This event has an open abstract session.

Abstracts can be submitted on any subject related to Sleep
The Deadline for abstract submissions for oral presentation is March 10th 2015
Abstracts for *poster presentation only* can be submitted up to two weeks before the event
You can download the instructions for authors at

[www.euroscicon.com/ABSTRACTSUBMISSIONS.pdf](http://www.euroscicon.com/ABSTRACTSUBMISSIONS.pdf)

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This abstract book will be finalised two weeks before the event
Table of Contents
Invited Speakers Abstracts .................................................................................. 5
Drowsy Driving ........................................................................................................ 5
The Assessment and Treatment of Isolated Sleep Paralysis ..................................... 5
Perioperative complications of sleep apnoea patients: current practice, latest evidences and road ahead ...................................................................................................................... 5
Obstructive Sleep Apnoea in Patients with Diabetes Mellitus: A Novel Risk Factor for Vascular Disease ................................................................................................................. 5
Exploding Head Syndrome: A Comprehensive Review of the Literature and New Data ............................................................................................................................... 5
The biological significance of reactive sleep slow waves .......................................... 6
Sleep Disruption in the Aftermath of Trauma .............................................................. 6
Longitudinal trajectories of parent-infant sleep from 1 to 24 months: Connections with observed bedtime/nighttime parenting, parent-infant relationships, and infant development ........................................................................... 6
Sleep related learning in children with developmental disorders .............................. 6
Sleep and Adverse Pregnancy Outcomes ................................................................... 7
The Changing Sleep Environment: Devices, Pets and other Phenomenon .................. 7
Multi-level Radiosurgery for Snoring and OSA ......................................................... 7
The visceral theory of sleep ...................................................................................... 7
The relationship between Sleep Related Eating Disorders and Night Eating Syndrome ................................................................................................................................. 7
The relationship between Eating Disorders and and Night Eating Syndrome .......... 7
Hot flashes are a possible cause of sleep disturbance in tamoxifen medicated women with breast cancer. Can acupuncture be used as a treatment method to reduce hot flashes, thereby promoting sleep? ......................................................................................................................... 8
Sleep, Health & Society: the contribution of epidemiology ....................................... 8
Anti-depressants and sleep ..................................................................................... 8
Epilepsy, Sleep and Thalamocortical Circuits .......................................................... 8
The Circadian Regulation of Sleep: Implications for Health and Disease .................. 8
REM Sleep Behavior Disorder in children. Clinical and Polysomnographic characteristics ................................................................................................................................. 8
Day 1: ...................................................................................................................... 9
Oral Presentation Abstracts ..................................................................................... 9
VARIABLES ASSOCIATED WITH SLEEP PARALYSIS: A SYSTEMATIC REVIEW OF THE LITERATURE ......................................................................................... 9
AUDIT OF DRIVING SAFETY ADVICE TO PATIENTS WITH EXCESSIVE DAYTIME SLEEPINESS AS PER GUIDELINES BY ROSPA (ROYAL SOCIETY FOR PREVENTION OF ACCIDENTS) AND BTS (BRITISH THORACIC SOCIETY) ............................................................................................................... 9
EFFECTS OF DOMAIN-SPECIFIC PHYSICAL ACTIVITIES ON SLEEP QUALITY AMONG 0.5 MILLION CHINESE ADULTS ..................................................... 10
Day 2: ..................................................................................................................... 10
Oral Presentation Abstracts ..................................................................................... 10
SLEEP FRAGMENTATION BUT NOT DURATION IS ASSOCIATED WITH LATER MEMORY PERFORMANCE IN INFANTS ................................................................. 10
REORGANIZING BIOLOGICAL CLOCK BY STIMULATING PINEAL GLAND WITH LIGHT ....................................................................................................................... 11
Day 3: ..................................................................................................................... 11
Oral Presentation Abstracts ..................................................................................... 11
EXPLORING THE NATURE OF SLEEP DISTURBANCE IN SCHIZOPHRENIA SPECTRUM DISORDERS ............................................................................ 11
Poster Presentation Abstracts ................................................................................... 12
THE SLEEP PARALYSIS PROJECT: USING ART TO RAISE AWARENESS OF THE SCIENCE OF SLEEP PARALYSIS .............................................................. 12
COMMONALITIES AND DISCTINCTIONS BETWEEN SLEEP PARALYSIS, LUCID DREAMING, AND WAKING LIFE EXPERIENCES.. 12
Invited Speakers Abstracts

