不足——什么证据?要做什么?	Fatigue – State of Art, Epidemiology and Therapeutic Interventions 疲劳: 争鸣, 流行病与防治				
15:00-16:15	Work and Intervention Accomplished in the COVID-19 Era 新冠疫情及后疫情时代医院工作开展的工作与干预	Cross Talk Between Remnant Intermitent Fasting, Mealtime, Sleep, and Circadian Rhythm 间歇性断食、进食、睡眠和生物节律之间的相互影响	Sleep Disorders and Psychiatric Disorders 睡眠障碍和精神障碍	Current Evidence and Trend in CPAP Therapy in Sleep-Disordered Breathing 目前CPAP治疗睡眠呼吸障碍的证据和趋势	Sleepiness & Narcolepsy: Wake-Promoting Therapies, with a Focus on H3-Receptor Inverse Agonist Pitolisant 嗜睡与发作性睡病, 促醒剂 Pitolisant 的临床应用	Treatment Approaches for Childhood Obstructive Sleep Apnea 儿童阻塞性睡眠呼吸暂停的治疗方法	Glymphatic System and Sleep 类淋巴系统与睡眠	Sleep Patterns and Metabolic Effect 睡眠模式和代谢效应				
19:00-21:00	CRSR Business Meeting 中国睡眠研究会睡眠继续教育专委会年会			Tea Break								
Date	Time	Auditorium, 2F 报告厅 二层	Function Room 8, 2F 多功能厅8 二层	Function Room 9, 2F 多功能厅9 二层	Function Room 2A, 1F 多功能厅2A 一层	Function Room 2B, 1F 多功能厅2B 一层	Function Room 3, 1F 多功能厅3 一层	Function Room 5A, 1F 多功能厅5A 一层	Function Room 6, 1F 多功能厅6 一层	Function Room 5C, 1F 多功能厅5C 一层	Function Room 10, 2F 多功能厅10 二层	
16-May 5月16 (周日)	08:00-08:35	Keynote Lecture 主旨发言	Keynote Lecture 主旨发言	Keynote Lecture 主旨发言	Function Room 2A, 1F 多功能厅2A 一层	Function Room 2B, 1F 多功能厅2B 一层	Function Room 3, 1F 多功能厅3 一层	Function Room 5A, 1F 多功能厅5A 一层	Function Room 6, 1F 多功能厅6 一层	Function Room 5C, 1F 多功能厅5C 一层	Function Room 10, 2F 多功能厅10 二层	
	08:40-10:40	Sleep and Metabolism 睡眠和代谢	Insights into The Diagnosis and Management of OSA with Upper Airway Imaging 上气道成像对阻塞性睡眠呼吸暂停诊断和治疗的新见解	Sleep, Circadian Rhythms and Neurodegeneration- a Multidisciplinary Perspective 睡眠, 生物节律和神经退行性疾病-多学科的观点	Translational studies for orexin and receptors 食欲素和受体的转化医学研究	New Trends for the Relationship of Sleep with Human Cognition and Emotion 睡眠与人类认知和情绪关系的新趋势	Oral Therapy and Sleep Disordered Breathing 口服治疗与睡眠呼吸障碍	The Epidemiology and Heterogeneity of REM Sleep Behavioral Disorder (RBD) 快速动眼睡眠行为障碍的流行病学及其异质性	Child and Adolescent Sleep: Conceptualization, Assessment, and Emotional Outcomes 儿童和青少年睡眠概念、评估、神经行为和情绪结果	Multi-omics Approaches for Sleep Research 睡眠研究的多组学方法	Neurological Disease and Sleep 神经系统疾病与睡眠	
	10:45-11:20	Keynote Lecture 主旨发言	Keynote Lecture 主旨发言	Keynote Lecture 主旨发言								
	11:25-12:00	Keynote Lecture 主旨发言										
	12:00-13:00	Lunch Seminar 午餐会: 杨子江	Lunch Seminar 午餐会: 琳恩迪	Lunch Seminar 午餐会: 琳恩迪								
	13:00-13:30											
	14:00-14:35	Keynote Lecture 主旨发言										
	14:40-16:40	The Latest Progress in The Field of REM Sleep, from Basic Research to Clinical Practice 快速动眼睡眠的最新进展: 从基础研究到临床	The Gating and Maintenance of Sleep and Wake: New Circuits and Insights 睡眠与觉醒的调控与更新: 新回路与新见解	Sleep status, socio-behavioral factors, and comorbidities in Korean adolescents 韩国青少年睡眠状态、社会行为因素及共病	Understanding, Modulating and Enhancing Sleep Process with Novel Neurotechnologies and Models 认识、调节和加强睡眠过程: 新技术、新模型	High Altitude and Sleep Medicine 高原反应与睡眠医学	REM Sleep Behavioral Disorder (RBD) and Neurodegeneration 快速动眼睡眠行为障碍(RBD)和神经退行	Sleep Habits and Sleep Problems in Children 儿童的睡眠习惯和睡眠问题	MCI and OSA: common problems in RBD. How to recognize and manage it 如何识别与管理? 睡眠行为障碍的常见问题	MCI and OSA: common problems in RBD. How to recognize and manage it 如何识别与管理? 睡眠行为障碍的常见问题	Genetics of Sleep: Insights to The Function and Evolution of Sleep 遗传, 对睡眠功能和进化的深入探讨	
	16:45-17:00	Closing Ceremony										

Programs

May 14th, 2021 08:00–12:40

Workshop: Multi-disciplinary Diagnosis and Treatment of Insomnia			
Auditorium, 2F		Chair: Zhongxin Zhao, Guihai Chen	
Date	Time	Topic	Speaker
May 14th, 2021	08:00-08:20	The present and future studies of biomarkers of chronic insomnia	Guihai Chen
	08:20-08:40	The systematic assessment and therapeutic strategy of insomnia	Hongqiang Sun
	08:40-09:00	The risk and benefits of the use of sedative drugs	Jiyang Pan
	09:00-09:20	The psychotherapy of insomnia	Zhanjiang Li
	09:20-09:40	The non-drug treatment of insomnia	Ning Li
Workshop: Diagnostic Challenge of Nocturnal Paroxysmal Events			
Auditorium, 2F		Chair: Changjun Su, Shuqin Zhan	
Date	Time	Topic	Speaker
May 14th, 2021	10:00-10:20	Thoughts on the phenotypic variation of narcolepsy	Shuqin Zhan
	10:20-10:40	Parasomnias	Changjun Su
	10:40-11:00	Sleep and epilepsy	Zan Wang
	11:00-11:20	Guidelines of scoring nocturnal movement in ASSM 2.6	Huan Yu
	11:20-11:40	Propriospinal myoclonus, PSM	Yan Huang
Sleep Staging Assessment: Artificial Intelligence or Sleep Technician			
Function Room 8, 2F		Chair: Bin Zhang, Zhili Huang, Yuping Wang	
Date	Time	Topic	Speaker
May 14th, 2021	08:00-12:00	Sleep Staging Assessment: Artificial Intelligence or Sleep Technician Discussant: Guaner Wang, Yan Xu	Bin Zhang Zhili Huang Yuping Wang Guaner Wang Yan Xu

Oral Presentation 1			
Function Room 9, 2F		Chair: Han Wang, Surong Yang	
Date	Time	Topic	Speaker
May 14th, 2021	08:00-08:10	Is accurate titration necessary for successful treatment of OSA?	Yan Chen
	08:10-08:20	Protective role of mesenchymal stem cells transfected by miRNA-378a-5p in phosgene inhalation lung injury	Yubei Qu
	08:20-08:30	STAT6 deficiency ameliorates severity of intermittent hypoxia induced pulmonary hypertension by decreasing Th2-inducing cytokines	Shengyu Hao
	08:30-08:40	Abnormal sleep-wake behaviors in ovariectomized mice	Surong Yang
	08:40-08:50	Long non-coding RNA MALAT1 affects intermittent hypoxia-induced endothelial injury by regulating miR-142-3p/HMGB1	Mengxue Chen
	08:50-09:00	Analysis of miRNA expression profile in lung tissue of intermittent hypoxia rat model	Zhijuan Liu
	09:00-09:10	Circadian regulation of sleep -- Insights from zebrafish	Han Wang
	09:10-09:20	Comparison of anatomical and aerodynamic characteristics of the upper airway among edentulous mild, moderate and severe obstructive sleep apnea patients	Hui Chen
	09:20-09:30	Sleep disturbance and its neurophenotypes in seniors with different cognitive status	Hanna Lu
	09:30-09:40	Effects of inflammation-associated KP on expression of apoptotic proteins Bcl-2 and Caspase3 in hippocampus after circadian rhythm disturbance in mice	Baoyan Wang
	09:40-09:50	Male reproductive damage caused by circadian disruption in population and rodent model	Qing Chen
	09:50-10:00	Alteration of the expression of serum exosomal circular RNAs in OSA patients with acute myocardial infarction	Jiefeng Huang
	10:00-10:10	Efficacy of an app-based cognitive behavioral technique (CBT) intervention for Iranian patients with insomnia	Vida Imani
	10:10-10:20	Relationships of social jetlag with poor mental health, emotional and behavioral problems, and daytime sleepiness among adolescents: a cross-sectional study in Hong Kong	Xie Chen

Oral Presentation 2			
Function Room 9, 2F		Chair: Yanzhong Li, Zhian Hu	
Date	Time	Topic	Speaker
May 14th, 2021	10:20-10:30	Causal association of Benzodiazepines target genes with dementia: a mendelian randomization study	Yue Liu
	10:30-10:40	A CBCT study of hyoid bone position in different age females	Wanxin Zhang
	10:40-10:50	Nucleus accumbens neurons expressing dopamine D1 receptors modulate states of consciousness in sevoflurane anesthesia	Weiwei Bao
	10:50-11:00	Weekday and weekend sleep deprivation is associated with recurrent nightmare in adolescents: a cross-sectional study	Yiqi Lin
	11:00-11:10	Control of wakefulness by lateral hypothalamic glutamatergic neurons	Lu Wang
	11:10-11:20	GABAergic neurons in the lateral pontine tegmentum switch off REM sleep and facilitate REM-to-NREM transition	Zeka Chen
	11:20-11:30	Medial parabrachial nucleus is essential in controlling wakefulness in rats	Qi Xu
	11:30-11:40	The glutamatergic neurons in the lateral periaqueductal gray regulate rapid eye movement sleep and wakefulness associated defensive behaviors	Lei Li
	11:40-11:50	Mesencephalic dopaminergic neurons are essential for modafinil induced arousal	Yanfei Yang
	11:50-12:00	The NAergic locus coeruleus-ventrolateral preoptic area neural circuit mediates rapid arousal from sleep	Yue Liang
	12:00-12:10	Regulation of breathing by leptin signaling in the nucleus tractus solitarii	Hongxiao Wei
	12:10-12:20	Morphologic and functional changes in sleep parameters following biomimetic oral appliance therapy in an adult	G. Dave Singh
	12:20-12:30	SNORES NDM2: a study on obstructive sleep apnea high risk prevalence, symptoms and sleepiness among patients with uncontrolled type 2 diabetes mellitus	Maria Lowella De Leon

