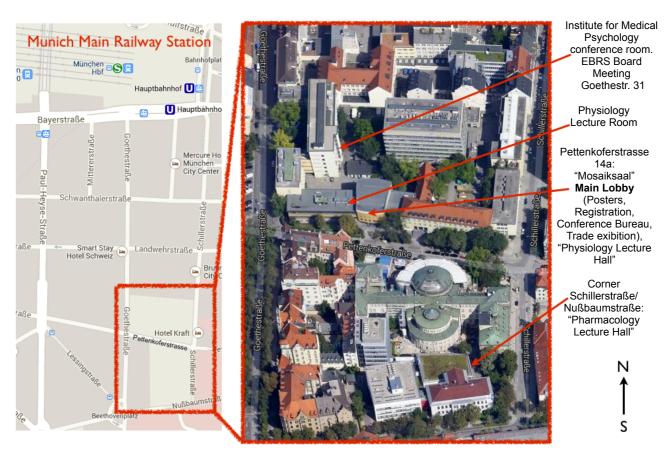


### XIII Congress of the European Biological Rhythms Society

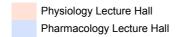
# **Programme**

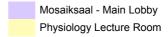
Conference Venue: Munich, Pettenkoferstrasse 14a (10 minutes walk south of Munich's Main Railway Station)



The Registration desk will open on Sunday the 18th of August at 14:00 and daily throughout the congress during all breaks.

### Sunday 18 August 2013 - Afternoon/Evening





14:00-16:30	REGISTRATION
16:30-17:00	OPENING CEREMONY
17:00-18:00	Plenary Lecture 1 Joseph Takahashi, University of Texas Southwestern, US The Clock and the Genome (Chair: Martha Merrow, University of Munich, DE)
18:00	OPENING RECEPTION

### Monday 19 August 2013 - Morning

Physiology Lecture Hall
Pharmacology Lecture Hall

	Planary Locature 2		
09:30-10:30	Plenary Lecture 2 Carl Johnson, Vanderbilt University, US As Time Glows By: Circadiana from Molecules to Populations (Chair: Sato Honma, Hokkaido University, JP)		
10:30-11:00	COFFEE BREAK – Trade Exhibition – Poster Session I		
11:00-13:00	Symposium 1 – Molecular Mechanisms I	Symposium 2 – Sleep Research	
Chairs	Steve Brown	Geert Mayer	
11:00-11:15	Steve Brown, University of Zürich, CH Cellular circadian signal transduction: From core clock proteins to circadian output	Geert Mayer, Hephata-Klinik Schwalmstadt, DE: Open Questions in Sleep Research	
11:15-11:45	Satchin Panda, Salk Institute, US Feeding-fasting and the circadian clock in metabolic homeostasis	Christian Baumann, Universität Zürich, CH Open questions in the assessment of nocturnal sleep	
11:45-12:15	Juergen Ripperger, University of Fribourg, CH Role of the PAR-bZip transcription factors within the mammalian circadian clock	Rolf Fronczek, LUMC, Leiden, NL Open questions in concepts of sleepiness and vigilance	
12:15-13:00	Short Talks Short Talks		
12:15-12:30	Arisa Hirano, University of Tokyo, JP FBXL21-mediated ubiquitination and stabilization of CRY1 and CRY2 are essential for mouse behavioral rhythm  Kazuhiko Kume, Nagoya City University of Tokyo, JP Large-scale objective sleep-data are using a contactless sleep monitor.		
12:30-12:45	Mino Belle, University of Manchester, UK SCN neurons of cryptochrome-deficient mice lack circadian timing in intrinsic electrical states and gating response to excitatory input		
12:45-13:00	Michael Parsons, MRC Harwell, UK Short-circuit: A circadian mutant in a suprachiasmatic nucleus transcription factor  Arcady Putilov, Russian Acad. Med. Sci, Simulation of an ultradian sleep homeos through fitting the time courses of its EE indicators obtained during baseline reco of night sleep		
13:00-13:15	General discussion and summary of "Open Questions"	General discussion and summary of "Open Questions"	
13:15-14:15	LUNCH – Trade Exhibition – Poster Session I		

