



SLTBR

Society for Light Treatment
and Biological Rhythms

The Effects of Rhythms, Genes and Light on Metabolism, Sleep and Mental Health

**June 20-22, 2019 - Chicago, Illinois
PROGRAM BOOK**



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THANK YOU TO THE CONFERENCE ORGANIZING COMMITTEE

Dorothy Sit, MD, SLTBR President, Host-Organizer
Northwestern University

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Barbara Sutcliffe, Program Assistant
Northwestern University

June 10, 2019

Dear SLTBR Members, Friends and Sponsors:

On behalf of the SLTBR Board and Organizing Committee and as the Local Host-Organizer, I would like to welcome you to the Society for Light Therapy and Biological Rhythms 31st Annual Meeting at Northwestern University, in Chicago, U.S.A.

This year's meeting is sponsored by Toshiba Materials Company, Ltd, The Daylight Academy, Lumie, Chromaviso, Northern Light Technologies, Seoul Semiconductor Ltd, and CET.org. Additional space and staff support are provided by the Asher Center for the Study and Treatment of Depressive Disorders, Department of Psychiatry and Behavioral Sciences, Northwestern University, Feinberg School of Medicine. We receive ongoing support from the journal, Neuropsychobiology and Karger Publishing who publish our Annual Meeting Abstracts and provide open access to all readers (DOI: 10.1159/000501249, online June 13, 2019).

We selected the theme of our scientific meeting, "The Effects of Rhythms, Genes and Light on Metabolism, Sleep and Mental Health," to highlight particularly intriguing targets of the innovative research which has advanced the interdisciplinary field of circadian rhythms and light treatment. The meeting is designed to provide a platform to encourage conversations among the laboratory scientists, clinical researchers, practicing clinicians and advocacy personnel. Our intention is to support efforts to build new research collaborations and to translate findings into improvements in public health policy and clinical care!

The scientific program launches with an enticing continuing education course that presents a survey of the light effects on energy metabolism, sleep chronobiology, human mood and functioning. The Research Symposia will feature the novel work of Inger Burnett Ziegler on the circadian predictors of stress in depressed U.S. minority women, Jamie Zeitzer's provocative report on ultra-short light flashes for resetting the human clock, Charmane Eastman's review on managing circadian rhythm disturbances from shift work, and the live-update from Luc Sclanzen on new light metrics that integrate the non-image forming responses to light. The program will be enriched by a Year in Review of top published papers, a lively data blitz session, and oral abstract sessions. Opportunities for networking and informal meetings are available at the poster wine reception and the banquet dinner (sold-out!) We will wrap up the meeting with the Awards session and presentation of the Poster Prize (CET.org).

In addition to experiencing the rich content of our conference meeting, please reserve time to explore and enjoy the beautiful city of Chicago!