Oral Presentation 3			
Function Room 2A, 1F		Chair: Zhifei Xu, Jie Zhang	
Date	Time	Topic	Speaker
May 14th, 2021	08:00-08:10	Sleep problems in children and adolescents recovered from COVID-19 in Wuhan, China	Anyi Zhang
	08:10-08:20	Muscle type of palatopharyngeal muscle in children with severe obstructive sleep apnea	Huaihong Chen
	08:20-08:30	Decreased RET and PHOX2B expression in iPSC-Derived Neurons in a child with sleep-related hypoventilation	Dandi Ma
	08:30-08:40	Effects of sleep structure in children with obstructive sleep apnea hypopnea syndrome	Yuqing Wang
	08:40-08:50	Characteristics of attentional network in children with sleep disordered breathing	Yunxiao Wu
	08:50-09:00	The prevalence of sleep problems among primary school students and its relationship with cognitive behaviors	Shiyin Yang
	09:00-09:10	Clinical manifestations and sleep structure in children with sleep apnea-hypopnea syndrome at different ages	Xueyun Xu
	09:10-09:20	Vertical facial types and age-related changes in adenoids and tonsils	Xin Huang
	09:20-09:30	Eosinophils are more strongly relevant to allergic sensitization than basophils in pediatric adenotonsillar hypertrophy	Juanjuan Zou
	09:30-09:40	Increased expression of Nrf2 protects against renal injury induced by chronic intermittent hypoxia	Yuanai Li
	09:40-09:50	Clinical characteristics of Chinese pediatric obstructive sleep apnea hypopnea syndrome	Yanyu He
	09:50-10:00	Clinical case of late-onset central hypoventilation with hypothalamus dysfunction: further consideration of ventilation support in ROHHAD syndrome	Rui Zhao

Oral Presentation 4			
Function Room 2A, 1F		Chair: Peipei Wang, Yingying Han	
Date	Time	Topic	Speaker
May 14th, 2021	10:00-10:10	Personality trait and its association with conversion to neurodegenerative disease in idiopathic REM sleep behavior disorder	Li Zhou
	10:10-10:20	The correlation between sleep apnea and early neurological deterioration in acute ischemic stroke	Wei Liu
	10:20-10:30	Compromised dynamic cerebral autoregulation in patients with central disorders of hypersomnolence	Anan Zhang
	10:30-10:40	Experience of being bullied and sleep quality among junior middle school students	Fangfang Duan
	10:40-10:50	The effect of caregivers' perception on the short-term compliance of CPAP treatment in children with OSAHS	Liqiang Yang
	10:50-11:00	Changes of serum myocardial enzymes in children with adenoidal hypertrophy and the risk factors of severe upper airway obstruction	Yingying Han
	11:00-11:10	Application of sleep disorders patients: based on arterial spin labeling imaging and ²³ Na MRI	Jiao Jiang
	11:10-11:20	Sub-cultural comparison in Chinese preschoolers' sleep	Qiuye Lan
	11:20-11:30	The effects of improvements of sleep problems throughout kindergarten on executive function: A latent change score analysis	Xiaoning Sun
	11:30-11:40	The association between corporal punishment and sleep disturbances in preschooler: a 3-year prospective cohort study	Zijing Wang
	11:40-11:50	Bidirectional associations between sleep problems and psycho-behavioral problems in preschool children	Wen Li
	11:50-12:00	Case report: Niemann-Pick Type C with sleep disorders: central sleep apnea and daytime sleepiness	Yimeng Zhang

Oral Presentation 9			
Function Room 2B, 1F		Chair: Jiyang Pan, Liu Cheng	
Date	Time	Topic	Speaker
May 14th, 2021	08:00-08:10	The impact of symptom severity on health-related quality of life in patients with narcolepsy	Chenyang Li
	08:10-08:20	Observe the therapeutic effect of EEG-based biofeedback on 82 patients with insomnia	Huicong Wang
	08:20-08:30	Validation of a new single-channel wearable EEG device (UMindSleep Forehead Sleep Recorder, Model S1) against polysomnography	Hanrong Cheng
	08:30-08:40	Semi-supervised residual attention network for sleep staging	Chuanhao Zhang
	08:40-08:50	Translation and validation of Berlin questionnaire in patients with obstructive sleep apnea syndrome in China	Xuelong Jiang
	08:50-09:00	Transformer neural network for apnea and hypopnea events classification	Liu Cheng
	09:00-09:10	Development and validation of the pediatric narcolepsy severity scale	Chenyang Li
	09:10-09:20	Electroencephalographic activity and cognitive function in middle-aged patients with obstructive sleep apnea before and after continuous positive airway pressure treatment	Jianhua Wang
	09:20-09:30	The impact of hypoxia on sleep, fatigue and cognition: study on sleep wearable device	Jing Xu
	09:30-09:40	Inhibitory effect of yishen formula on hippocampal neuron apoptosis in rats with vascular cognitive dysfunction and its mechanism	Jian Xu
	09:40-09:50	Subjective cognitive decline and its relationship with demographic characteristics and chronic diseases in Chinese elderly	Lihua Lin
	09:50-10:00	Home Sleep Apnea Testing with telemedicine in asymptomatic healthy persons	Can Cao
	10:00-10:10	Diagnostic Test of STOP BANG Questionnaire, Berlin Questionnaire, Snoring Score, and Stanford Sleepiness Scale Compared with Apnea/Hypopnea Index in obstructive sleep apnea patient at Dr. Saiful Anwar Malang Hospital	Vida Imani

Oral Presentation 10			
Function Room 2B, 1F		Chair: Linjing Gong, Di Zhao	
Date	Time	Topic	Speaker
May 14th, 2021	10:20-10:30	Clinical efficacy and cost-effectiveness analysis of telemedicine in obstructive sleep apnea (OSA): a randomized controlled trial	Mengyuan Pi
	10:30-10:40	Comparison of the cognitive impairment between children with OSAHS and primary snoring using Das-Naglieri Cognitive Assessment System	ADWOA TAKYIWAA GYABA AH
	10:40-10:50	The effect of mindfulness-based psychological intervention on sleep problem among lung cancer patients in the perioperative period	Gaorong Lv
	10:50-11:00	Is there a relationship between vasomotor symptoms and sleep-related problems among Chinese women in menopausal transition?	Di Zhao
	11:00-11:10	Association among serum leptin, orexin, and ghrelin levels and indices related to sleep monitoring in patients with obstructive sleep apnea-hypopnea syndrome	Huiwen Tan
	11:10-11:20	Self-reported snoring patterns predict cardiovascular events in high-risk patients with obstructive sleep apnea: post-hoc analyses of the SAVE study	Jingwei Li
	11:20-11:30	Analysis of the characteristics of sleep-disordered breathing in children with neuromuscular diseases	Qin Yang
	11:30-11:40	NLRP3 deficiency protects against intermittent hypoxia-induced neuroinflammation and mitochondrial ROS by promoting the PINK1-Parkin pathway of mitophagy in a murine model of sleep apnea	Xu Wu
	11:40-11:50	Prognostic effect of sleep-disordered breathing on hospitalized patients following acute heart failure	Sayaki Ishiwata

Oral Presentation 5			
Function Room 3, 1F		Chair: Zan Wang, Yan Wang	
Date	Time	Topic	Speaker
May 14th, 2021	08:00-08:10	The prevalence of sleep apnea in different ethnic people of the Karamay Community	Qinglong Zhang
	08:10-08:20	Isolated rapid eye movement sleep without atonia (RSWA): a precursor biomarker for neurodegeneration?	Steven Chau
	08:20-08:30	Angiotensin-(1-7) rescues chronic intermittent hypoxia-aggravated TGF- β -mediated airway remodeling in murine and cellular models of asthma.	Jianping Zhou
	08:30-08:40	Effect of high-fat diet on the respiratory function and diaphragm fiber types related with its mitochondrial mechanism in mice	Ning Li
	08:40-08:50	Epidemiology of sleep disturbances during pregnancy and its association with pregnancy complications and perinatal outcomes: a multi-center retrospective study	Chujun Zhang
	08:50-09:00	PM 2.5 exposure aggravates chronic intermittent hypoxia-induced myocardial injury via AMPK-PGC1 α pathway mediated mitochondrial oxidative damage and apoptosis	Guiling Xiang
	09:00-09:10	Factors related to sleep-disordered breathing in patients with acute stroke	Jihong He
	09:10-09:20	A meta-analysis of the association between sleep duration and type 2 diabetes mellitus	Huapeng Lu
	09:20-09:30	Long sleep duration and unusual apnea-hypopnea index associated with mild cognitive impairment in older adults: a population-based study	Shi Tang
	09:30-09:40	Hypercapnia and hypoxemia in a young woman	Taoran Bi
09:40-09:50	Resting-state brain network topological properties and the correlation with neuropsychological assessment in adolescent narcolepsy	Fulong Xiao	

Oral Presentation 6			
Function Room 3, 1F		Chair: Jinxiang Cheng, Hongjing Mao	
Date	Time	Topic	Speaker
May 14th, 2021	10:10-10:20	REM Sleep Behavior Disorder Combined with Obstructive Sleep Apnea: Response to Continuous Positive Airway Pressure Treatment and Its Associated Factors	Woo-Jin Lee
	10:20-10:30	Association between sleep duration and subjective cognitive decline	Lihua Lin
	10:30-10:40	Oxygen Desaturation Rate as a Novel Intermittent Hypoxemia Parameter in Severe Obstructive Sleep Apnea is Strongly Associated With Hypertension	Jing Xu
	10:40-10:50	Factors influencing sleep structure changes in OSA pressure titration	Jinxiang Cheng
	10:50-11:00	A false alarm of polycythemia: obesity hypoventilation syndrome masquerading as erythrocythemia	Yanan Liu
	11:00-11:10	NLRP3 inflammasome mediates chronic intermittent hypoxia-induced renal injury implication of the microRNA-155/FOXO3a signaling pathway	Xu Wu
	11:10-11:20	Preoperative Application of Auto-CPAP on Obstructive Sleep Apnea Reduces Postoperative Complications in Patients Undergoing Heart Valve Replacement surgery	Ning Ding
	11:20-11:30	A prospective study of sleep duration, snoring and risk of heart failure	Sheng Zhuang
	11:30-11:40	Heterozygous SOD2 deletion deteriorated chronic intermittent hypoxia-induced lung inflammation and vascular remodeling through mtROS-NLRP3 signaling pathway	Shengyu Hao
	11:40-11:50	A preliminary study of coronary vascular remodeling in patients with obstructive sleep apnea-hypopnea syndrome and coronary heart disease	Min Xu
	11:50-12:00	The effect of CPAP on reflux-associated cough in obstructive sleep apnea patients	Jiao Su
	12:00-12:10	Diagnostic accuracy of the Berlin questionnaire and therapeutic effect of nasal continuous positive airway pressure in OSAHS patients with glucose metabolic dysfunction	Linjing Gong
	12:10-12:20	Sleep fragmentation and risk of type 2 diabetes mellitus: results from the UK Biobank prospective cohort	Xinru Chen
12:20-12:30	Sleep problems and heart failure: a bidirectional and multivariable two-sample mendelian randomization study	Sizhi Ai	