**Drowsy Driving**
Dr. Steven M. Brown, MD, The Insomnia Center, Creve Coeur, Missouri, USA
Educational objectives: (1) Review physiological disorders that may contribute to situations whereby patients find themselves impaired due to drowsiness behind the wheel of a motor vehicle (2) Discuss societal demands that lead to sleep deprivation and/or non-restorative sleep and the effects on driving ability (3) Survey the legal and ethical obligations of health care authorities to report drowsy driving in multiple countries, including the United States, Canada, and Great Britain (4) Examine various pharmacologic, mechanical, and behavioural treatment options for the management of drowsy driving.

**The Assessment and Treatment of Isolated Sleep Paralysis**
Professor Brian Sharpless, Associate Professor, Clinical Psychology Program, American School of Professional Psychology, Argosy University, Washington DC, USA
Isolated sleep paralysis (ISP) is characterized by an inability to move upon waking or falling asleep. It is often a frightening event, and episodes can include hallucinations/REM activity coupled with conscious awareness. Although episodes are fairly common in the general population, a minority of individuals suffer from clinically-significant and chronic cases of ISP. Unfortunately, differential diagnosis can be difficult, treatments are not widely known, and outcome data are scarce. After reviewing the available psychological and medical literatures, current assessment and treatment options will be summarized along with guidance for differential diagnosis. Finally, a new cognitive-behavioral treatment will be described.

**Perioperative complications of sleep apnoea patients: current practice, latest evidences and road ahead**
Dr Vladimir Macavei, Locum Respiratory Consultant, Newham University Hospital, Barts Health NHS Trust, London, United Kingdom
Obstructive sleep apnoea has been previously reported as a major risk factor for perioperative adverse events. This session will represent an insight of scientific evidence on the intra and postoperative complications of sleep apnoea patients and preventive factors available.

**Obstructive Sleep Apnoea in Patients with Diabetes Mellitus: A Novel Risk Factor for Vascular Disease**
Dr Abd A Tahrani, MD, MRCP, MMedSci, CCT (Endocrinology), PhD, NIHR Clinician Scientist and Honorary Consultant Physician in Diabetes and Endocrinology, Heart of England NHS Foundation Trust and University of Birmingham
Obstructive sleep apnoea (OSA) is very common in patients with Type 2 diabetes (T2D), however the impact of having OSA in patients with T2D remains unclear. The metabolic consequences of OSA and hypoglycaemia are similar and hence it is plausible that OSA might contribute to the development of diabetes-related complications. Over the last decade there has been an increasing interest in exploring the consequences of having OSA in patients with T2D and more recently Type 1 diabetes. In my talk I will explore the links between OSA and diabetic vascular complications and the potential underlying mechanisms.

**Exploding Head Syndrome: A Comprehensive Review of the Literature and New Data**
Dr Brian Sharpless, Associate Professor, Clinical Psychology Program, American School of Professional Psychology, Argosy University, Washington DC, USA
Exploding head syndrome (EHS) is characterized by the perception of loud noises when going to sleep or waking up. Episodes are usually painless, but associated with fear and distress. In spite of the fact that it was first described approximately 150 years ago, EHS has received relatively little empirical and clinical attention. Therefore, a comprehensive review of the scientific literature was undertaken. After discussing the history, prevalence, and associated features, results derived from a new assessment instrument are described. EHS was found to be common in a diverse sample of students, and a minority experienced clinically significant distress/impairment.
The biological significance of reactive sleep slow waves
Dr Péter Halász, MD, PhD, DSc.- em. professor of Neurology National Institute of Clinical Neuroscience, Budapest, Hungary
In the last 10-15 years sleep research have provided increasing evidences about the close link between homeostatic regulation of slow oscillation and plastic changes that refresh and increase learning capacities of the human brain during night sleep. These data explained why we need slow waves and elevated the significance of slow wave homeostasis importantly.

On the other hand the slow wave functions have got in another light. Turned out that when homeostatic pressure is high slow waves can be elicited by sensory input. This knowledge was with us for long time in the form of elicibility of K-complexes by sensory stimulation, and was confirmed by the recognition of the cyclic alternating pattern, with the identification of the A1 subtype of input sensitivity of the A phase of them. We proposed recently that this A1 phase of CAP represent a short time (instant) homeostatic regulation which is added to the traditional long term homeostasis, providing a double helmet for the frontal lobes to ensure the necessary slow wave amount for cognitive functioning.