Sincerely,

Dorothy Sit, M.D.
SLTBR President

Marijke Gordijn, PhD
SLTBR Vice-President
Program Chair

CONFERENCE INFORMATION

THURSDAY, June 20, 2019

McGaw Pavilion, 240 E Huron Street, 2nd Floor. Daniel Hale Williams Auditorium		
8:00 - 9:00	Registration and breakfast	
9:10 - 9:20	Dorothy Sit, MD. Welcome Address from the SLTBR President	
9:20 - 9:30	John Csernansky, MD. Chair of Department of Psychiatry and Behavioral Sciences, Northwestern University, Feinberg School of Medicine. Introduction to Chicago and Northwestern University	
9:30 - 12:40	<u>CME Course (Chair: Marijke Gordijn) Open to all participants</u>	
	9:30-10:10	Dries Kalsbeek, PhD. Netherlands Institute for Neuroscience (NIN), Amsterdam, The Netherlands. Shining light on energy metabolism in mice, rats and man.
	10:10 - 10:50	Christian Cajochen, PhD. Center for Chronobiology, Basel, CH – Chronobiology and sleep, non-image forming aspects of light.
	10:50 - 11:20	COFFEE BREAK
	11:20 - 12:00	Michael Young, PhD. Illinois Institute of Technology, USA - Network modeling of seasonal depression: implications for etiology and treatment.
	12:00 - 12:40	Marijke Gordijn, PhD. University of Groningen, The Netherlands - Shift work and chronotype: health consequences of circadian misalignment.
12:40 - 13:30	LUNCH BREAK	
13:30 - 15:30	<u>SYMPOSIUM 1: Fundamental science; Christian Cajochen, PhD.</u>	
	13:30 - 14:10	Patrice Bourgin, PhD. CIRCSomnology, Neurologie, University of Strasbourg, France - A model to predict sleep-wake changes induced by aberrant light dark cycles.
	14:10 - 14:50	Ludovic Mure, PhD, Regulatory Biology Laboratory, The Salk Institute for Biological Studies La Jolla, USA - Inputs and outputs of the diurnal primate clock
	14:50 - 15:30	Jamie Zeitzer, PhD, Stanford Center for Sleep Sciences and Medicine, Palo Alto, USA – Less is more: ultrashort light flashes for resetting the human circadian clock
15:30 - 16:00	COFFEE BREAK	
16:00 - 17:00	<u>Oral Session 1 (Chair: Michael Young)</u>	
	16:00 - 16:12	K. Smolders, Eindhoven University of Technology, Netherlands: A behavior-based assessment of attitude toward sleep hygiene and chronotype-dependent differences in the engagement in sleep-promoting behaviors
	16:12 - 16:24	L. Hartstein, University of Colorado Boulder, USA: Light Before Bed and Melatonin Suppression in Preschool-Age Children
	16:24 - 16:36	J. de Zeeuw, Charite - Universitätsmedizin Berlin, Germany: EEG power density as a proxy for objective alertness depends on spectral composition and intensity of light exposures during daytime

Thursday, June 20, 2019 - continued

	16:36 - 16:48	D. Mathew, Indiana University School of Medicine, USA: The scotopic electroretinogram of C57Bl/6 mice display circadian rhythmicity
	16:48 - 17:00	R. Gutman, Tel-Hai College & Galilee Research Institute, Israel: Extent and onset of high-fat-diet-induced obesity in mice is attenuated under an environmental photic cycle that resembles their endogenous circadian rhythm period length
17:00 - 17:30	Data blitz with short poster presentations. Chair Renske Lok.	
Morton Medical Research Building, First Floor, 300-310 E Superior St, Method Atrium		
17:30 - 20:30	Welcome Reception and posters	

FRIDAY, June 21, 2019

McGaw Pavilion, 240 E Huron Street, Floor. Daniel Hale Williams Auditorium		
8:30 - 9:00	Registration and breakfast	
9:00 - 10:00	Keynote: Phyllis Zee, MD, PhD. Northwestern University, Feinberg School of Medicine. - New ways to diagnose sleep and circadian rhythm disorders: a universal method to detect circadian state from gene expression.	
10:00 - 10:30	COFFEE BREAK	
10:30 - 12:30	SYMPOSIUM 2: <u>Translational Chronobiology Research</u> ; Marijke Gordijn, PhD.	
	10:30 - 11:10	Yvonne de Kort, PhD. Industrial Engineering & Innovations Sciences, Technical University Eindhoven, The Netherlands - A close look at acute diurnal effects of light exposure.
	11:10 - 11:50	Hee-Kyung Hong, PhD. Northwestern University. Center for Diabetes and Metabolism, Chicago, USA - Changes in Clock Repression and Circadian Disruption in Response to Inflammation.
	11:50 - 12:30	Charmaine Eastman, Ph.D, Rush University Medical Center, Chicago, USA- Shift Work and Jet Lag: Management of circadian rhythm misalignment with bright light, dark and melatonin.
12:30 - 13:30	LUNCH BREAK	
12:30 - 13:30	SLTBR Board Meeting, Part 1, McGaw Room 2-321	
13:30 - 14:30	<u>Oral Session II</u>	
	13:30 - 13:42	M.N. Böhmer, Erasmus MC, University Medical Center Rotterdam, Netherlands: Are we still in the dark? A systematic review on light exposure, sleep and mood in the general population
	13:42 - 13:54	B. van de Zande, Signify, Eindhoven, Netherlands: Light and vitality: effects of bright office white light on workers' performance, well-being, sleep and appreciation
	13:54 - 14:06	R. Lok, University of Groningen, Netherlands: Effects of bright light exposure on alertness under forced desynchrony conditions.