Oral Presentation 7			
Function Room 5AB, 1F		Chair: Yun Li, Bin Zhang	
Date	Time	Topic	Speaker
	08:00-08:10	Are anti-inflammatory cytokines associated with cognitive impairment in patients with comorbid insomnia and depression? a clinical study	Shuo He
	08:10-08:20	Can daytime Transcranial direct current stimulation treatment change the quality of sleep for depression patients: EEG perspective?	Zhe Li
	08:20-08:30	Do psychiatric patients experience more psychiatric and sleep symptoms during the COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry	Fengyi Hao
	08:30-08:40	Psychological reactions and insomnia in adults with mental health disorders during the COVID-19 outbreak	Qimeng Sun
	08:40-08:50	The influence of intra-family conflict on mental health problems in Chinese adolescents: the longitudinal mediating role of sleep problems	Shuo Wang
	08:50-09:00	A quantitative and qualitative study on the neuropsychiatric sequelae of acutely ill COVID-19 inpatients in isolation facilities	Fengyi Hao
	09:00-09:10	Subjective and objective sleep-wake patterns on weekdays and weekends in offspring of parents with bipolar disorder	Binbin LEI
	09:10-09:20	The establishment and application of a follow-up system for the CPAP intervention' s impact on OSAHS patients' cognitive function based on REDCap	Chenyang Li
	09:20-09:30	Obstructive sleep apnea and erectile dysfunction	Chen Feng
	09:30-09:40	The role of depression and anxiety in the relationship between poor sleep quality and subjective cognitive decline: exploring parallel, serial, and moderated mediation	Wenqi Xu
	09:40-09:50	Insomnia symptoms are associated with metabolic syndrome in patients with severe psychiatric disorders	Yun Li
	09:50-10:00	Association of COVID-19 related traumatic events with suicidal thoughts among Wuhan hospital workers: the mediating role of nightmares	Jianyu Que
	10:00-10:10	Ten years follow-up: the correlation between obstructive sleep apnea syndrome and hypertension, diabetes disease in Han and Uygur nationality	Qinglong Zhang

Oral Presentation 8			
Function Room 5AB, 1F		Chair: Na Shao, Qiong Ou	
Date	Time	Topic	Speaker
May 14th, 2021	10:10-10:20	Clinical research of comprehensive treatment of sleep apnea syndrome with traditional Chinese medicine	Guiling Fu
	10:20-10:30	Hypoxic ventilatory response in highlander and lowlander Chinese patients with sleep apnea	Dongmei Chen
	10:30-10:40	Analysis of the pressure and related factors in non-invasive ventilation therapy in 109 patients with Obstructive sleep apnea hypopnea syndrome	Shilin Ma
	10:40-10:50	Study of nasal continuous positive airway pressure on cognitive dysfunction and multimodal brain magnetic resonance changes in patients with severe OSAHS	Qun Lv
	10:50-11:00	Tissue expression of inflammatory cytokines and rhythm-related genes in sleep deprived juvenile model animals	Wei Cheng
	11:00-11:10	Astrocytes involved in improvement of learning and memory of orexin dual receptor antagonist in chronic sleep-deprivation mice model	Na Shao
	11:10-11:20	Research on sleep quality evaluation algorithm based on multi-event fusion	Chenyang Li
	11:20-11:30	Evaluation of a non-contact ultra-wideband bio-radar sleep monitoring device for screening of sleep breathing disease	Zhijing Wei
	11:30-11:40	Chronic sleep deprivation promotes appetite via attenuation of LepRb-mediated signal pathways and disruption of circadian clock regulation in hypothalamus of adolescent rats	Qi Sun
	11:40-11:50	Disrupted small-world networks are associated with decreased psychomotor vigilance after total sleep deprivation	Jing Qi
11:50-12:00	Sleep quality and sleep pattern among residents and its relation to anxiety and depression during the pandemic of the COVID-19	Gabriel Gerardo Cortez	

May 14th, 2021 13:30–17:45

Case Discussion			
Auditorium, 2F		Chair: Hongju Zhang, Yan Huang, Yonghong Tang	
Date	Time	Topic	Speaker
May 14th, 2021	13:30-13:48	Restless night: who makes me roll my head?	Yueyang Cheng
	13:48-14:06	Secrets of night terrors	Xiaoying Zhu
	14:06-14:24	Special case with insomnia as the main complaint	Qingqing Sun
	14:24-14:42	Multidisciplinary diagnosis and treatment for a patient with Pickwickian Syndrome	Chengcan Yang
	14:42-15:00	Narcolepsy, obstructive sleep apnea, or epilepsy?	Xuan Ouyang
	15:00-15:18	Sleep or flee	Zhaohong Xie
	15:18-15:30	Discussant: Liying Deng, Jiyou Tang, Wei Shang, Fang Han	Liyang Deng Jiyou Tang Wei Shang Fang Han
Case Discussion			
Auditorium, 2F		Chair: Yulan Zhu, Ping Gu, Jianfang Ma	
Date	Time	Topic	Speaker
May 14th, 2021	15:30-15:48	Who cause hypersomnia?	Jia He
	15:48-16:06	Myoclonus at sleep onset and literature review	Lin Xu
	16:06-16:24	Toss and turn at night	Sheng Zhuang
	16:24-16:42	A case of recurrent isolated sleep paralysis with exploding head syndrome	Liang Xie
	16:42-17:00	Nocturnal groaning accompanied by synchronous or asynchronous head involuntary movement	Juanjuan Xu
	17:00-17:18	Sleepiness child	Zhennan Yu
	17:18-17:30	Discussant: Zhongxin Zhao, Jiyang Pan, Changjun Su	Zhongxin Zhao Jiyang Pan Changjun Su

Sleep Practice Skills Competition			
Function Room 8, 2F			
Date	Time	Topic	Speaker
May 14th, 2021	13:30-17:30	Sleep Practice Skills Competition	N/A
Sleep Practice Skills Competition			
Function Room 8, 2F			
Date	Time	Topic	Speaker
May 14th, 2021	15:45-17:45	Sleep practice skills competition	N/A
Traditional Medicine in Sleep Disorders: Young Investigators Symposium			
Function Room 9, 2F		Moderator: Shuchen Sun, Ying Duan	
Date	Time	Topic	Speaker
May 14th, 2021	15:45-16:05	Professor Sun' s clinical experience of CBT-t in the treatment of chronic tinnitus with insomnia	Yuan Chang
	16:05-16:25	Establishment of SD-265 therapy to treat insomnia based on traditional Chinese medicine	Ying Duan
	16:25-16:45	acupuncture for insomnia: an update of current evidence	Yeung Wing Fai
	16:45-17:05	Application of TCM combined with remote CBTi in sleep medicine clinic	Hongyan Li
	17:05-17:25	Discussion	Shuchen Sun Ying Duan
Workshop: Sleep and Health			
Function Room 2A, 1F		Moderator: Heming Zuo	
Date	Time	Topic	Speaker
May 14th, 2021	13:40-14:00		Zhili Huang
	14:00-14:20		Tao Sun
	14:20-14:40		Jianguo Huo
	14:40-15:00		Jiqing Yao
	15:00-16:00	Discussion	Zhili Huang Tao Sun Jianguo Huo Jiqing Yao

Oral Presentation 11			
Function Room 2B, 1F		Chair: Yan Wang, Hanqiao Wang	
Date	Time	Topic	Speaker
May 14th, 2021	13:30-13:40	The level of carbon dioxide is the determinant of successful non-invasive ventilation pressure titration in patients with non-hypercapnic primary central sleep apnea: a case report	Xuejiao Han
	13:40-13:50	Gender differences in the Clinical and Polysomnographic Characteristics among Patients with Comorbid Obstructive Sleep Apnea and Insomnia	Rong Zhou
	13:50-14:00	Ring pulse oximeter for screening obstructive sleep apnea syndrome (OSAS): A novel wearable sleep apnea testing system	Rui Zhao
	14:00-14:10	CB1 receptor antagonist rimonabant protects against chronic intermittent hypoxia-induced renal injury in rats	Li Zhao
	14:10-14:20	The timing of CPAP benefits on Circulating Biomarkers for OSA patients	Yi Wang
	14:20-14:30	A preliminary study on the body mass index of patients with obstructive sleep apnea hypopnea syndrome who have similar clinical features with obesity hypoventilation syndrome	Zhijun Wang
	14:30-14:40	Comparison of cephalometric measurements between simple snoring and obstructive sleep apnea: a retrospective study	Yanlong Chen
	14:40-14:50	Characteristics of overnight changes of obstructive apnea episodes in patients with obstructive sleep apnea hypopnea syndrome	Jianqing Wang
	14:50-15:00	Automatic sleep scoring: a deep learning architecture for patients with sleep disturbance	Rui Yan
	15:00-15:10	Comprehensive treatment of moderate and severe OSAHS with low temperature plasma radiofrequency assisted multi plane simultaneous operation of upper airway	De Huai
	15:10-15:20	10-year follow-up for morbidities in children with obstructive sleep apnea	Lucksanai Patibat

Oral Presentation 12			
Function Room 2B, 1F		Chair: Yuanming Luo, Yunhui Lv	
Date	Time	Topic	Speaker
	15:45-15:55	Melatonin ameliorates CIH-induced systemic inflammation via improving intestinal barrier dysfunction	Huajun Xu
	15:55-16:05	Effects of daytime hypercapnia on memory and executive function in patients with obstructive sleep apnea hypopnea syndrome	Huaman Wu
	16:05-16:15	Association of BST1 polymorphism with idiopathic restless legs syndrome in Chinese population	Yumeng Huang
	16:15-16:25	Anti-Streptococcal antibodies in Chinese patients with type 1 narcolepsy	Qidi Ding
	16:25-16:35	Craniofacial phenotyping by photogrammetry in Hong Kong Chinese prepubertal children with obstructive sleep apnea	Hoi Man Yuen
	16:35-16:45	The exploration of pathogenesis and treatment of catathrenia from the perspective of maxillofacial structures	Min Yu
	16:45-16:55	Interaction between Night Shift Work and MTNR1B rs10830963 on the incidence of prostate cancer in the UK Biobank	Lulu Yang
	16:55-17:05	Changes of gut microbiota in patients with type 1 narcolepsy	Ruirui Zhang
	17:05-17:15	Effects of titrated mandibular advancement on obstructive sleep apnea severity	Yanyan Ma
	17:15-17:25	Neuromodulation of the histaminergic nervous system on HN in CIH conditions	Liang Xie
	17:25-17:35	Validation of a contact-free device for the diagnosis of patients with obstructive sleep apnea	Ruiling Liang
	17:35-17:45	Diurnal autonomic cardiovascular regulation in pediatric narcolepsy with cataplexy	Jingyu WANG
	17:45-17:55	Prevalence and prediction of metabolic syndrome in patients who consult otolaryngologists for symptoms of obstructive sleep apnea	Wenbin Guo