### Monday 19 August 2013 - Afternoon/Evening

Physiology Lecture Hall
Pharmacology Lecture Hall

14:15-16:30	Symposium 3 – Clocks and Metabolism	Symposium 4 – Genetics of Clocks and Sleep	
Chairs	Joe Bass	Simon Archer	
14:15-14:30	Joe Bass, Northwestern Univ., Chicago, US Molecular Coupling of Circadian and Metabolic Systems	Simon Archer, University of Surrey, UK Sleep and the circadian regulation of gene expression	
14:30-15:00	Michael Brunner, University of Heidelberg, DE RNA helicase FRH is an ATP-dependent regulator of phosphorylation of the Neurospora clock protein FRQ by casein kinase 1	Karla Allebrandt, Univ. of Munich, DE Sleep duration and chronotype: from genes to pathways	
15:00-15:30	Urs Albrecht, University of Fribourg, CH The clock gene Per2 in adaptive thermogenesis  Mehdi Tafti, University of Lausanne, Genetics of sleep in normal subjects		
15:30-16:15	Short Talks	Short Talks	
15:30-15:45	Sarah Davies, University of Surrey, UK Effect of sleep and sleep deprivation on the human metabolome	Christine Damrau, MRC Harwell, UK Sleep disturbances and circadian behavioural deficits in a novel Fbxl3 mutant	
15:45-16:00	Edith Grosbellet, Inst. f. Cellular & Integrative Neurosci, FR Impaired circadian synchronization to light in obese mice with dysfunctional leptin signaling	Daan van der Veen, University of Surrey, UK Transference of a human sleep- homeostasis phenotype to mice through transgenic expression of a human variable number tandem repeat polymorphism in PERIOD3	
16:00-16:15	Sophie Wehrens, University of Surrey, UK Recording continuous human interstitial glucose and skin temperature during constant routines and ultradian cycles to assess the effects of timed feeding	Hideki Terajima, University of Tokyo, JP CLOCK-controlled multiple regulations of circadian rhythms through canonical and non-canonical E-boxes	
16:15-16:30	General discussion General discussion and summary of "Open Questions" and summary of "Open Questions"		
16:30-17:00	COFFEE BREAK – Trade Exhibition – Poster Session I		
17:00-18:00	The Gwinner Lecture Barbara Helm, University of Glasgow, UK Circadian clocks and the real world: an avian perspective (Chair: Serge Daan, RuG, Groningen, NL)		
18:00-20:00	POSTER SESSION I (Wine)		
19:30	IMP Conference Room: MEETING OF THE EBRS COUNCIL		

### Tuesday 20 August 2013 - Morning

Physiology Lecture Hall
Pharmacology Lecture Hall

09:30-10:30	JSC Lecture Ken-Ichi Honma, Hokkaido University, JP Non-photic Entrainment of Human Circadian Rhythms: A Possible Mechanism (Chair: Takao Kondo, Nagoya University, JP)		
10:30-11:00	COFFEE BREAK – Trade Exhibition	– Poster Sessi	on II
11:00-13:00	Symposium 5 Molecular Mechanisms II		Symposium 6 Joint EBRS-ESRS Symposium
Chairs	Achim Kramer		Philippe Peigneux (President, ESRS) Debra J. Skene (Vice-President, EBRS)
11:00-11:15	Achim Kramer, Charité, Berlin, DE Post-transcriptional mechanisms control circadian rhythms in mammals	11:00-11:30	Hugh Piggins, University of Manchester, UK Stabilising weakened clocks through exercise and light
11:15-11:45	Eva Wolf, University of Munich, DE Structure-function analyses of circadian clock proteins	11:30-12:00	Claude Gronfier, INSERM, Lyon, FR Age-related ocular changes and non-visual light responses in humans
11:45-12:15	Michael Rosbash, Brandeis, US Molecular mechanisms of circadian clocks	12:00-12:30	Eus van Someren, Amsterdam, NL Insomnia phenotypes; beyond the clock
12:15-13:00	Short Talks		
12:15-12:30	Abdelhalim Azzi, Inst. Pharmacol./ Toxicol., University of Zurich, CH Control of Circadian Behavior by Epigenetics and Neural Plasticity	12:30-13:00	Tiina Paunio, University of Helsinki, FI Genetic background for shift work intolerance
12:30-12:45	Naoto Hayasaka, Yamaguchi Univ., JP A role for Salt-inducible kinase 3 in the central circadian pacemaker in mammals: phosphorylation- dependent degradation of the clock protein	13:00-13:15	General discussion and summary of "Open Questions"
12:45-13:00	Bharath Ananthasubramaniam, HU Berlin, DE Timing of neuropeptide coupling determines synchrony in the mammalian circadian clock		
13:00-13:15	General discussion and summary of "Open Questions"		
13:15-14:15	LUNCH – Trade Exhibition – Poster Session I		