Friday, June 21, 2019 - continued

	14:06 - 14:18	O. Stefani, University of Basel, Switzerland: Effects of lighting with continuously changing color temperature and illuminance on Melatonin Profile, Skin Temperature and Sleep.
	14:18 - 14:30	M. Kompier, Eindhoven University of Technology, Netherlands: Effects of light transitions on subjective and objective measures of alertness, comfort and affective state.
14:30 - 15:15	Luc Schlangen- Non-image forming responses to light: new light metrics and insights.	
15:15 - 15:45	COFFEE BREAK	
15:45 - 16:45	Year in Review 20 min animal (Dries Kalsbeek) / 20 min human basic (Jamie Zeitzer) / 20 min clinical (Dorothy Sit)	
17:00 - 17:45	SLTBR Board Meeting, Part 2, McGaw Room 2-321	
18:00 - 20:30	Dinner cruise aboard the Mystic Blue, boarding from 18:00 at Navy Pier, Chicago. Boat leaves promptly at 18:30.	

SATURDAY, June 22, 2019

McGaw Pavilion, 240 E Huron Street, Floor. Daniel Hale Williams Auditorium		
7:30 - 10:00	Registration and breakfast	
8:00 - 10:00	'Hands-on clinical workshop' on Light Therapy for Mood Disorders: Dorothy Sit, Room 2-322	
8:00 - 10:00	Young Investigator meeting Chair: Renske Lok, Groningen, The Netherlands Speakers: M. Gordijn: career path in business C. Cajochen: career path in science Student pitches & discussion: 1. B. Bais, Netherlands: A randomized, double-blind controlled clinical trial of light therapy for pregnant women with major depressive disorder. 2. J.T. Danielsen, Denmark: The Effect of Systematic Light Exposure on Vigilance and Attention in Clinically Fatigued Women Recently Treated for Breast Cancer. 3. F. Webler, Switzerland: Decoding the 'spectral diet'. 4. A. Ishihara, Japan: Association between the evening use of electronic media, sleep, and chronotypes of employees in Japan.	
10:00 - 10:30	COFFEE BREAK	
10:30 - 12:30	<u>SYMPOSIUM 3: Circadian Rhythms and Psychiatric Disorders, Dorothy Sit, MD..</u>	
	10:30 - 11:10	Inger Burnett Zeigler, PhD. Northwestern University. Changes in daily heart rate and pulse pressure as circadian predictors of chronic stress in U.S. minority women with a history of depression: impact of mindfulness based interventions.

Saturday, June 22, 2019 - continued

	11:10 - 11:50	John Gottlieb, MD. Northwestern University. International Society for Bipolar Disorders: UPDATE on the chronobiology and chronotherapeutics task force. Systematic data review: report on the study design and data findings on chronobiological treatments. .
	11:50 - 12:30	O. Stefani, University of Basel, Switzerland: Effects of lighting with continuously changing color temperature and illuminance on Melatonin Profile, Skin Temperature and Sleep.
	14:18 - 14:30	Colleen McClung, PhD. University of Pittsburgh, USA - Circadian rhythm regulation of reward processes through metabolic signaling in the brain..
12:30 - 13:30	LUNCH BREAK	
13:30 - 14:15	MEMBERS MEETING	
14:30 - 15:42	ORAL Session III (Chair: John Gottlieb)	
	14:30 - 14:42	A. Shankar, University of Alaska Fairbanks, USA. SAD rats: Effects of short photoperiod on sleep and carbohydrate consumption in grass rats.
	14:42 - 14:54	D.C. Fernandez, National Institute of Mental Health, USA: A novel retina-thalamic circuit underlies the effects of light on mood.
	14:54 - 15:06	M.N. Böhmer, Erasmus MC, University Medical Center Rotterdam, Netherlands: Bright-study: the effect of dynamic indoor lighting on sleep and mood in elderly with intellectual disabilities living in group home facilities.
	15:06 - 15:18	L.M. Wu, Northwestern University Feinberg School of Medicine, USA: The association between assignment to dim or bright hospital room and symptom burden during stem cell transplantation: A longitudinal pilot study.
	15:18 - 15:30	A. Amidi, Aarhus University, Denmark: The Effect of Systematic Light Exposure to Reduce Cancer-related Fatigue (CRF) in Women Treated for Breast Cancer: A Randomized Controlled Trial of Circadian Active versus Inactive Light Stimulation.
	15:30 - 15:42	T.C. Erren, University Hospital of Cologne, Germany: Can disease “start” with perinatal light? - PLICCS results in 190.000 live births from the International Childhood Cancer Cohort Consortium [I4C].
15:45 - 16:00	AWARDS, CLOSING	