Oral Presentation 13			
Function Room 3, 1F		Chair: Ke Hu, Rui Chen	
Date	Time	Topic	Speaker
May 14th, 2021	13:30-13:40	Moderating Effect of BMI on the Relationship between Sympathetic Activation and Blood Pressure in Males with Obstructive Sleep Apnea	Baixin Chen
	13:40-13:50	Anxiety and depression in patients with chronic obstructive pulmonary disease and obstructive sleep apnea (overlap syndrome)	Zhiling Zhao
	13:50-14:00	Obstructive sleep apnea and metabolic cardiovascular risk factors: Joint effect modification by age and sex	Yupu Liu
	14:00-14:10	Chronic intermittent hypoxia and sleep deprivation, two pivotal hallmarks of obstructive sleep apnea, alters the gut microbiome and metabolome	Fan Wang
	14:10-14:20	The relationship between apolipoprotein E genetic polymorphism and metabolic syndrome in patients of OSAHS	Xinyi Li
	14:20-14:30	Mmultiple genetic variations of chronic rhinosinusitis with nasal polyps are associated with respiratory parameters in men with obstructive sleep apnea	Xinyi Li
	14:30-14:40	Genome-wide association study of standard polysomnography confirmed OSA and its related quantitative traits identifies 17 novel risk loci in Han Chinese	Shankai Yin
	14:40-14:50	High flow nasal cannula therapy for obstructive sleep apnea in adults	Yan Hu
	14:50-15:00	How does tongue strength training increase upper airway stability in rats?	Hong Huang
	15:00-15:10	Clinical subtypes of Chinese with obstructive sleep apnea: a cluster analysis	Jingjing Guo
	15:10-15:20	Causal association between snoring and type 2 diabetes mellitus: a Mendelian Randomization study	Jiajin Zhou
	15:20-15:30	Performance of brief ICF-sleep disorders and obesity core set in obstructive sleep apnea patients	Liang Xie
	15:30-15:40	Effects of home-based aerobic interval training combined with resistance training on subjective sleep disorders in adults with obesity and sleep-disordered breathing	Khomkrip Longlalerng

Oral Presentation 14			
Function Room 3, 1F		Chair: Jiangtao Xu, Jiyou Tang	
Date	Time	Topic	Speaker
May 14th, 2021	15:55-16:05	Effectiveness of e-based cognitive behavioral therapy for insomnia on improving sleep and mental health in Chinese youths with insomnia and subclinical depression: a randomized control trial	Sijing Chen
	16:05-16:15	Catathrenia phenomenon are common in obstructive sleep apnea	Yongfei Wen
	16:15-16:25	Impact of dual orexin receptors antagonist on mice behaviors and depression in chronic intermittent hypoxia conditions	Qinhan Wu
	16:25-16:35	Development of a classification method for sleep phenotypes - a method to draw a landscape of sleep phenotypes	Machiko Katori
	16:35-16:45	Validation of the Nox-T3 portable monitor for diagnosis of obstructive sleep apnea in Chinese pregnancy	Jingyu Wang
	16:45-16:55	Butyrate improves cognitive impairment caused by circadian rhythm disorder through regulating JAK2-STAT3 pathway	Lin Xu
	16:55-17:05	Clinical characteristics of sleep disorders in patients with vestibular migraine	Jun Wu
	17:05-17:15	Sleep-related painful erection: A case report and review of literature	Jiangtao Xu
	17:15-17:25	Impaired sleep quality and its relative factors of health care workers at the beginning of the COVID-19 epidemic: a longitudinal follow-up study	Xiaolong Zhao
	17:25-17:35	Digital cognitive behavioral therapy for insomnia: A systematic review and meta-analysis of randomized controlled trials	Yueying Wang
	17:35-17:45	Effectiveness of inhalation therapy with <i>Taxus chinensis</i> sustained release granules in Chronic Insomnia Disorder	Zan Wang
	17:45-17:55	Relationship between neuropeptide-S receptor gene polymorphism and primary insomnia	Jie Fan
	17:55-18:05	Transcutaneous auricular vagus nerve stimulation in the treatment of insomnia with depression: a retrospective case series	Yanan Zhao
18:05-18:15	Loss of dorsolateral nigral hyperintensity on 3.0T MRI and its correlation with motor function in idiopathic rapid eye movement sleep disorder	Bingxin Song	

Practical Discussion on Sleep Center Management			
Function Room 5AB, 1F		Chair: Dong Gao, He Gao Moderator: Chnagjun Su, Huan Yu	
Date	Time	Topic	Speaker
May 14th, 2021	13:30-13:40	Forum Opening Address	Heming Zuo
	13:40-14:20	Development mode of sleep medicine	He Gao
	14:20-15:00	Specialized technology and clinical decision-making of sleep medicine center	Zan Wang
	15:00-15:40	Medical teambuilding and cultivation of sleep medicine center	Hanqiao Wang
Practical Discussion on Sleep Center Management			
Function Room 5AB, 1F		Chair: Dong Gao, He Gao Moderator: Yun Li, Chunling Liu	
Date	Time	Topic	Speaker
May 14th, 2021	16:00-16:40	TBD	Dongsheng Lv
	16:40-17:00	TBD	Dong Gao
	17:00-18:00	Discussant: Dong Gao, He Gao, Dongsheng Lv, Changjun Su, Zan Wang, Hanqiao Wang, Huan Yu, Heming Zuo	Dong Gao He Gao Dongsheng Lv Changjun Su Zan Wang Hanqiao Wang Huan Yu Heming Zuo

Oral Presentation 15			
Function Room 6, 1F		Chair: Hongqiang Sun, Zhongxin Zhao	
Date	Time	Topic	Speaker
May 14th, 2021	13:30-13:40	Obstructive sleep apnea (OSA) detection system based on Fast Fourier Transform (FFT) algorithm on electrocardiogram	Rifaldy Fajar
	13:40-13:50	Map2k5 deficient mice manifest phenotypes and pathological changes of dopamine deficiency in central nervous system	Yumeng Huang
	13:50-14:00	Peripheral iron metabolism was association with legs movements in polysomnography but not with severity and outcomes of restless legs syndrome	Tiantian Wang
	14:00-14:10	Paraventricular hypothalamic nucleus are essential for arousal promotion and maintenance	Yu-heng Zhong
	14:10-14:20	Usefulness of Maintenance of Wakefulness Test in assessment of sleepiness	Yingxin Wu
	14:20-14:30	Abnormal cerebral white matter structural network topology and its correlation with cognitive behavioral abnormalities in narcolepsy type 1	Li Xiao
	14:30-14:40	The month of birth distribution of Type 1 narcolepsy patients: a 20-year cohort in China	Jingjing Guo
	14:40-14:50	Sleep quality measured with odds ratio products in narcolepsy patients	Taoran Bi
	14:50-15:00	Abnormal striatal-cortical networks contribute to the attention/executive function deficits in idiopathic REM sleep behavior disorder: A resting state functional MRI study	Yingying Bai
	15:00-15:10	Pinocembrin ameliorates intermittent hypoxia-induced neuroinflammation through BNIP3-dependent mitophagy in a murine model of sleep apnea	Linjing Gong
15:10-15:20	Mendelian randomization reveals no causal association between daytime napping and Parkinson's disease	Hongliang Feng	

Opening Ceremony			
Grand Hall, 1F		Moderator: Zhili Huang	
Date	Time	Topic	Speaker
May 14th, 2021	18:00-18:05	Opening speech	Seung Bong Hong
	18:05-18:10	Opening speech	Fang Han
	18:10-18:15	Opening speech	Leader from CAST
	18:15-18:45	Symposium	Allan I. Pack
	18:45-18:55	The Award ceremony	Industry representatives

May 15th, 2021 08:00–12:00

Keynote Lecture - 1			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 15th, 2021	08:00-08:30	Combined cognitive behavioral therapy and medication for the management of insomnia disorder	Charles M. Morin
International Sleep Research Training Program & Scientific Work from IS RTP Trainees			
Auditorium, 2F		Moderator: Allan O' bryan, Leila Emami	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-08:55	Introduction of International Sleep Research Training Program	Allan O' bryan
	08:55-09:10	International Sleep Medicine and Research Training	Clete A. Kushida
	09:10-09:25	Curriculum of International Sleep Research Training Program	Mike Mutschelknaus
	09:25-09:33	The effect of armodafinil on sleep spindles in obstructive sleep apnea: secondary analysis of a randomized placebo-controlled trial	Leila Emami
	09:33-09:41	Heart rate variability during wakefulness as a marker of obstructive sleep apnea severity	Hua Qin
	09:41-09:49	Effect of obstructive sleep apnea and positive airway pressure therapy on cardiac remodeling as assessed by cardiac biomarker and mri in non-obese and obese adults	Liyue Xu
	09:49-09:57	The role of mitophagy in the mechanism of genioglossal dysfunction caused by chronic intermittent hypoxia and the protective effect of adiponectin	Wenjing Wang
	09:57-10:05	The effect of apnea management on novel coronavirus infection: a study on patients with obstructive sleep apnea	Arezu Najafi
	10:05-10:13	Clinical and neurophysiological characteristics of 89 patients with narcolepsy- cataplexy from the Russian narcolepsy network	Andrey Golovatyuk
	10:13-10:21	Associations between affect and sleep among college students: results from mixed-effect models	Bingqian Zhu
	10:21-10:40	Discussion	N/A

Keynote Lecture - 3			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 15th, 2021	10:45-11:15	Neuroimaging studies in OSA, insomnia and narcolepsy	Seung Bong Hong
Keynote Lecture - 5			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 15th, 2021	11:25-12:00	Sleep medicine in China	Lin Lu
Keynote Lecture - 2			
Function Room 8, 2F			
Date	Time	Topic	Speaker
May 15th, 2021	08:00-08:30	Sleep apnea in Asia, the pathogenesis, outcomes and treatment	Ning-Hung Chen
Precision Medicine in OSA			
Function Room 8, 2F		Moderator: Qingyun Li, Yuanming Luo	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Medication therapy of OSA based on PALM model: research and perspective	Qingyun Li
	09:00-09:20	Diagnosis and treatment of OSA guided by neural respiratory drive	Yuanming Luo
	09:20-09:40	Symptom subtypes of OSA and its clinical significance	Brendan T. Keenan
	09:40-10:00	The role of the respiratory arousal threshold in OSA pathogenesis	Rui Chen
	10:00-10:20	OSA and upper airway dilator muscles	Wei Wang
	10:20-10:40	Discussion	N/A
Keynote Lecture - 4			
Function Room 8, 2F			
Date	Time	Topic	Speaker
May 15th, 2021	10:45-11:15	Natural progression of childhood obstructive sleep apnoea (OSA): does baseline disease status predict adulthood cardiovascular outcomes?	Albert Li

Circadian Rhythms and Circadian Medicine			
Function Room 9, 2F		Moderator: Ying Xu, Qinghua Liu	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Somatic genetics analysis of sleep in adult mice	Qinghua Liu
	09:00-09:20	The role of Imp in regulation of drosophila sleep	Yong Zhang
	09:20-09:40	The genetic basis of natural short sleep	Guangsen Shi
	09:40-10:00	Circadian medicine: a new frontier of precision medicine	Gang Wu
	10:00-10:20	Chemical perturbations reveal that RUVBL2 regulates the circadian phase in mammals	Dapeng Ju
	10:20-10:40	Discussion	N/A
Traditional and Complementary Medicine for Insomnia			
Function Room 2A, 1F		Moderator: Jian Xu, Yunfei Chen	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	The potential benefits of Chinese herbal medicine to anxiety associated insomnia: a multi-center, randomized, double-blind, placebo-controlled trial	Jian Xu
	09:00-09:20	Acupuncture improves menopausal insomnia: a randomized controlled trial	Yunfei Chen
	09:20-09:40	Comparative effectiveness of multiple acupuncture therapies on insomnia: a network meta-analysis	Long Ge
	09:40-10:00	Clinical evidence on traditional and complementary medicine for insomnia and priorities settings for future clinical trials	Xiaojia Ni
	10:00-10:20	The add-on effect of Chinese herbal medicine on insomnia treated with CBT-i: a controlled clinical trial	Liyu Lin
	10:20-10:40	Discussion	N/A