#### Tuesday 20 August 2013 - Afternoon/Evening

Physiology Lecture Hall
Pharmacology Lecture Hall

14:15-16:30	Symposium 7 – Clock Evolution*  Symposium 8 – Shift-Work Research		
Chairs	Bambos Kyriacou	Céline Vetter	
14:15-14:30	Bambos Kyriacou, Univ. Leicester, UK Natural selection and clock genes: the legacy of Alex Peixoto	Céline Vetter, University of Munich, DE Don't work around the clock: reducing shift- work strain by with chronotype-based shift schedules?	
14:30-15:00	Ak Reddy, Cambridge University, UK Redox oscillations in the clockwork	Ken Wright, Univ. of Colorado, US Sleep Disruption and Circadian Misalignment in Shift Work and Shift Work Disorder	
15:00-15:30	Isaac Edery, Rutgers Univ., US RNA and the thermal adaptation of daily wake-sleep cycles	Drew Dawson, Queensland, AU Shift work research: the known unknowns	
15:30-16:15	Short Talks	Short Talks	
15:30-15:45	Sabine Haenniger, MPICE Jena, DE Allochronic differentiation in a moth	Eva Schernhammer, Harvard Med. School, US Effect of light exposure, activity, and night shift work on the circadian system in nurses	
15:45-16:00	Aida Sánchez-Bretaño, Complutense University of Madrid, ES Evidence of a hepatic oscillator in goldfish (Carassius auratus). Daily clock gene rhythms and the role of glucocorticoids modifying gPer1a, gBmal1 and gClock1 expression.	Frank Scheer, Harvard Med. School, US Circadian misalignment, circadian meal timing, and meal timing within the wake episode have distinct effects on glucose tolerance	
16:00-16:15	Vincent van der Vinne, RuG, Groningen, NL Energetic consequences of diurnality in mice	Wendy Rodenburg, RIVM, NL Causal relationship circadian disruption and breast cancer: Study in a humanized mouse model for breast cancer	
16:15-16:30	General discussion and summary of "Open Questions"  General discussion and summary of "Open Questions"		
16:30-17:00	COFFEE BREAK – Trade Exhibition – Poster Session II		
17:00-18:00	Plenary Lecture 3 Ueli Schibler, University of Geneva, CH Transcriptional and post-transcriptional regulation of circadian gene expression (Chair: Anna Wirz-Justice, University of Basel, CH)		
18:00-19:00	General Assembly of EBRS members		
19:00-20:30	POSTER SESSION II (Wine)		

<sup>\*</sup>Symposium 7 is dedicated to the memory of Alexandre A. Peixoto (1963-2013). Alex pioneered the population genetic and evolutionary analysis of clock gene variation and allied it to phenotypic and molecular testing to generate a powerful and rigorous paradigm for identifying the selective forces that act on circadian rhythms. His unexpected death robs us of an outstanding colleague. However his greatest gift was his warmth, humour, kindness and generosity which touched everyone, who was fortunate enough to know him (Bambos Kyriacou).