Useful Information:

WI-FI at Northwestern University:

Guest-Northwestern (no password required)

Important Telephone Numbers:

Emergency: 911

Northwestern Campus Police: 312-503-3456

SPEAKERS



Patrice Bourgin, PhD, DSc

Professor of Neurology and Director of CIRCSom (International Research Center for ChronoSomnology) and the Sleep Disorders Center, Strasbourg University, France

Dr. Patrice Bourgin is head of CNRS research team “Light, circadian rhythms, sleep homeostasis and Neuropsychiatry” at the Neurosciences Institute (INCI). His translational research is aimed at dissecting the functional interactions between sleep/circadian disturbances and neuropsychiatric disorders, with a special focus on the dissection and quantification of phototransduction and neuronal pathways by which light influences sleep, alertness and behavior, in order to de-

fine novel applications of light therapy.



Inger Burnett-Zeigler, PhD

Assistant Professor, Department of Psychiatry and Behavioral Sciences
Northwestern University, Feinberg School of Medicine, USA

Dr. Burnett-Zeigler utilizes traditional psychotherapy and complementary and integrative health approaches to help clients with mood and anxiety disorders, stress management, interpersonal relationships and wellness. Her research program focuses on examining the factors associated with access and engagement in mental health service utilization and using this data to develop, test and implement acceptable and accessible evidence based interventions in community

based settings. Inger’s long-term goal is to improve mental and physical health among socio-economically disadvantaged individuals by creating a sustainable model to efficiently deliver effective interventions in community based settings. Dr. Burnett-Zeigler’s research has been featured in The New York Times, TIME magazine, The Hill, and Chicago Tribune.



Christian Cajochen, PhD

Director, Center for Chronobiology, University of Basel, Switzerland

Prof. Christian Cajochen received his PhD in natural sciences from the ETH in Zürich, Switzerland, followed by a 3-y postdoctoral stay at the Harvard Medical School in Boston, MA. His major research interests include investigative work on the influence of light on human cognition, circadian rhythms and sleep, circadian related disturbances in psychiatric disorders, and age-related changes in the circadian regulation of sleep and neurobehavioral performance. He has held a number of honors and has authored more than 150 original papers and reviews in his career.



Yvonne de Kort, PhD

Professor and Chair of Environmental Psychology of Human-Technology Interaction
Department of Industrial Engineering and Innovation Sciences
Eindhoven University of Technology, Netherlands

Yvonne de Kort is full professor environmental psychology in the Human-Technology Interaction group Eindhoven University of Technology, The Netherlands. With her group, she investigates effects of lighting conditions on mood, vigilance, vitality, and behavior, combining insights and methods from psychology, chronobiology and neuroscience. In line with a translational research

agenda, this work includes both controlled lab studies and field research, and considers both image-forming and non-image forming pathways, mostly, though not exclusively, during daytime.



Charmaine I. Eastmen, PhD

Professor, Division of Behavioral Sciences
Founding Director, Biological Rhythms Research Lab
Rush Medical College, Rush University, USA

Charmaine Eastman founded the Biological Rhythms Research Laboratory at Rush in 1987. Her research on bright light treatment of SAD and phase shifting the human circadian clock with light and melatonin, to alleviate problems such as jet lag and shift work, was supported for about 30 years by grants from the NIH and the CDC. She has published over 100 scientific papers, and has given numerous presentations at national and international meetings. She received the “Excellence in Applied Circadian Rhythm Research Award” from the National Sleep Foundation in 2012.



Andries Kalsbeek, PhD

Professor of Experimental Neuroendocrinology
Amsterdam University Medical Center, Netherlands

Andries Kalsbeek is head of the Hypothalamic Integration Mechanisms group at the Netherlands Institute for Neuroscience (NIN). He studied Biology in Groningen and obtained his PhD at the NIN in 1989. In Strasbourg (France) he performed a post-doc on the role of the SCN in seasonal rhythms. Back at the NIN (1992) he continued working on the clock control of hormone rhythms and the autonomic nervous system, with a focus on glucose metabolism and circadian rhythms. In 2008 he joined the Department of Endocrinology and Metabolism at the AUMC.