Therefore sleep slow oscillation seems to have two important aspects: the homeostatic and reactive, working together in sleep regulation.

Sleep Disruption in the Aftermath of Trauma
Dr Tara E. Galovski, Department of Psychological Sciences, Center for Trauma Recovery, University of Missouri – St. Louis, MO, USA
Studies have shown that sleep disturbance following a trauma is predictive of the development and maintenance of Posttraumatic Stress Disorder (PTSD). Sleep impairment in PTSD rarely receives specific primary intervention, perhaps due to the conceptualization that sleep impairment is a secondary symptom of PTSD as opposed to a core feature of the disorder. Despite the success of evidence-based treatments for PTSD, sleep impairment frequently remains refractory following treatment for PTSD. Data will be presented examining the role of sleep impairment in predicting PTSD and in recovery from PTSD in survivors of community violence and interpersonal violence.

Longitudinal trajectories of parent-infant sleep from 1 to 24 months: Connections with observed bedtime/nighttime parenting, parent-infant relationships, and infant development
Dr Douglas M. Teti, Ph.D., Professor of Human Development, Psychology, and Pediatrics Head, Human Development and Family Studies, The Pennsylvania State University, University Park, PA, US
This talk will examine the development of infant-parent sleep patterns across the first two years of life in a central Pennsylvania sample, and how these patterns relate to bedtime and nighttime parenting of infants. Parenting data are derived from actual video-recorded observations of parenting during infant bedtimes and throughout the night. Both what parents do (parenting practices), and the emotional quality underlying what parents do (emotional availability) will be examined as predictors of parent-infant sleep. Infant-parent sleep will also be examined in relation to the functioning of the larger family system, and to parents’ individual and marital distress.

Sleep related learning in children with developmental disorders
Dr Dagmara Dimitriou, Senior Lecturer, Programme Leader for Master in Psychology of Education & MA in Education (Psychology), Department of Psychology and Human Development, Institute of Education, University of London, London, UK
There is now a substantial body of evidence that sleep is essential for numerous functions, including health, mood, memory, academic performance and daytime behaviour. Sleep contributes to optimal consolidation of learning as well neuropsychological functioning. Yet, very little research has examined the complexities of sleep patterns in children with neurodevelopmental disorders despite the fact that these children are more likely to suffer from sleep problems. Our current findings examining sleep related learning in children with developmental disorders such as Down Syndrome, Williams syndrome, Autism and ADHD show that these children often suffer double jeopardy.
Sleep and Adverse Pregnancy Outcomes
Dr Michelle A Miller, University of Warwick, Warwick Medical School, Division of Mental Health & Wellbeing, UK
There is a wealth of evidence to support the epidemiological link between quantity and quality of sleep and a number of adverse health outcomes. Furthermore, the physiological and hormonal changes that occur in pregnancy increase the risk of developing Sleep Disordered Breathing (SDB). It has been estimated that 10-27% of pregnant women may suffer from habitual snoring. This talk will briefly examine the growing evidence which suggests that SDB, along with short sleep (SS) duration, may be associated with an increased risk of adverse maternal and foetal pregnancy outcomes. These include an increased risk of gestational diabetes mellitus (GDM).

The Changing Sleep Environment: Devices, Pets and other Phenomenon
Dr Lois E Krahm, Mayo Clinic, AZ, USA

Multi-level Radiosurgery for Snoring and OSA
Dr. Andrei Marinescu, HNO Praxis Winnenden, Union of Panel Doctors (KV) Stuttgart, Germany
The present-day management of the sleep-related breathing disorders is generally inter-disciplinary and conservative. The Radiofrequency Volume Reduction has by now firmly established and proven as an reliable, minimal-invasive therapeutically option. In the last 15 years the speaker has several times published his multi-level methods or related about his concept of graduate aproach using originals electrodes. The anatomically and physiologically, as well the histological reason in favour of the treatment of naso-oro-pharyngeal obstructions sites with bipolar radiofrequency is explained. Each surgical technique is discussed.