## Wednesday 21 August 2013 - Morning

Physiology Lecture Hall
Pharmacology Lecture Hall

09:30-10:30	Plenary Lecture 4 Speaker: Tarja Porkka-Heiskanen, University of Helsinki, FI Sleep and metabolism (Chair: Ken Wright, University of Colorado, US)		
10:30-11:00	COFFEE BREAK – Trade Exhibition – Poster Session II		
11:00-13:00	Symposium 9 – Clocks change with age	Symposium 10 – Clocks make Sense	
Chairs	Joke Meijer Doug McMahon		
11:00-11:15	Joke Meijer, LUMC, Leiden, NL Ageing of the circadian system as a neuronal network problem	Doug McMahon, Vanderbilt University, US Circadian Modulation of Sensory Systems: The Eyes have It	
11:15-11:45	Stephan Michel, LUMC, Leiden, NL Cellular investigations of ageing  Monika Stengl, University of Kassel, Circadian rhythms in cyclic nucleotide affect odour detection in insects		
11:45-12:15	Roman Kondratov, Cleveland State Univ., US Circadian regulation of longevity associated signalling pathways  David Somers, Ohio State, US Timing takes Teamwork: Chaperones a co-chaperones in the plant circadian system		
12:15-13:00	Short Talks Short Talks		
12:15-12:30	Emma Wams, RuG, Groningen, NL Progressive fragmentation of sleep and circadian rhythmicity with increasing memory impairment in Alzheimer's disease  Maria Olmedo, LMU, Munich, DE Circadian rhythms in Caenorhabditis elegans: from molecules to behavior		
12:30-12:45	Adam Neumann, University of Warsaw, PL Circadian expression of Steroidogenic acute regulatory protein and Cyp19 aromatase genes is age dependent in the mouse male reproductive tract  P. Michael Iuvone, Emory University School Medicine, US Circadian regulation of photopic visual function: differential roles of NPAS2 and CLOCK		
12:45-13:00	Krisztina Káldi, Semmelweis University, HU Social jetlag and academic performance in undergraduates  Elzbieta Pyza, Jagiellonian University, Daily synaptic plasticity in the visual system of Drosophila melanogaster		
13:00-13:15	General discussion and summary of "Open Questions"	General discussion and summary of "Open Questions"	

### Wednesday 21 August 2013 - Afternoon/Evening

Physiology Lecture Hall
Pharmacology Lecture Hall

13:15-17:00	Free Afternoon	
17:00-18:00	The J Ariens-Kappers Lecture Russell Foster, University of Oxford, UK Sensing Light and Time Using Non-Image Forming Photoreceptors (Chair: Mike Menaker, University of Virginia, US)	
19:30	Conference Dinner Hofbräuhaus, Platzl 9, 80331 Munich	