Hee-Kyung Hong, PhD

Research Assistant Professor, Department of Medicine
Northwestern University, Feingberg School of Medicine, USA

Dr. Heekyung Hong received her Ph.D. in Genetics from Case Western University, Cleveland, Ohio in 1999. For her postdoctoral training, she joined the laboratory of Dr. Joseph Takahashi at Northwestern University, where she developed several mouse models of clock genes to study integrative nature of circadian gene-regulated physiology. She continues her research in identifying the molecular mechanism that link circadian rhythm, aging, dysregulation of sleep and metabolic disease in humans using genetic animal models. Dr. Hong’s recent publication uncovered a critical epigenetic regulatory layer involved in circadian reprogramming in response to inflammatory signal in the mouse liver. This research also paved the way to uncover similar molecular mechanisms triggering pathological states associated to diet-induced obesity and inflammation.



Marijke Gordijn, MD

Guest Researcher, Chronobiology Group
University of Groningen, Netherlands

Marijke C.M. Gordijn, PhD, is guest researcher at the Chronobiology group of the University of Groningen, The Netherlands and founder/director of Chrono@Work B.V. Her main interest is translational research in the fields of chronobiology, sleep, light, metabolism and mood/well-being. Her goal is to use this knowledge to prevent the negative effects of chronobiological disruption in our 24/7 society. Marijke is vice-president of the Society for Light Treatment and Biological Rhythms, chair of the scientific committee of the Dutch Sleep Wake Society and co-founder of both Chronotherapy Network Netherlands and the Good Light Group.

SPEAKERS



John Gottlieb, MD

Clinical Assistant Professor Psychiatry and Behavioral Sciences
Northwestern University, Feinberg School of Medicine, USA

Dr. John Gottlieb received his undergraduate degree from Oberlin College, attended medical school at the University of Illinois at Chicago, and completed a residency in psychiatry at Yale University in New Haven, CT. He is an Assistant Professor of Psychiatry at the Feinberg School of Medicine of Northwestern University in Chicago, IL. In his university position, John has been actively involved in residency education and supervision. In this role, he developed and teaches one of the first courses in psychiatric chronotherapy in the United States. In addition, he is the Medical Director of Chicago Psychiatry Associates, a group practice specializing in the evaluation and treatment of cyclic mood disorders. He is a member of the Training and Curriculum Committee of the International Society for Bipolar Disorders. John's clinical focus on bipolar disorders led to his interest in both the circadian underpinnings of affective disturbances and the use of biological rhythm-modifying interventions to treat these conditions. He regularly uses bright light therapy, dawn simulation, wake therapy, and darkness therapy. John's current research focus is on circadian phase variation in bipolar illness and the use of darkness therapy for manic symptoms.



Renske Lok, MSc

Faculty of Science and Engineering
Groningen Institute for Evolutionary Life Sciences, Netherlands

MSc Renske Lok studied Medical Biology at the University of Groningen. After graduation, she continued as a PhD candidate at the University of Groningen, department of Chronobiology, in which she investigated effects of light on human alertness. Other topics of interests include effects of light on psychological and physical performance, thermoregulation and sleep.



Colleen McClung, PhD

Professor of Psychiatry and Clinical and Translational Science
Department of Psychiatry, University of Pittsburgh, USA

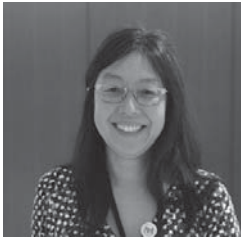
Dr. McClung received her Ph.D. from the University of Virginia in the lab of Dr. Jay Hirsh. She went on to do her postdoctoral work at the University of Texas Southwestern Medical Center with Dr. Eric Nestler. Through this work, Dr. McClung became interested in the role of the genes that control circadian rhythms and central rhythm disruptions in the development and treatment of psychiatric disorders. In 2005 she became an Assistant Professor in Psychiatry at UT Southwestern and in 2011 moved to the University of Pittsburgh School of Medicine to the Department of Psychiatry as an Associate Professor and was subsequently promoted to Professor in 2017.



Ludovic Mure, PhD

Staff Scientist at Salk Institute for Biological Studies, USA

Ludovic Mure obtained his Ph.D. in the laboratory of Howard Cooper (Lyon, France) where he worked on non-visual photoreception. He then joined the Panda lab at the Salk Institute (La Jolla, US) in 2011 where he continued to tackle the mechanisms by which light is perceived and how light controls non-visual functions, in particular, the circadian clock. He uses an interdisciplinary approach coupling transcriptomics to neuroscience and bio-computation methods.