Wearable Devices and Telemedicine in Sleep			
Function Room 2B, 1F		Moderator: Xiaosong Dong, Naricha Chirakalwasan	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Wearable devices utility in OSA	Xiaosong Dong
	09:00-09:20	Efficacy of telemonitoring system in continuous positive airway pressure therapy in Asian OSA patients	Naricha Chirakalwasan
	09:20-09:40	Telemedicine in OSA management: experience of the veterans health administration's TeleSleep program	Samuel T. Kuna
	09:40-10:00	Personalized insomnia therapy: a proposition of implementation at scale	Pierrick Arnal
	10:00-10:20	Population data of snoring analysis based on smartphone app	Jianguo Sun
	10:20-10:40	Serving Deep Learning Models for Wearable Healthcare Devices	Shenda Hong
Surgical Intervention for Obstructive Sleep Apnea Based on Phenotype Classification			
Function Room 3, 1F		Moderator: Jingying Ye, Hsueh Yu Li	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Hypoglossal nerve stimulation for treatment of obstructive sleep apnea	Stanley Yung-Chuan Liu
	09:00-09:20	MMA treatment for obstructive sleep apnea: mechanisms and indications	Biao Yi
	09:20-09:40	Pharyngeal surgery strategies for OSA	Hsin-Ching Lin
	09:40-10:40	Discussion	N/A
Various Sleep Disordered Breathing Derived from Various Diseases			
Function Room 5AB, 1F		Moderator: Motoo Yamauchi, Kingman P. Strohl	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Polysomnographic features of sleep disordered breathing in neuromuscular diseases	Motoo Yamauchi
	09:00-09:20	Inherited features and sleep disordered breathing	Kingman P. Strohl
	09:20-09:40	Chronic opioid use and central sleep apnea, where are we now and where to go?	David Wang
	09:40-10:00	Sleep disordered breathing in down syndrome	Pei Lin Lee
	10:00-10:20	Discussion	N/A

Pediatric Sleep Breathing Disorder: Growth, Development and Targeted Treatment			
Function Room 6,1F		Moderator: Takashi Ono, Weiran Li	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Consequences of intermittent hypoxia during growth period	Takashi Ono
	09:00-09:20	Describe changes of upper airway in children with cleft lip and palate after maxillary protraction	Weiran Li
	09:20-09:40	3D imaging application in OSA	Bingshuang Zou
	09:40-10:00	Different craniofacial malformations associated with upper airway morphology	Jingjing Zhang
	10:00-10:20	Describe the characteristics of upper airway at different ages	Xuemei Gao
	10:20-10:40	Discussion	N/A
Advances in Neural Circuitry of Wakefulness			
Function Room 5C,1F		Moderator: Zhili Huang, Zhian Hu	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	Sleep continuity in the aging brain	Luis de Lecea
	09:00-09:20	Wakefulness/sleep and seeding	Antoine Adamantidis
	09:20-09:40	Medial septum glutamatergic neurons control wakefulness through a septo-hypothalamic	Junli Cao
	09:40-10:00	Dysfunctions of glutamatergic neurons in the paraventricular hypothalamic nucleus are essential for hypersomnia in human and mice	Changrui Chen
	10:00-10:20	The paraventricular thalamus mediates sensory-evoked wakefulness from sleep	Zhian Hu
	10:20-10:40	Discussion	N/A

The Interaction of Upper-Lower Airways and OSA: The Role of Multidisciplinary Healthcare Actors in Contemporary Century			
Function Room 10,2F		Moderator: Sy Duong Quy, Naricha Chirakalwasan	
Date	Time	Topic	Speaker
May 15th, 2021	08:40-09:00	The interaction between upper and lower airways and OSA: facts and challenges	Sy Duong Quy
	09:00-09:20	Current evidence on allergic rhinitis in OSA management	Naricha Chirakalwasan
	09:20-09:40	Overlap of chronic obstructive pulmonary disease and obstructive sleep apnea	Vinh Nguyen
	09:40-10:00	Interaction between OSA and asthma	Quan Vu-Tran-Thien
	10:00-10:20	Physical therapy for obstructive sleep apnea patients	Khue Bui Diem
	10:20-10:40	Discussion	N/A

May 15th, 2021 14:00–18:15

Sleep in Professionals			
Auditorium, 2F		Moderator: Yu-Tao Xiang, Bin Zhang	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Network analysis of insomnia symptoms in Chinese psychiatric clinicians during the COVID-19 pandemic	Yu-Tao Xiang
	14:20-14:40	Sleep problems and practical intervention among college students in southern China	Ning Ma
	14:40-15:00	Sleep characteristics and risk factors of Korean esports athletes	Sangha Lee
	15:00-15:20	Associations of shift work with symptomatic COVID-19 infection: findings from the UK biobank cohort	Lulu Yang
	15:20-15:40	Discussion	N/A
Work and Intervention Accomplished in Hospitals During the COVID-19			
Auditorium, 2F		Moderator: Cailan Hou, Bin Zhang	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	From the perspective of public health and psychiatry, we can see the crisis, challenge and response after the pandemic	Cailan Hou
	16:35-16:55	The work of the psychiatric department of the Second Xiangya Hospital of Central South University during the COVID-19 outbreak	Yan Zhang
	16:55-17:15	The psychological intervention at FANGCANG Hospital in Wuhan city: implementation and thoughts	Chuan Shi
	17:15-17:35	Working with COVID-19 patients with anxiety and insomnia - experiences from Shanghai	Jun Chen
	17:35-17:55	Discussion	N/A

Treatment of Sleep Disordered Breathing in Different Comorbidities			
Function Room 8, 2F		Moderator: Thomas Penzel, Babak Amara	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Obesity hypoventilation syndrome	Babak Amara
	14:20-14:40	Chronic obstructive pulmonary disease	Ingo Fietze
	14:40-15:00	Cardiovascular disorder	Christoph Schoebel
	15:00-15:20	Neuromuscular disorder	Parisa Admi
	15:20-15:40	Diabetes melitus	Forogh Soltaninejd
	15:40-16:00	Discussion	N/A
Artificial Intelligence (AI) for Sleep Analysis			
Function Room 8, 2F		Moderator: Chen Chen, Qihong Zou	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Multi-modality neuroimaging in sleep: recent advances and role of AI	Qihong Zou
	16:35-16:55	Artificial intelligence and feature engineering for sleep monitoring	Wei Chen
	16:55-17:15	A gearing toward an intelligent ecosystem for sleep monitoring	Theerawit Wilaiprasitporn
	17:15-17:35	Sleep staging technology based on machine learning	Lijuan Duan
	17:35-17:55	Title of presentation automatic sleep scoring based on multimodality polysomnography data	Fengyu Cong
	17:55-18:15	Discussion	N/A

Impact of Eveningness and Efficacy of Bright Light Therapy			
Function Room 9, 2F		Moderator: Joey Wing-yan Chan, Shirley Xin Li	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	The efficacy of adjunctive bright light therapy in patients with non-seasonal unipolar depression and evening chronotype	Joey Wing-yan Chan
	14:20-14:40	The efficacy of cognitive behavioral therapy and bright light therapy for insomnia in adolescents with evening chronotype	Shirley Xin Li
	14:40-15:00	University-wide chronotyping shows that late types have lower grades, shorter sleep, poorer well-being, and lower class attendance	Joshua J. Gooley
	15:00-15:20	Effects on depression from bright light therapy for adolescents with delayed sleep-wake phase disorder	Michael Gradisar
	15:20-15:40	Discussion	N/A
Cross Talk Between Ramadan Intermittent Fasting, Mealtime, Sleep, and Circadian Rhythm			
Function Room 9, 2F		Moderator: Ahmed BaHammam, Moezalislam Ezzat Faris	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	The interactions between mealtime and the biological clock	Ahmed BaHammam
	16:35-16:55	The effects of Ramadan intermittent fasting on circadian rhythm	Ahmed BaHammam
	16:55-17:15	Ramadan diurnal intermittent fasting and other types of experimental fasting: an overview	Moezalislam Ezzat Faris
	17:15-17:35	Effect of Ramadan diurnal intermittent fasting on sleep duration	Haitham Jahrami
	17:35-17:55	Sleep pattern, sleep architecture, and daytime sleepiness during Ramadan	Shaden O. Qasrawi
	17:55-18:15	Discussion	N/A

New Techniques of Sleep Research			
Function Room 2A, 1F		Moderator: Min Xu, Yulong Li	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	The application of miniscope	Min Xu
	14:20-14:40	The application of new genetically encoded fluorescent sensor	Yulong Li
	14:40-15:00	Advanced imaging and labeling methods to decipher neuron organization and function	Chao He
	15:00-15:20	Resting-state EEG and its applications	Xu Lei
	15:20-16:00	Discussion	N/A
Pathophysiological Mechanism and Non-Pharmacological Treatment of Restless Leg Syndrome			
Function Room 2A, 1F		Moderator: Yuping Wang, Weidong Le	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Study on iron deficiency in the pathogenesis of restless legs syndrome	Yuncheng Wu
	16:35-16:55	Non-invasive brain stimulation in RLS: from diagnostic hints to experimental treatments	Francesco Fiscaro
	16:55-17:15	Functional magnetic resonance imaging study of restless leg syndrome	Jiaojian Wang
	17:15-17:35	Transcutaneous spinal cord direct-current stimulation for restless leg syndrome	Yuping Wang
	17:35-17:55	Pathogenetic mechanisms of restless leg syndrome	Weidong Le
	17:55-18:15	Discussion	N/A

Smart Sensing for Sleep Health			
Function Room 2B, 1F		Moderator: Hong Hong, Bei Wang	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Wearable sensing for sleep health: recent advancements and future prospects	Yuan Zhang
	14:20-14:40	Non-perceived sleep monitoring based on capacitive coupling ECG and respiration collection method	Chengyu Liu
	14:40-15:00	Computer audition for sleep health: perspectives on physical and psychological conditions	Kun Qian
	15:00-15:20	Emerging sensor and wearable technology for monitoring sleep quality	Ou Bai
	15:20-15:40	Monitoring of non-invasive vital signs for detection of sleep apnea: opportunities and challenges	Han Zhang
	15:40-16:00	Discussion	N/A
Sleep Disorders and Psychiatric Disorders			
Function Room 2B, 1F		Moderator: Jianhua Shen, Yun Li	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Narcolepsy and psychiatric disorders	Jianhua Shen
	16:35-16:55	Obstructive sleep apnea and depression	Yun Li
	16:55-17:15	Mental disorders and sleep and circadian rhythm dysregulation in the offspring of parents with bipolar disorder	Hongliang Feng
	17:15-17:35	Sleep in posttraumatic stress disorder	Xiangdong Tang
	17:35-17:55	Accurate treatment of sleep apnea	Qingyun Li
	17:55-18:15	Discussion	N/A
Sleep Problems in Youth – What’ s New?			
Function Room 3, 1F		Moderator: Shirley Xin Li, Chun Ting Au	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	CBT-i for youths with comorbid insomnia and depression	Shirley Xin Li
	14:20-14:40	Technological distraction when trying to fall asleep	Michael Gradisar
	14:40-15:00	Treatment development for decreasing bedtime procrastination: the bed-pro study	Sooyeon Aly Suh
	15:00-15:20	Prevention of insomnia in at-risk adolescents	Rachel Ngan Yin Chan
	15:20-16:00	Discussion	N/A