The visceral theory of sleep
Dr Ivan N. Pigaerov, Institute for Information Transmission Problems (Kharkevich Institute), Russian Academy of Sciences, Moscow, Russia
Sleep deprivation leads to death of animals from multiple dysfunctions in visceral systems. On the other hand, sleep studies investigate bright changes in cerebral activity during transition from wakefulness to sleep. In order to explain this situation by single non contradictive theory we proposed that during sleep central nervous system including all cortical areas switches from the processing of the exteroceptive information (visual, somatosensory and so on) to the processing of the interoceptive information coming from all visceral systems of an organism for recovery of their functionality. Direct experiments performed with rabbits, cats and monkeys confirmed this proposal.

The relationship between Sleep Related Eating Disorders and Night Eating Syndrome
Associate Professor Orna Tzischinsky, Emek Yezreel Academic College, Emek Yezreel, Israel
Nighttime eating and drinking is a common symptom of two clinical conditions with suggested different pathogenesis. The first is labeled as Sleep Related Eating Disorders (SRED) and is considered to be a parasomnia. The second is termed Night Eating Syndrome (NES) and is considered to be an eating disorder. The level of awareness during the nocturnal eating episodes represents the main differentiating feature between NES and SRED, with SRED characterized by a lack of awareness during eating episodes and NES characterized by full awareness. These differences between NES and SRED are still controversial; are they opposite poles in the continuum of the clinical spectrum of eating disorders or separate syndromes but with similar pathology.

The relationship between Eating Disorders and and Night Eating Syndrome
Professor Yael Latzer, Haifa University, Mount Carmel, Haifa, Israel
Only a few studies have examined NES among patients with Eating Disorders (EDs). The literature is marked by an ongoing debate over the relationship between Night Eating Syndrome (NES) and EDs. Some researchers conceptualize NES as a subtype of obesity, some as a Sleep Related Eating Disorder and still others treat this syndrome as a variant of other EDs or as a separate syndrome among EDs. The aim of this presentation is to review the existing literature on NES among patients with EDs and to describe their relationships. The research findings will be discussed in light of discrepancies and similarities.
Hot flashes are a possible cause of sleep disturbance in tamoxifen medicated women with breast cancer. Can acupuncture be used as a treatment method to reduce hot flashes, thereby promoting sleep?

Mrs Jill Brook Hervik, Vestfold Hospital, Pain Clinic, Dept of Anesthesiology, Tonsberg, Norway

Sleep difficulties are reported by 30–50% of cancer patients. Breast cancer is associated with a particularly high rate of insomnia, compared to other cancer types. Hot flashes at night, due to either chemotherapy and/or estrogen-antagonist treatment have been reported as more severe than daytime episodes, causing sleep disturbance. Results from the randomized, controlled trial Acupuncture for the treatment of hot flashes in breast cancer patients, demonstrated that the combination of hot flashes, sleep disturbances and fatigue found at base line, was similarly improved for up to three months following 15 acupuncture treatments.

Sleep, Health & Society: the contribution of epidemiology
Dr Francesco P Cappuccio, Cephalon Professor of Cardiovascular Medicine & Epidemiology, University of Warwick, Warwick Medical School, Division of Mental Health & Wellbeing, London, UK

Sleep disturbances and sleep deprivation are common in modern society. Increasingly, populations have been subjected to a steady decline in the number of hours devoted to sleep, due to changes in a variety of environmental and social conditions. Through the application of epidemiological methods of investigation, sleep deprivation has been shown to be associated with a variety of chronic conditions and health outcomes, detectable across the entire lifespan, from childhood to adulthood to older age. The talk will summarize the epidemiological evidence linking sleep deprivation and disruption to several chronic conditions, and will explore the public health implications and possible preventive strategies.

Anti-depressants and sleep
Dr James A. Dosman, OC, SOM, MA, MD, FRCP(C), FRSC, FCAHS, Canadian Centre for Health and Safety in Agriculture (CCHSA), College of Medicine, University of Saskatchewan, Saskatoon, SK, Canada

Many patients presenting with suspected obstructive sleep apnea are being treated with anti-depressant medications. This talk explores the effect of these medications on sleep, and on the polysomnogram and suggests approaches to remediation following treatment.

Epilepsy, Sleep and Thalamocortical Circuits
Dr Dora A. Lozsadi Consultant Neurologist, St George’s University London, London, United Kingdom

The sleep-wake cycle is known to influence seizure control in people suffering from epilepsy. The talk will discuss epilepsy syndromes, seizure types most affected. These will be related to known features as well as abnormalities of thalamocortical circuits.