Dorothy Sit, MD

Associate Professor of Psychiatry and Behavioral Sciences
Northwestern University, Feinberg School of Medicine, USA

Dorothy Sit, M.D. is the 2018-2020 SLTBR President. Her research focus is on the development of novel treatments and new applications for existing therapies for patients with Bipolar Disorders, Treatment Refractory Depression and Perinatal Mood Disorders. She is particularly interested in clinical trials research and recently completed her placebo controlled RCT on adjunctive midday bright light therapy for bipolar depression (Sit D et al, Am J Psychiatry, 2018). She is now planning new studies to investigate the contributions of the circadian system and the depression neural pathways in the antidepressant response to bright light. As a clinician-educator, Dr. Sit provides training and supervision of PGY3 psychiatry residents on the assessment and management of women with mood disorders during pregnancy, postpartum and the preconception stages of planning. She serves on hospital based committees, scientific advisory committees, and provides peer reviews for several major journals, book publishers and grant agencies.



Michael A. Young, PhD

Chair, Department of Psychology, Professor of Psychology
Illinois Institute of Technology, USA

Michael A. Young, Ph.D. is Professor and Chair in the Department of Psychology at Illinois Institute of Technology in Chicago. Previously he was Associate Professor in the Departments of Psychiatry and Psychology at Rush Medical Center (1980-1996) and associate editor of the Journal of Abnormal Psychology (2006-2014). His research focuses on seasonal affective disorder, emotion regulation and cognitive processes in depression, and the structure and course of psychopathology. He was president of SLTBR from 2002-2004.



Phyllis C. Zee, MD, PhD

Chief of Sleep Medicine in the Department of Neurology, Benjamin and Virginia T. Boshes
Professor of Neurology, Professor of Neurology (Sleep Medicine)
Northwestern University, Feinberg School of Medicine, USA

As Director of the Center for Circadian and Sleep Medicine, Dr. Zee oversees an interdisciplinary program in basic and translational sleep and circadian rhythm research, and findings from her team have paved the way for innovative approaches to improve sleep and circadian health. Her research focuses on understanding the mechanisms that link alterations in sleep, circadian rhythms and sleep disorders with neurological and cardio-metabolic disorders, as well as the development of treatments for sleep and circadian based disturbances in clinical populations. She is principal investigator of an NIA Program Project Grant and serves as a co-investigator in several NIH funded studies to understand the mechanisms linking sleep quality and circadian alignment with neurocognitive impairment, mood, cardiovascular and metabolic risk in populations at risk for sleep and circadian disorders.



Jamie Zeitzer, PhD

Associate Professor (Research) of Psychiatry & Behavioral Sciences (Sleep Medicine)
Stanford University, USA

For more than 20 years, Dr. Zeitzer has researched the fundamental causes of alterations in sleep and circadian function in humans. Using such a physiologic basis, he has been involved in the assessment and development of countermeasures for a number of circadian- and sleep-based disruptions in both healthy individuals and those with traumatic brain injury, breast cancer, spinal cord injury, bipolar disorder, Alzheimer's disease, and schizophrenia. His most recent work has focused on human centric lighting and the use of mobile technology to assess and change sleep and psychiatric health.

ORAL SPEAKERS

Ali Amidi, PhD, Aarhus University, Denmark: The Effect of Systematic Light Exposure to Reduce Cancer-related Fatigue (CRF) in Women Treated for Breast Cancer: A Randomized Controlled Trial of Circadian Active versus In-active Light Stimulation.

M.N. Böhmer, Erasmus MC, University Medical Center Rotterdam, Netherlands: 1) Bright-study: the effect of dynamic indoor lighting on sleep and mood in elderly with intellectual disabilities living in group home facilities. 2) Are we still in the dark? A systematic review on light exposure, sleep and mood in the general population.

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A. Shankar, PhD, University of Alaska Fairbanks, USA. SAD rats: Effects of short photoperiod on sleep and carbohydrate consumption in grass rats.

Karin Smolders, PhD, Eindhoven University of Technology, Netherlands: A behaviorbased assessment of attitude toward sleep hygiene and chronotype-dependent differences in the engagement in sleep-promoting behaviors.