Current Evidence and Trend in CPAP Therapy in Sleep-Disordered Breathing			
Function Room 3, 1F		Moderator: Seung Bong Hong, Naricha Chirakalwasan	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Non-surgical modality in CPAP non-adherence	Naricha Chirakalwasan
	16:35-16:55	Individualized treatment of OSA in Asians	Ning-Hung Chen
	16:55-17:15	Surgical modality in CPAP non-adherence	Yoke Yeow Yap
	17:15-17:35	Factors affecting CPAP acceptance and adherence in elderly	Theerakorn Theerakittikul
	17:35-17:55	Phenotypic approach towards management of obesity hypoventilation syndrome	Kah Lin Choo
	17:55-18:15	Discussion	N/A
Update on Comorbidities of Narcolepsy			
Function Room 5AB, 1F		Moderator: Seung Chul Hong	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Overview	Seung Chul Hong
	14:20-14:40	Narcolepsy and autoimmune disorders	Ji-Hye Oh
	14:40-15:00	Narcolepsy and obstructive sleep apnea	Sung Min Kim
	15:00-15:20	Narcolepsy and psychiatric disorders, with consideration for COVID-19	Yoo Hyun Um
	15:20-15:40	Discussion	N/A
Sleepiness & Narcolepsy: Wake-Promoting Therapies, with a Focus on H3-Receptor Inverse Agonist Pitolisant			
Function Room 5AB, 1F		Moderator: Jian-Sheng Lin, Isabelle Arnulf	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Introduction to three generations of wake-promoting therapies	Jian-Sheng Lin
	16:35-16:55	Overview of preclinical studies with Pitolisant, histamine H3-receptor inverse agonist	Xavier Ligneau
	16:55-17:15	H3-receptor inverse agonist Pitolisant, an overview of clinical studies	Christian Caussé
	17:15-17:35	Adult narcolepsy: overview & treatments	Isabelle Arnulf
	17:35-17:55	Childhood narcolepsy, clinical characteristics & treatments	Patricia Franco
	17:55-18:15	Discussion	N/A

Pediatric Sleep Hypoventilation Syndrome			
Function Room 6, 1F		Moderator: Zhifei Xu, Aroonwan Preutthipan	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Sleep related hypoventilation syndrome in children	Zhifei Xu
	14:20-14:40	Noninvasive ventilation for pediatric hypoventilation syndrome	Aroonwan Preutthipan
	14:40-15:00	Phox2b and breathing	Sheng Wang
	15:00-15:20	Experience of CCHS from Australia	Karen Waters
	15:20-15:40	Discussion	N/A
Treatment Approaches for Childhood Obstructive Sleep Apnea			
Function Room 6, 1F		Moderator: Kate Ching Ching CHAN, Chun Ting Au	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	High flow nasal cannula therapy as an alternative treatment for childhood OSA – any evidence?	Kate Ching Ching CHAN
	16:35-16:55	Adenotonsillectomy – can it reverse OSA-related complications?	Chun Ting Au
	16:55-17:15	A cohort of pediatric OSA – what happens after surgery?	Yu-Shu Huang
	17:15-17:35	Orthodontic treatment for childhood OSA	Myung-Rip Kim
	17:35-17:55	Anti-inflammatory therapy for childhood OSA	Zhifei Xu
	17:55-18:15	Discussion	N/A
Sleep Deprivation in Asian Children and Adolescents – Any Evidence? What Should We Do?			
Function Room 5C, 1F		Moderator: Yun Kwok Wing, Michael Chee	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Measuring sleep in the 21st century – how do we harness wearable data	Michael Chee
	14:20-14:40	Modulation of willingness to deploy effort and framing effects by reward, fatigue and sleep deprivation	Stijn Massar
	14:40-15:00	A tale of two cities—ten-year secular trends in sleep/wake patterns in shanghai and Hong Kong school-aged children	Guanghai Wang
	15:00-15:20	A benefit of delay school start time in Korea	Tae Won Kim
	15:20-15:40	Late owl city and sleep deprivation in adolescents – is it effective to advance bedtime	Rachel Ngan Yin Chan
	15:40-16:00	Discussion	N/A

Glymphatic System and Sleep			
Auditorium, 2F		Moderator: Ming Xiao, Fengfei Ding	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Chronic sleep fragmentation alters brain glymphatic function	Fengfei Ding
	09:00-09:20	An involvement of aquaporin 4 in chronic sleep disruption	Ming Xiao
	09:20-09:40	The glymphatic system	Maiken Nedergaard
	09:40-10:00	The glymphatic system, from mice and pigs to humans	Iben Lundgaard
	10:00-10:20	Adrenergic blockers induce neuroprotection and facilitate recovery from K ⁺ -induced cortical spreading depression and acute ischemic stroke	Hajime Hirase
	10:20-10:40	Discussion	N/A
Sleep and Metabolism			
Function Room 5C, 1F		Moderator: Clifford B. Saper, Hailong Dong	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Preoptic control of sleep and body temperature	Clifford B. Saper
	16:35-16:55	The regulative role of VTA neurons in the homeostasis of arousal states	Hailong Dong
	16:55-17:15	Living in the cold - what we can learn from a hibernator	Wei Li
	17:15-17:35	Exploring the role of H2B propionylation in regulating circadian rhythm and physiology	Luoying Zhang
	17:35-17:55	Brain circadian clock in dawn phenomenon	Zheng Sun
	17:55-18:15	Discussion	N/A

Fatigue – State of Art, Epidemiology and Therapeutical Interventions			
Function Room 10, 2F		Moderator: Antje Büttner-Teleaga, Knejinja Richter	
Date	Time	Topic	Speaker
May 15th, 2021	14:00-14:20	Cancer related fatigue (CRF) – epidemiological data. Results of a multicentre study	Antje Büttner-Teleaga
	14:20-14:40	Effects of cognitive behaviour therapy in patients with CRF	Knejinja Richter
	14:40-15:00	Distinction between fatigue, sleepiness and tiredness. State of art	Peter Geisler
	15:00-15:20	Fatigue in elderly - geriatric patients	Nikolaus Netzer
	15:20-15:40	Discussion	N/A
Sleep Patterns and Metabolic Effect			
Function Room 10, 2F		Moderator: Mohammed Al-Abri, Fahad Al-Zedjali	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Sleep patterns	Mohammed Al-Abri
	16:35-16:55	Sleep and cardiovascular markers	Fahad Al-Zedjali
	16:55-17:15	Afternoon napping and diabetes mellitus	Ibtisam Mustafa Juma Al Lawati
	17:15-17:35	Agreement analysis of sleep patterns between self-reported questionnaires and actigraphy in adults	Ibtisam Mustafa Juma Al Lawati
	17:35-17:55	Discussion	N/A
Test Session			
Grand Hall, 1F		Moderator: Weihui Zu, Chunyang Li, Peggy Bi	
Date	Time	Topic	Speaker
May 15th, 2021	16:00-16:20	Individualized treatment of OSA in Asians	Peggy Bi
	16:20-16:40	Sleep and cardiovascular markers	Weihui Zu
	16:40-17:00	Afternoon napping and diabetes mellitus	Chunyang Li
	17:00-17:20	Agreement analysis of sleep patterns between self-reported questionnaires and actigraphy in adults	Peggy Bi

May 16th, 2021 08:00–12:40

Keynote Lecture - 6			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	08:00-08:30	Circadian medicine: does timing matter in development and treatment of disease?	Phyllis C. Zee
Sleep and Metabolism			
Function Room 5C, 1F		Moderator: Clifford B. Saper, Hailong Dong	
Date	Time	Topic	Speaker
May 15th, 2021	16:15-16:35	Preoptic control of sleep and body temperature	Clifford B. Saper
	16:35-16:55	The regulative role of VTA neurons in the homeostasis of arousal states	Hailong Dong
	16:55-17:15	Living in the cold - what we can learn from a hibernator	Wei Li
	17:15-17:35	Exploring the role of H2B propionylation in regulating circadian rhythm and physiology	Luoying Zhang
	17:35-17:55	Brain circadian clock in dawn phenomenon	Zheng Sun
	17:55-18:15	Discussion	N/A
Keynote Lecture - 8			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	10:45-11:20		
Keynote Lecture – 10			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	11:25-12:00		
Keynote Lecture - 7			
Function Room 8, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	08:00-08:30	Clinical and genetic characteristics of type 1 and type 2 narcolepsy	Seung Chul Hong

Insights into The Diagnosis and Management of OSA with Upper Airway Imaging			
Function Room 8, 2F		Moderator: Richard Schwab, Liyue Xu	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Mechanistic insights on oral appliance therapy and multilevel surgery from imaging studies	Peter Cistulli
	09:00-09:20	Tongue fat/obesity and its relationship to OSA	Richard Schwab
	09:20-09:40	Ultrasonographic evaluation of upper airway structures in children and adults with obstructive sleep apnea	Pei Lin Lee
	09:40-10:00	Insights into the pathogenesis of OSA with dynamic imaging	Yuan Feng
	10:00-10:20	Ethnic differences in upper airway anatomy	Liyue Xu
	10:20-10:40	Discussion	N/A
Keynote Lecture - 9			
Function Room 8, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	10:45-11:15	Physiological hybrid surgery, multi-disciplinary combined surgery and holistic care for obstructive sleep apnea	Hsueh Yu Li
Sleep, Circadian Rhythms and Neurodegeneration- a Multidisciplinary Perspective			
Function Room 9, 2F		Moderator: Yue Leng, Jihui Zhang	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Objective daytime napping and neurodegeneration- a bi-directional relationship	Yue Leng
	09:00-09:20	Circadian rhythm disruptions in REM sleep behavior disorders	Jihui Zhang
	09:20-09:40	'Noise' and rhythms in daily motor activity: linking sleep/circadian disturbances to Alzheimer' s disease	Kun Hu
	09:40-10:00	Sleep neurophysiology in older adults at risk for dementia: insights from high-density EEG	Angela Rozario
	10:00-10:20	Diurnal pattern of blood pressure and risk of Alzheimer' s disease – a longitudinal study over 24 years	Christian Benedict
	10:20-10:40	Discussion	N/A

Translational Studies for Orexin and Receptors			
Function Room 2A, 1F		Moderator: Zhili Huang, Fang Han	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Levels of wakefulness and sensory input	Zhian Hu
	09:00-09:20	On-demand control of arousal by hypocretin/orexin	Xiao-Bing Gao
	09:20-09:40	Hypocretin/orexin receptor pharmacology and drug development: past, present and future	Thomas Kilduff
	09:40-10:00	From gene transfer to neuron regeneration: history of orexin function restoration	Meng Liu
	10:00-10:20	Increased numbers of histamine neurons containing histidine decarboxylase in narcolepsy type 1	Ling Shan
	10:20-10:40	Discussion	N/A
New Trends for the Relationship of Sleep with Human Cognition and Emotion			
Function Room 2B, 1F		Moderator: Ning Ma, Xu Lei	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Effect of sleep and sleep loss on cognition	Ning Ma
	09:00-09:20	Simultaneous EEG-fMRI and its application in sleep study	Xu Lei
	09:20-09:40	The impact of sleep vs. sleep deprivation on emotional memories	Xiaoqing Hu
	09:40-10:00	Effect of dawn simulation on morning sleep inertia under mild sleep restriction	Yingying Zhu
	10:00-10:40	Discussion	N/A
Oral Therapy and Sleep Disordered Breathing			
Function Room 3, 1F		Moderator: Xuemei Gao, Fernanda Almeida	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Titration effects of adjustable appliance	Xuemei Gao
	09:00-09:20	Oral appliance for Downs syndrome	Fernanda Almeida
	09:20-09:40	Alternative therapy to mandibular advancement devices	Satoru Tsuiki
	09:40-10:00	Effect of orthognathic surgery on OSA with severe skeletal deformity	Yang Li
	10:00-10:20	Treatment of OSA with Le Fort III osteotomy in children with syndromic craniosynostosis	Yue Liu
	10:20-10:40	Discussion	N/A