## Thursday 22 August 2013 - Morning

Physiology Lecture Hall
Pharmacology Lecture Hall

09:30-10:30	Plenary Lecture 5 Rob Lucas, University of Manchester, UK Retinal influences on the hypothalamus (Chair: Till Roenneberg, University of Munich, DE)		
10:30-11:00	COFFEE BREAK – Trade Exhibition – Poster Session III		
11:00-13:00	Symposium 11 Clocks and Pathology	Symposium 12 Melatonin and Light as Chronobiotics	Symposium 13 Non-Circadian Rhythms
Chairs	Francis Levi	Phyllis Zee	Stefanie Monecke
11:00-11:15	Francis Levi, INSERM, Paris, FR Circadian clocks, cell cycle and cancer hallmarks	Phyllis Zee, Northwestern Univ., Chicago, US Light: Window to Obesity?	Stefanie Monecke, University of Strasbourg, FR Photoperiod is able to entrain circannual rhythms of European hamsters even in the absence of melatonin
11:15-11:45	Bert van der Horst, Erasmus, Rotterdam, NL Circadian clocks and	Samer Hattar, Johns Hopkins Univ., US ipRGCs: diverse types,	David Wilcockson, Aberystwyth University, UK Molecular and neurogenetic dissociation of tidal and circadian rhythms Kim Last, Scottish Marine
	human breast cancer	many functions	Institute, UK Zooplankton Vertical Migrations in Arctic Seas
	Villejuif FR Liniversity US	Elizabeth Klerman, Harvard University. US	Kristin Tessmar-Raible, Univers. of Vienna, AT Circadian and circalunar clock interactions in the marine worm Platynereis dumerilii
11:45-12:15		Modelling light effects on	Yisrael Schnytzer, Bar-Ilan University, IL Biological rhythms and clocks of intertidal animals: The limpet Cellana rota as a model organism
12:15-13:00	Short Talks	Short Talks	
12:15-12:30	Robert Dallmann, University of Zurich, CH Cancer Clocks: Real-time Circadian Gene Expression in Solid Tumors In Vitro and In Vivo	Claudia Moreno, School of Public Health, University of São Paulo, BR Impact of electricity on sleep timing of rubber tappers living in the Amazon	Charlotte Helfrich-Förster, University of Würzburg, DE Lunar rhythms in women - preliminary case studies
12:30-12:45	Marina Antoch, Roswell Park Cancer Institute, US Functional clock is retained both in spontaneously developed sarcomas and in xenografts grown in immunocompromised SCID mice.	Tom De Boer, LUMC, Leiden, NL Sleep deprivation and caffeine influence light responsiveness of circadian pacemaker neurons	Shinobu Yasuo, Kyushu University, JP Photoperiodic responses of the brain serotonergic system and mood-related behaviors in mammals
12:45-13:00	Charna Dibner, University of Geneva, CH Circadian clock characteristics are altered in human thyroid malignant nodules	Jens Hannibal, University of Copenhagen, DK Central projections of melanopsin expressing retinal ganglion cells in the macaque monkey	Cristina Sáenz de Miera, Universities of Strasbourg and Aberdeen, FR,UK The circannual clock drives expression of hypothalamic genes central for reproduction
13:00-13:15	General discussion and summary of "Open Questions"	General discussion and summary of "Open Questions"	General discussion and summary of "Open Questions"
13:15-14:15	13:15-14:15 LUNCH – Trade Exhibition – Poster Session III		

### Thursday 22 August 2013 - Afternoon/Evening

Physiology Lecture Hall
Pharmacology Lecture Hall

14:15-16:30	Symposium 14  Model systems in the real world  Symposium 15  Clocks in Psychiatry		
Chairs	Roelof Hut	Katarina Wulff	
14:15-14:30	Roelof Hut, RuG, Groningen, NL Into the wild: what is the adaptive value of circadian rhythms?  Katarina Wulff, University of Oxford, U Disrupted circadian rhythms – disadva for mental health		
14:30-15:00	Kwangwon Lee, Rutgers University, US Neurospora in the wild	Ullrich Bartsch, Bristol, UK Neural network oscillations during sleep as a translational biomarker in Schizophrenia	
15:00-15:30	Kamiel Spoelstra, Institute for Ecology, NL Tau mutant mice in the wild	Nestor Kapusta, Wien Title: TBA	
15:30-16:15	Short Talks	Short Talks	
15:30-15:45	Joydeep De, JNCASR, Bangalore, IN Significance of activity peaks in fruit flies, Drosophila melanogaster, under seminatural conditions	Johannes Thome, University of Rostock, DE Chronotherapy in adult patients with ADHD (attention-deficit hyperactivity-disorder)	
15:45-16:00	Taro Fuchikawa, Hebrew University, IL Social synchronization overrides photic entrainment in young nest honey bees	Lucia Pagani, University of Texas Southwestern, US A circadian insight into human behavioral bipolar disorder endophenotypes	
16:00-16:15	Barbara Tomotani, Netherlands Institute of Ecology, NL Climate change and birds' annual temporal organization  Dawn Loh, UCLA, US Circadian rhythm disruption in models neurodevelopmental disease		
16:15-16:30	General discussion and summary of "Open Questions"  General discussion and summary of "Open Questions"		
16:30-17:00	COFFEE BREAK – Trade Exhibition – Poster Session III		
17:00-18:00	The Axelrod Lecture Stafford Lightman, University of Bristol, UK Dissecting HPA rhythmicity (Chair: Russell Foster, University of Oxford, UK)		
18:00-19:00	Summing Up Till Roenneberg, University of Munich, DE		