O. Stefani, PhD, University of Basel, Switzerland: Effects of lighting with continuously changing color temperature and illuminance on Melatonin Profile, Skin Temperature and Sleep.

B. van de Zande, PhD, Signify, Eindhoven, Netherlands: Light and vitality: effects of bright office white light on workers' performance, well-being, sleep and appreciation.

L.M. Wu, PhD, Northwestern University Feinberg School of Medicine, USA: The association between assignment to dim or bright hospital room and symptom burden during stem cell transplantation: A longitudinal pilot study.

CONTINUING EDUCATION CREDITS

Satisfactory Completion

Learners must complete an evaluation form to receive a certificate of completion. Your chosen sessions must be attended in their entirety. Partial credit of individual sessions is not available. If you are seeking continuing education credit for a specialty not listed below, it is your responsibility to contact your licensing/certification board to determine course eligibility for your licensing/certification requirement.

Physicians



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In support of improving patient care, this activity has been planned and implemented by Amedco LLC and Society for Light Treatment and Biological Rhythms. Amedco LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

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Psychologists

This course is co-sponsored by Amedco and Society for Light Treatment and Biological Rhythms. Amedco is approved by the American Psychological Association to sponsor continuing education for psychologists. Amedco maintains responsibility for this program and its content. 17.75 hours.

The following state boards accept courses from APA providers for Counselors: AK, AR, AZ, CA, CO, CT, DC, DE, FL, GA, HI, IA, ID, IL, IN, KS, MD, ME, MO, NC, ND, NH, NE, NJ, NM, NV, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, WI, WY

AL / Counselors: Activities not providing NBCC approval may be approved by the Board for individual licensees upon receipt of acceptable documentation prior to the activity. Please send course details to your licensing board for approval BEFORE the event. No approvals afterward by the board.

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MA / MFTs: Participants can self-submit courses not approved by the MAMFT board for review.

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Definition of Financial Relationship:

Financial relationships are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria for promotional speakers' bureau, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received, or expected. ACCME considers relationships of the person involved in the CME activity to include financial relationships of a spouse or partner. Contracted research includes research funding where the institution gets the grant and manages the fund's and the person is the principal or named investigator on the grant. There is no minimum dollar amount for relationships.

Definition of Commercial Interest:

A commercial interest is any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients. Providers of clinical service directly to patients are not commercial interests (unless the provider of clinical service is owned, or controlled by, a commercial interest)

Disclosure:

In the past 12 months, have you or your spouse/partner had a financial relationship with any commercial interest whose products/services are related to your educational content in this activity?

The following speakers have disclosures:

Speaker	Disclosure
David Avery	UpToDate: other
Babette Bais	Signify: other
Christian Cajochen	Toshiba Materials: Research Grant Site Principal Investigator
Marijke Gordijn	Chrono@Work: Stock Shareholder
Colleen McClung	Janssen: Research Grant Site Principal Investigator and Consultant
Bianca van der Zande	Signify: employee
Luc Schlangen	Signify: Employee
Phllis Zee	Jazz: Consultant; Merk: Scientific/Medical Advisory Board Member; Eisai: Consultant; Teva: Stock Shareholder; Harmony: Scientific/Medical Advisory Board Member and Research Grant Site Principal Investigator

These speakers have nothing to disclose:

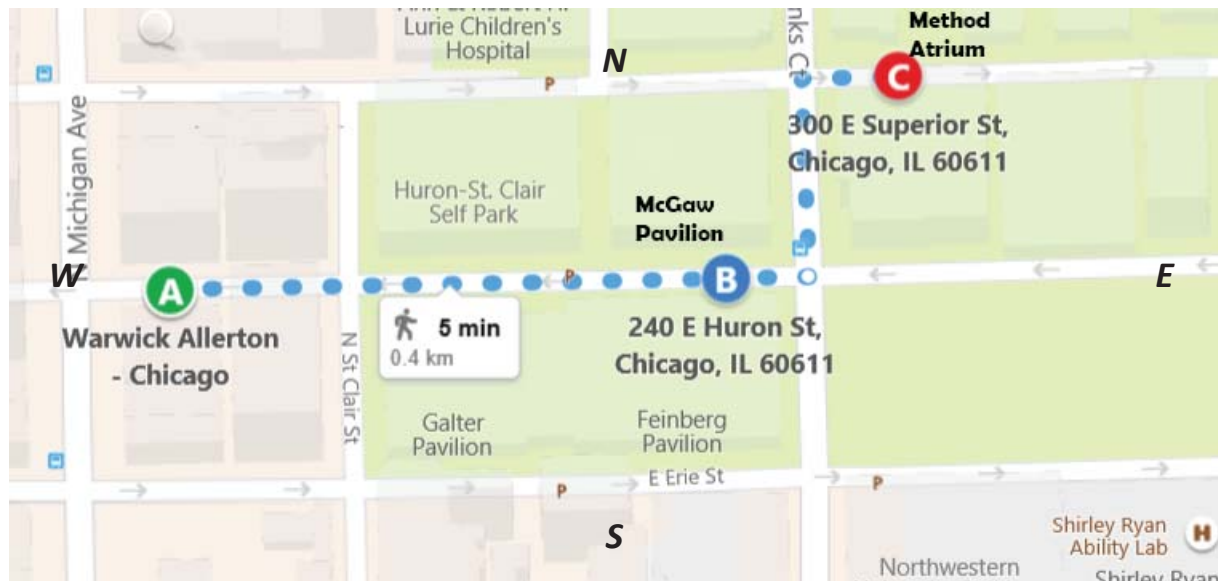
Ali Amidi	John Gottlieb	Anusha Shankar
Mikhail Blagonravov	Roe Gutman	Dorothy Sit
Mylene Böhmer	Lauren Hartstein	Karin Smolders
Patrice Bourgin	Heekyung Hong	Oliver Stefani
Inger Burnett-Zeigler	Asuka Ishihara	Byron Turner
Josefine Danielsen	Andries Kalsbeek	Forrest Webler
Yvonne de Kort	Maajke Kompier	Lisa Wu
Jan de Zeeuw	Renske Lok	Michael Young
Charmane Eastman	Klaus Martiny	Yashar Yousefzadehfard
Thomas Erren	Deepa Mathew	Jamie Zeitzer
Diego Fernandez	Ludovic Mure	

POSTERS

Poster Number	Abstract Number	Title
1	A2	Synchrony of Sleep-Wake Cycles with Lunisolar Gravitational Force Changes in a Rapid-cycling Bipolar Patient
2	A34	Critically-Timed Wake and Light Therapy: Mood Effects on Premenstrual, Peripartum and Menopausal Depression Depend on Melatonin-Sleep Timing
3	A32	Loss of circadian rhythmicity of renin-angiotensin-aldosterone system and sodium and potassium balance in lupus nephritis mice
4	A29	Optimized indoor daylight exposure through 2-layered versus 3-layered window glass in residential housing: sleep, visual comfort and energy consumption
5	A30	ROOM-LIGHT: Dynamic LED-light as treatment for depressed inpatients – a feasibility trial
6	A3	Health Effects of Year-Round Daylight Saving Time: Would It Create More Circadian Desynchrony?
7	A24	Association between the evening use of electronic media, sleep, and chronotypes of employees in Japan
8	A35	NIF and IF effects of different light scenarios in a real-life office setting
9	A23	Adjunctive Triple Chronotherapy in the Accelerated Treatment of Acute Depression in the Adolescent Population
10	A5	Effects of extended darkness on daytime and nighttime melatonin production in normotensive and spontaneously hypertensive rats
11	A45	Human circadian rhythm studies: Practical guidelines for inclusion/exclusion criteria and protocol
12	A21	The psychological and physiological effects of fluctuated lighting on healthy participant
13	A11	The Effect of Systematic Light Exposure on Vigilance and Attention in Clinically Fatigued Women Recently Treated for Breast Cancer
14	A4	A randomized, double-blind controlled clinical trial of light therapy for pregnant women with major depressive disorder
15	A10	Neurocognitive assessment – sensitivity to chronotype and time of day
16	A41	Decoding the ‘spectral diet’

DIRECTIONS

Route from Warwick Allerton (A) to McGaw Pavillion (B) and Method Atrium (C)



SLTBR Banquet Dinner Cruise Mystic Blue at Navy Pier Friday, June 21

Boarding begins at 18:00

Ship sails at 18:30

Public Transportation Options:
CTA Bus #66 (walk to Fairbanks and Huron
- bus leaves every 11 minutes)

Taxi / Uber / Lyft

...or walking; from the Warwick-Allerton,
distance is 1.2 miles (1.9km); 25 minutes.



Notes: _____