The Epidemiology and Heterogeneity of REM Sleep Behavioral Disorder (RBD)			
Function Room 5AB, 1F		Moderator: Yun Kwok Wing, Yuichi Inoue	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Epidemiology of RBD in population-based studies	Taeko Sasai-Sakuma
	09:00-09:20	Gender differences in RBD	Xiao Li
	09:20-09:40	RBD and psychiatric disorders – is there a link?	Jing Wang
	09:40-10:00	Prodromal RBD – does it exist?	Yaping Liu
	10:00-10:20	Discussion	N/A
Child and Adolescent Sleep: Conceptualization, Assessment, and Neurobehavioral and Emotional Outcomes			
Function Room 6, 1F		Moderator: Jianghong Liu, Fan Jiang	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Adolescent sleep assessment: insomnia, daytime sleepiness, and nightmare distress	Yanyun Yang
	09:00-09:20	Bedtime smart phone use and adolescent internalizing behavior: mediating role of circadian phase delay	Naixue Cui
	09:20-09:40	Sleep, chronotype and executive function among adolescents in the united states: social risk as a moderator	Xiaopeng Ji
	09:40-10:00	Childhood sleep quality trajectory and childhood happiness: the moderating role of maternal psychosocial support	Ying Dai
	10:00-10:20	Childhood sleep: factors associated with, consequences, and implications	Jianghong Liu
	10:20-12:20	Q & A	N/A
Anesthesia, Pain and Sleep (Close-Down Meeting)			
Function Room 6, 1F			
Date	Time	Topic	Speaker
May 16th, 2021	11:25-11:45	Effect and mechanism of multimodal sleep for treating intractable insomnia	Jianxiong An
	11:45-12:05	The comorbidity mechanisms between sleep disorders and chronic cardiovascular diseases in the elderly	E Wang
	12:05-12:25	Prevention and treatment of postoperative sleep disturbances	Dongxin Wang
	12:25-12:40	Discussion	N/A

Multi-omics Approaches for Sleep Research			
Function Room 5C, 1F		Moderator: Heming Wang, Xiaoyu Li	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Upregulation in the heme biosynthesis pathway increases obstructive sleep apnea severity: a mendelian randomization study	Heming Wang
	09:00-09:20	Association between obstructive sleep apnea and epigenetic age acceleration: evidence from the multi-ethnic study of atherosclerosis	Xiaoyu Li
	09:20-09:40	Genetic analysis of obstructive sleep apnea discovers a strong association with cardiometabolic health	Satu Strausz
	09:40-10:00	Associations between actigraphy-measured sleep irregularity and plasma metabolomics in the multi-ethnic study of atherosclerosis	Tianyi Huang
	10:00-10:20	Human metabolomics-based biomarkers of insufficient sleep and their association with cognitive performance	Christopher M. Depner
	10:20-10:40	Causal associations of short and long sleep durations with 12 cardiovascular diseases: linear and nonlinear mendelian randomization analyses in uk biobank	Sizhi Ai
Neurological Disease and Sleep			
Function Room 10, 2F		Moderator: Shuqin Zhan, Tao Wang	
Date	Time	Topic	Speaker
May 16th, 2021	08:40-09:00	Autoimmune encephalitis related sleep disorders	Tao Wang
	09:00-09:20	Validation and update of the clinical diagnostic criteria. For fatal familial insomnia	Liyong Wu
	09:20-09:40	The study of dynamic cerebral autoregulation in patients with central disorder of hypersomnia	Zan Wang
	09:40-10:00	Diagnosis of narcolepsy and the type of genes in HLA	Jiyong Tang
	10:00-10:20	The features of obstructive sleep apnea syndrome and restless legs syndrome in Parkinson' s disease	Kangping Xiong

May 16th, 2021 14:00–17:00

Keynote Lecture – 11			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	14:00-14:30	Toward the molecular basis of “sleepiness”	Yanagisawa Masashi
The Latest Progress in The Field of REM Sleep: from Basic Research to Clinics			
Auditorium, 2F		Moderator: Yiqun Wang, Huan Yu	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Neural circuitry underlying REM sleep	Yiqun Wang
	15:00-15:20	Paradoxical (REM) sleep muscle atonia: how and why?	Luppi Pierre Hervé
	15:20-15:40	The characteristic and function of the hypothalamus-to-sublaterodorsal orexin pathway	Jun Zhang
	15:40-16:00	REM sleep related spectrum disorders	Shuqin Zhan
	16:00-16:20	Discussion	N/A
Closing Ceremony			
Auditorium, 2F			
Date	Time	Topic	Speaker
May 16th, 2021	16:45-17:00		
Hypoventilation Derived from Rare Respiratory Genetic Disorders			
Function Room 8, 2F		Moderator: Sheng Wang, Sergey Kasparov	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Neurobiology of CCHS	Sheng Wang
	15:00-15:20	Astrocyte-to-neuronal communication in control of cardio-respiratory homeostasis	Sergey Kasparov
	15:20-15:40	The physiology of congenital central hypoventilation syndrome	Martin Samuels
	15:40-16:00	Diagnosis and management of Prader-Willi syndrome	Yalei Pi
	16:00-16:40	Discussion	N/A

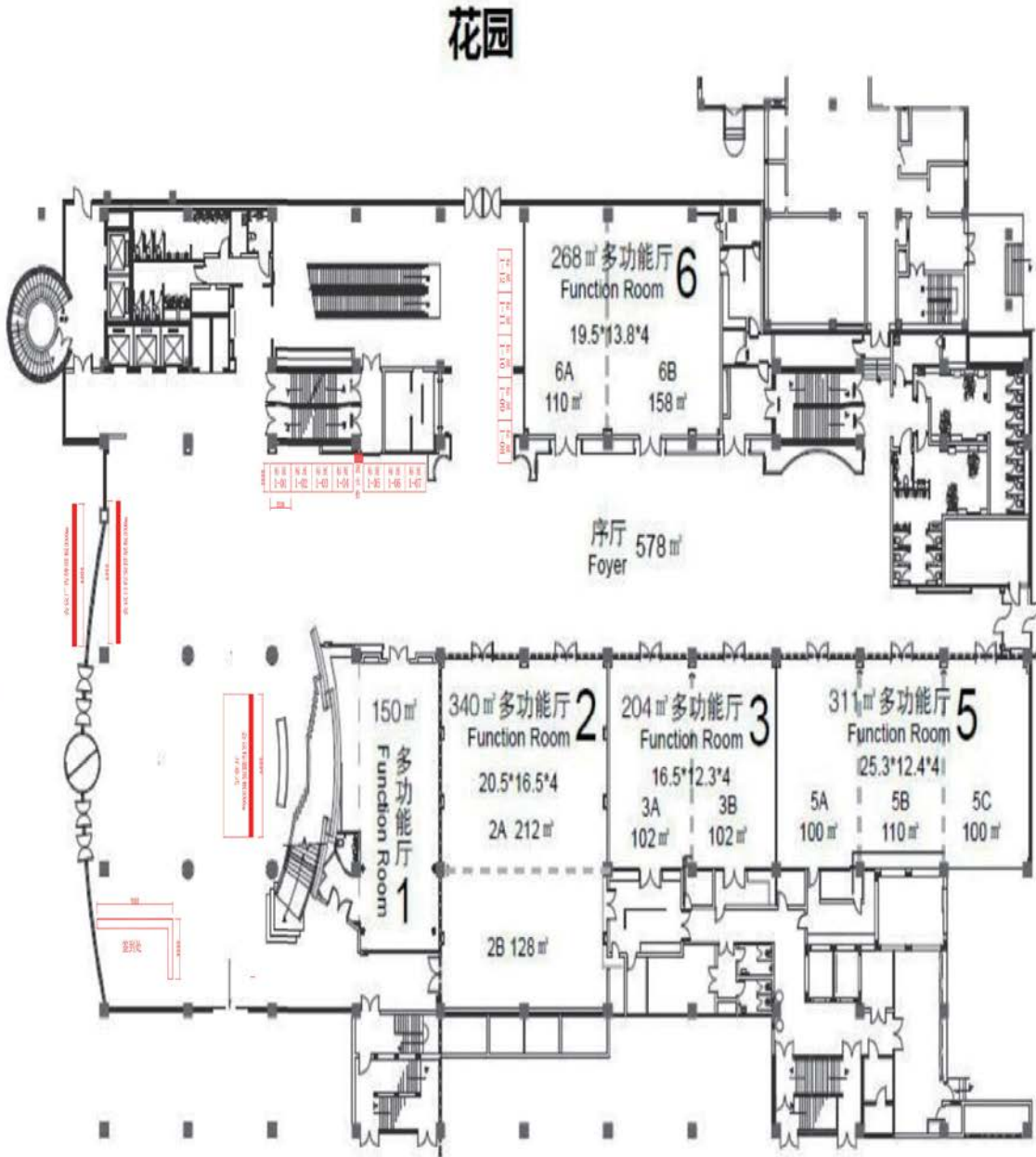
The Gating and Maintenance of Sleep and Wake: New Circuits and Insights			
Function Room 9, 2F		Moderator: Michael Lazarus, Yoan Cherasse	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Ventral basal ganglia control of arousal and related emotions	Yadong Li
	15:00-15:20	Functional analysis of neural network regulating circadian sleep-wake rhythms	Arisa Hirano
	15:20-15:40	Ca ²⁺ -dependent/independent hyperpolarization pathways in sleep regulation	Shoi Shi
	15:40-16:00	No need to sleep if you should drink and eat	Mathias Treier
	16:00-16:20	Discussion	N/A
Understanding, Modulating and Enhancing Sleep Process with Novel Neurotechnologies and Models			
Function Room 2A, 1F		Moderator: Hanna Lu, Jiahui Deng	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Transcranial brain stimulation, sleep quality and cognition: recent findings from randomized clinical trials	Hanna Lu
	15:00-15:20	Disrupting sleep oscillations by transcranial alternating current stimulation in rem sleep impairs emotional memory consolidation	Jiahui Deng
	15:20-15:40	Sleep disorders and neurodegenerative diseases	Junliang Yuan
	15:40-16:00	Open-source software for advanced analysis of sleep EEG in clinical populations using MDD as an example	Frederik Weber
	16:00-16:20	Trajectory of sleep and cognitive change: new insights from statistical modeling	Xi Ni
	16:20-16:40	Discussion	N/A
Sleep Status, Socio-Behavioral Factors, and Comorbidities in Korean Adolescents			
Function Room 2B, 1F		Moderator: Kwang Ik Yang	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Sleep duration, chronotype, and obesity in adolescence	Jun-Sang Sunwoo
	15:00-15:20	Impact of sleeping habits and sleep-related environmental factors on depression in late adolescence	Dae Lim Koo
	15:20-15:40	Insomnia symptoms and its associated factors in adolescence	Soo Hwan Yim
	15:40-16:00	Socio-behavioral factors associated with suggestive symptoms of restless legs syndrome in adolescence	Jongkyu Park
	16:00-16:40	Discussion	N/A