The Circadian Regulation of Sleep: Implications for Health and Disease
Professor Derk-Jan Dijk, University of Surrey, Surrey, United Kingdom

Circadian rhythmicity is pervasive and regulates many different processes and behaviour, including sleep. Disruption of the circadian regulation of sleep is associated with adverse health outcomes. In this presentation, current insights into the mechanisms related to circadian rhythm sleep disorders and health problems associated with mistimes sleep such as occurs in shift work, will be reviewed.

REM Sleep Behavior Disorder in children. Clinical and Polysomnographic characteristics
Dr Alcibiades J. Rodriguez, MD, FAASM, Medical director, New York Sleep Institute, New York, NY, USA

REM Sleep Behavior Disorder (RBD) has been documented widely in adults, especially related to neurodegenerative diseases such as the alpha synucleopathies. The literature of RBD in children is scarce and only some cases have been reported. In children, as in adults, RBD may be related to medications, specifically anti-depressants, brain stem lesions and narcolepsy. A subset of cases of RBD cases have been reported in children with neurodevelopmental disabilities, such as autism. More recently, a case series of children with pediatric acute-onset neuropsychiatric syndrome (PANS) and RBD has been reported. We report two cases of RBD in children and review the literature, including the relationship with autoimmune and psychiatric disorders.

Defining Snoring for Surgical Outcomes
Vik Veer, University College London, London, United Kingdom.

There is currently no definition for snoring and no agreed classification for describing snoring location and obstructive level in DISE (Drug Induced Sedation Endoscopy). A presentation on the research for both of these issues will be provided here.
Day 1:

**Oral Presentation Abstracts**

Oral presentations will be added after the submission deadline

**VARIABLES ASSOCIATED WITH SLEEP PARALYSIS: A SYSTEMATIC REVIEW OF THE LITERATURE**

D. Denis*, French, C.C., and Gregory, A.M

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Department of Psychology, The University of Sheffield, Western Bank, Sheffield, South Yorkshire, S10 2TN.

Sleep paralysis is a relatively common but under-researched phenomenon. The causes of sleep paralysis are unknown, a number of studies have now investigated relationships with potential risk factors. This talk presents the results of a systematic review into this topic, with the aim to consolidate the current literature regarding variables associated with sleep paralysis. A reported association was found between sleep paralysis and a large number of variables, though a number of themes emerged. These were: psychiatric illness and medication, symptoms of psychiatric illness, substance use, stress and trauma, sleep, hereditary factors, physical illness, and personality, intelligence, and anomalous beliefs. Limitations of the current literature, directions for future research, and implications for clinical practice are discussed.

**AUDIT OF DRIVING SAFETY ADVICE TO PATIENTS WITH EXCESSIVE DAYTIME SLEEPINESS AS PER GUIDELINES BY ROSPA (ROYAL SOCIETY FOR PREVENTION OF ACCIDENTS) AND BTS (BRITISH THORACIC SOCIETY)**

A Khetarpal, Dr K Anderson, Dr S West

Newcastle University Medical School, Newcastle upon Tyne, NE2 4HH, UK

**Background**

3.5 million people in the UK have excessive daytime sleepiness and 1 in 5 Road Traffic Accidents are due to sleepiness while driving.

**Aim**

To assess the provision of driving safety advice to patients with daytime sleepiness in 2 settings: (i) at referral and (ii) at Newcastle sleep clinic. The RoSPA and BTS guidelines reflect best practice in each setting respectively.

**Method**

Retrospective study between 01/10/15-06/01/16 of (i) 100 referral letters to Newcastle Sleep Clinic and (ii) 100 sleep clinic letters to patients' GP. In both cases, patients were included if the letter mentioned 'Daytime sleepiness' or if their Epworth Sleepiness Score (ESS) was over 10 (indicating excessive sleepiness).

**Results**

Only 19% of referral letters from primary/secondary care had documented giving driving safety advice to patients with daytime sleepiness.

The Sleep Clinic gave advice to 85% of patients. In the 15% where no advice was given, patients usually had ESS<10 (but symptomatically sleepy) or a primary complaint not directly related to excessive sleepiness.

7 patients reported falling asleep while driving (only 2/7 discovered at GP). Moreover, the sleep clinic noted that 1 had a road accident and 1 had a near miss. Average waiting time from referral to sleep clinic appointment was 3 months. Thus driving advice needs to be given at referral.