High Altitude and Sleep Medicine			
Function Room 3, 1F		Moderator: Xiangdong Tang	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Sleep at high altitude	Konrad Bloch
	15:00-15:20	Characteristic of 24-hour blood pressure changes in patients with obstructive sleep apnea-hypopnea syndrome in high altitude areas	Yunhui Lv
	15:20-15:40	The characteristics of highland OSA patients and the effect of oxygen supplementation	Lu Tan
	15:40-16:40	Discussion	N/A
REM Sleep Behavioral Disorder (RBD) and Neurodegeneration			
Function Room 5AB, 1F		Moderator: Yun Kwok Wing, Ki-Young Jung	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Increased free-water in the substantia nigra in iRBD, a new neuroimaging biomarker	Jun Liu
	15:00-15:20	Mortality and RBD	Junying Zhou
	15:20-15:40	RBD and inflammation	Jin Sun Jun
	15:40-16:00	RBD and microbiota	Joanne Bei Huang
	16:00-16:20	Discussion	N/A
Sleep Habits and Sleep Problems in Children			
Function Room 6, 1F		Moderator: Shirley Xin Li, Aly Sooyeon Suh	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Co-sleeping, sleep environment, and mental health	Seockhoon Chung
	15:00-15:20	Effects of adenotonsillectomy on childhood OSA: subjective and objective outcomes from RCTs	Chun Ting Au
	15:20-15:40	Non-invasive positive pressure ventilation in childhood OSA	Zhifei Xu
	15:40-16:00	Insomnia in children with ASD and management	Guanghai Wang
	16:00-16:20	Insomnia in children with attention deficit hyperactivity disorder (ADHD): impact and management	Xiao Li
	16:20-16:40	Discussion	N/A

MCI and OSA: Common Problems in iRBD. How to Recognize and Manage It			
Function Room 5C, 1F		Moderator: Ki-Young Jung	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Metabolic pattern associated with cognition in RBD	Jung-Ick Byun
	15:00-15:20	Is APOE genotype associated with cognitive decline in iRBD?	Jun-Sang Sunwoo
	15:20-15:40	Is REM sleep behavior disorder a friend or foe of obstructive sleep apnea?	Yu Jin Jung
	15:40-16:00	Improvement of nightmare with CPAP treatment in iRBD combined with OSA	Woo-Jin Lee
	16:00-16:40	Discussion	N/A
Genetics of Sleep: Insights to The Function and Evolution of Sleep			
Function Room 10, 2F		Moderator: Yu Hayashi, Henrik Bringmann	
Date	Time	Topic	Speaker
May 16th, 2021	14:40-15:00	Sleep-regulating mechanisms revealed by genetics in mice and worms	Yu Hayashi
	15:00-15:20	Sleep: a worm' s eye view	Henrik Bringmann
	15:20-15:40	A novel arousal-regulating pathway in the central complex of drosophila	Kazuhiko Kume
	15:40-16:00	Melatonin promotes sleep by activating SLO-1 potassium channel in C. Elegans	Zhao-Wen Wang
	16:00-16:20	Origin of sleep regulation observed in brain-less hydra	Hiroyuki Kanaya
	16:20-16:40	Discussion	N/A

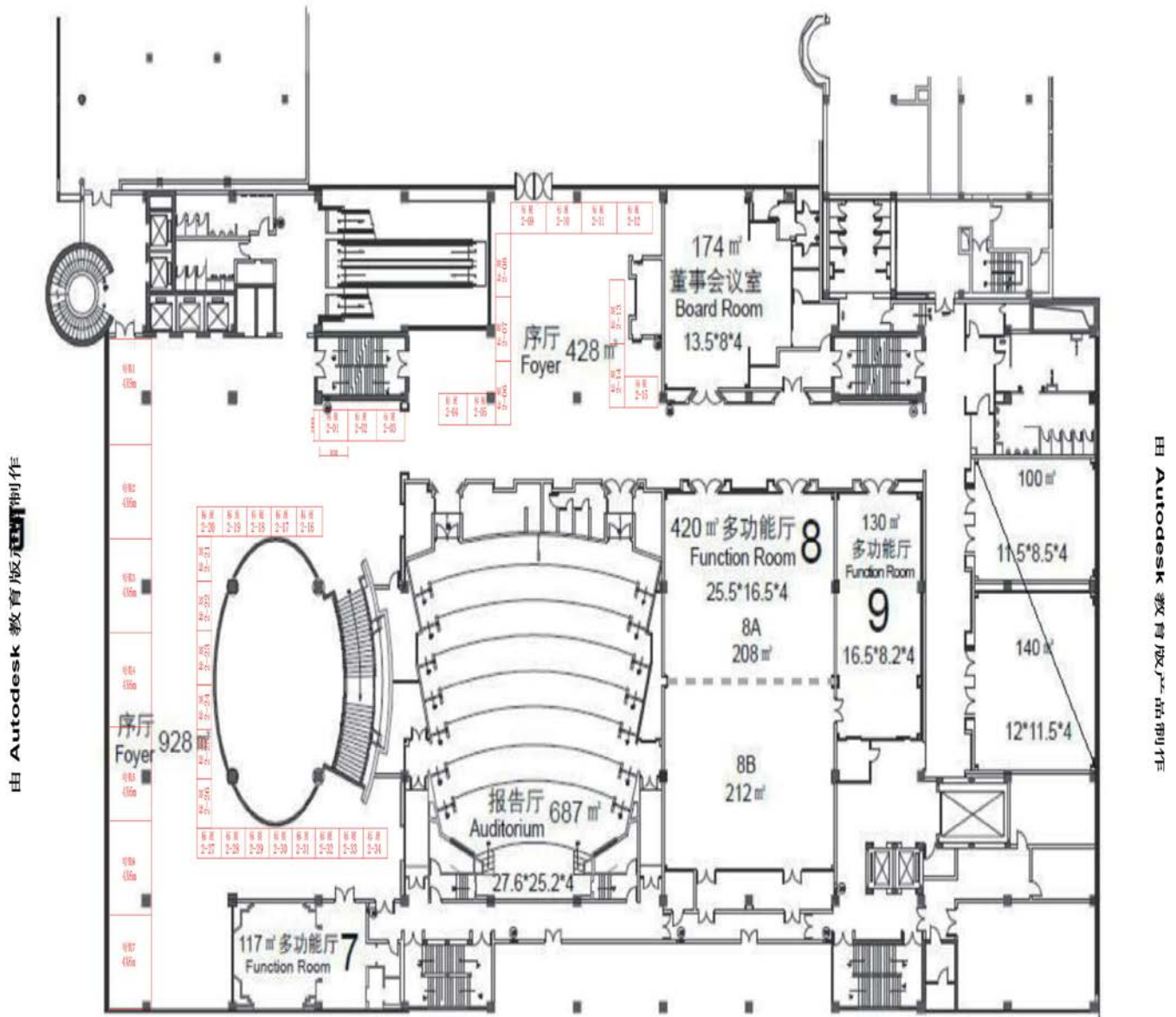
The Floor Plan

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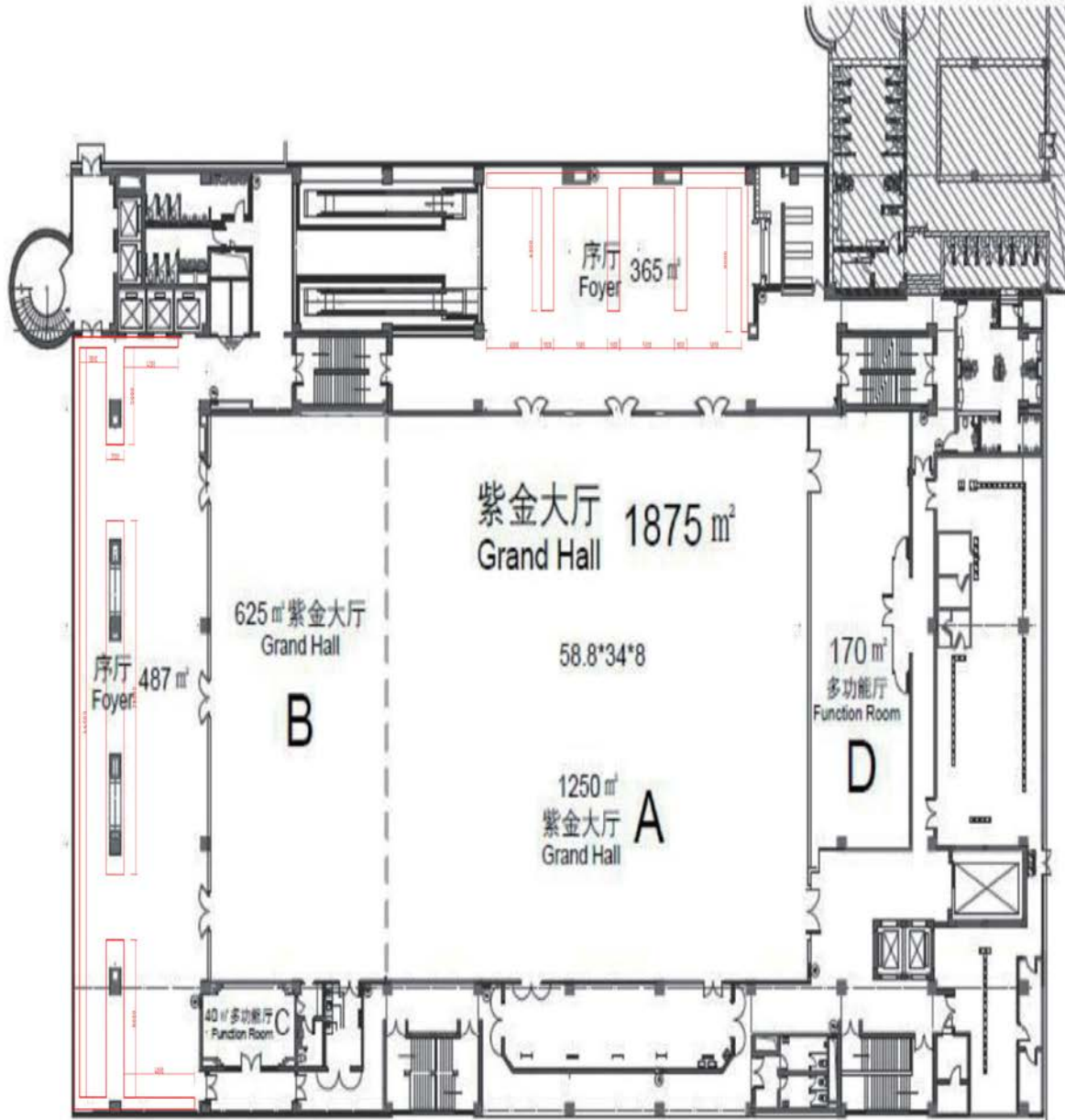
会议中心一层厅房名称及格局图

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会议中心二层厅房名称及格局图

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会议中心三层厅房及格局图

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