**Conclusion**

Driving safety discussions on referral can be improved by educating GPs/secondary care and introducing an Alert on eReferral. To maintain patient and public safety, the Sleep Clinic should ensure all patients complete a pro forma of driving questions.
EFFECTS OF DOMAIN-SPECIFIC PHYSICAL ACTIVITIES ON SLEEP QUALITY AMONG 0.5 MILLION CHINESE ADULTS

B Zheng, LL Lin, CQ Yu*, HD Du, J Lv, Y Guo, Z Bian, YP Chen, M Yu, JG Li, JS Chen, ZM Chen, LM Li*; on behalf of the China Kadoorie Biobank Collaborative Group

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Abstract

Purpose: To investigate the relationships of overall and domain-specific physical activities with sleep disorders among Chinese men and women.

Methods: The data of 452,024 Chinese adults aged 35-79 years from The China Kadoorie Biobank Study was analyzed. Sleep disorders were classified as having disorders in initiating and maintaining sleep (DIMS), early morning awakening (EMA), daytime dysfunction (DDF), and any sleep disorders (ASD). Self-reported physical activity was divided into four domains, including occupational, commuter-related, household and leisure time activities. Gender-specific multiple logistic regression analysis was conducted to identify independent effects of overall and domain-specific physical activities on the risk of sleep disorders.

Results: Of the subjects included in the analyses, 40.2% were men, the mean age at baseline was 50.5±10.4 years. In total, 12.9% of men and 17.8% of women participants reported having ASD. Occupational activity had the largest contribution to the overall activity level. Moderate to high levels of overall activity were associated with lower risks of DIMS and DDF in both sexes (ORs range: 0.87-0.94). Beneficial effects of occupational, household and leisure time physical activities on sleep disorders were identified in women (ORs range: 0.84-0.94), while adverse effects of household and leisure time activities on EMA were found in men (ORs range: 1.08-1.15). However, both moderate and high levels of commuter-related activity were associated with increased risks of DIMS and ASD in men and women (ORs range: 1.07-1.17).

Conclusion: This study confirmed that moderate to high level of physical activities have beneficial effects on sleep among Chinese adults. However, different domains of activity may have varied effects with gender differences, which needs to be taken into consideration in policy making.

Day 2:

Oral Presentation Abstracts

SLEEP FRAGMENTATION BUT NOT DURATION IS ASSOCIATED WITH LATER MEMORY PERFORMANCE IN INFANTS

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High quality sleep has been linked to improved cognitive functioning in older children and adults. We examined concurrent and longitudinal associations between habitual sleep variables and memory performance in infants. Sleep data was collected from 40 infants at 4, 6, 8, and 10 months for a week using actigraphy. Subsequently, we used eye-tracking to record infants' looking patterns in a spatial indexing task assessing memory. Infants showed a shift in response strategy over time in the memory task, with one group of infants shifting earlier than the other. Sleep fragmentation but not duration was reduced in those who shifted earlier, in particular when infants were 4 months old. Moreover, sleep fragmentation predicted performance in the memory task longitudinally. We conclude that sleep fragmentation could serve as an early marker for later cognitive functioning. Direct and indirect links between infant habitual sleep and memory are discussed.
REORGANIZING BIOLOGICAL CLOCK BY STIMULATING PINEAL GLAND WITH LIGHT

Tunçak S., Oz P.
Ulucami Caddesi, No:24, Osmangazi/Bursa/Turkey

Nature has its own cycle: days and nights, months and years all come with an organized cycle. In every month, tidal waves occur in synchrony with the changes in the gravitational effects of the moon. Just like these cycles, all organisms have their own rhythms working like a clock. Circadian rhythm is involved in the maintenance of homeostasis according to environmental cues like light and temperature. Suprachiasmatic Nucleus (SCN) is the main controller of the rhythm in mammals. However, SCN does not work alone, it has peripheral tissues that help it. SCN transmits the light cues, which are coming through eyes, to pineal gland. Pineal gland is a neuroendocrine organ that secretes serotonin by day and melatonin by night. When there is no more light cues coming through the eyes, pineal gland starts secreting melatonin. Melatonin helps to organize sleep patterns and increase the quality of sleep. Sleep is a type of a resetting mechanism, therefore, its quality and amount is important for an organism to prevent any anomalies. When there is a problem with the retinal photoreceptors and ganglion cells, the most important stimulant for circadian rhythm, light, does not function anymore. In this case, there will be anomalies in melatonin secretion and this will result in biological problems. This disorder is called Free Running Disorder or Non-24-Hour-Sleep-Wake Disorder (N24SWD), which is observed in 50% of blind people. Pineal gland can be stimulated by direct light in sub-mammallians and in some cases in mammals. With procedures like brain chips and transplantations, it may be possible to stimulate human pineal gland and help those patients who suffer from N24SWD.

Day 3:

Oral Presentation Abstracts
Oral presentations will be added after the submission deadline

EXPLORING THE NATURE OF SLEEP DISTURBANCE IN SCHIZOPHRENIA SPECTRUM DISORDERS
S Faulkner, P Bee, S Kyle
Sophie Faulkner, Manchester Mental Health and Social Care Trust, Central West Area CMHT, Kath Locke Centre, 123 Moss Lane East, Manchester, M15 4DD

Sleep disturbance is very prevalent in people with schizophrenia spectrum disorders, yet little research has explored the experience of these problems from patients’ perspectives. This talk will present findings of a qualitative study exploring the experience of sleep disturbance in people with schizophrenia spectrum disorders, and their perspectives on approaches to improving sleep. Evidence for significant qualitative differences between insomnia without comorbidity, and initial insomnia in people with psychotic illnesses will be discussed, both in terms of differences in the nature of the experience, and in terms of the mechanisms causing and sustaining insomnia. Discrepancies between the effects of antipsychotics on sleep reported by sleep lab based studies, and these effects as experienced by patients will be discussed. Factors which are important to patients will be compared to those measured by existing self-report measures and recommendations made for future patient reported outcome measures. Implications of the diagnosis of a serious mental illness, and of regular use of sedating medication, for the non-pharmacological treatment of sleep problems will be discussed.
THE SLEEP PARALYSIS PROJECT: USING ART TO RAISE AWARENESS OF THE SCIENCE OF SLEEP PARALYSIS

C. C. French, C. MacKinnon, & D. Denis

Anomalous Psychology Research Unit, Department of Psychology, Goldsmiths, University of London, New Cross London SE14 6NW, UK

This presentation will describe the Sleep Paralysis Project, a project led by film-maker Carla MacKinnon and supported by the Wellcome Trust. Sleep paralysis in its most basic form is common experience affecting between 10% and 40% of the general population at least once in their lives. It consists of a brief period of paralysis when the sufferer is either just entering or emerging from sleep. About one person in twenty experiences a more frightening form of sleep paralysis including symptoms such as a strong sense of presence, auditory, visual and/or tactile hallucinations, pressure on the chest and difficulty breathing, and intense fear. Not surprisingly, the experience is often interpreted in terms of the supernatural (e.g., ghostly encounters, attacks by demons or spirits) or even as a sign of alien contact. The experience has also inspired artists of all kinds for hundreds of years. The Sleep Paralysis project involved collaboration between a film-maker and scientists intended to raise awareness of the true nature and causes of sleep paralysis. The outcomes of the projected included (a) a prize-winning short animated film, The Devil in the Room, based upon first-hand sleep paralysis experiences (including those of the film-maker); (b) a web site (http://www.thesleepparalysisproject.org) providing further information on sleep paralysis for those affected by it; and (c) a series of live events about sleep paralysis to help raise awareness of this fascinating, albeit distressing, phenomenon. This presentation will include an overview of sleep paralysis and the artistic works that it has inspired, a description of the Sleep Paralysis Project, and a screening of The Devil in the Room.

COMMONALITIES AND DISCTINCTIONS BETWEEN SLEEP PARALYSIS, LUCID DREAMING, AND WAKING LIFE EXPERIENCES

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Sleep paralysis and lucid dreaming are both dissociated states related to REM sleep. Here we investigated, for the first time, whether these two experiences are related. Using an online survey with 1928 participants, we found a significant relationship between frequency of sleep paralysis episodes and frequency of lucid dreams. This relationship was strongest for sleep paralysis episodes featuring ‘vestibular-motor’ hallucinations (e.g. out-of body experiences, illusory feeling of movement). Additionally, dissociative experiences during waking was the only variable to significantly predict both sleep paralysis and lucid dreaming. Poor sleep quality, and well-being issues (e.g. stress and anxiety) only predicted sleep paralysis. On the other hand, lucid dreaming was predicted by vividness of sensory imagery and positive constructive daydreaming style. Overall, results suggest that dissociative experiences during wakefulness are reflected in dissociative experiences during REM sleep.