

The 6th Annual

Sleep and Circadian Science Research Day



Thursday, November 4th 2021

9:30 am – 5:15 pm
University Club
123 University Place
Pittsburgh (Oakland)

Program Overview

The 6th Annual Sleep and Circadian Science Research Day is a full-day inter-disciplinary event hosted by the University of Pittsburgh Center for Sleep and Circadian Science. The purpose of this conference is to bring together individuals from diverse disciplines from the University of Pittsburgh's Schools and area partners to disseminate innovative sleep-circadian research, promote the translation of basic science into clinical practice, and advance the science and practice of sleep medicine. This year's research symposia emphasize research on sleep, physical health, and mental health. The David J. Kupfer Lecture keynote lecture centers on sleep and oxidative stress.

Target Audience

Clinicians, researchers, and students in fields relevant to sleep-circadian research or the practice of sleep medicine, including (but not limited to) psychiatry, psychology, sleep medicine, neurology, nursing, and pulmonary & critical care medicine.

Learning Objectives

Sleep, Circadian Rhythms, and Mother-Infant Health

Marquis Hawkins, PhD

Sleep moderates the associations between physical activity and gestational weight gain

Learning Objectives:

1. Learn how sleep and physical activity can jointly impact maternal health in pregnancy

Lauren DePoy, PhD

Gestational Circadian Rhythm Disruption Induces Sex-specific Substance Use-related Phenotypes in Mice

Learning Objectives

1. Identify how circadian rhythms are disrupted and measured, non-invasively, in animal models.
2. What behavioral paradigms can be used to model substance use and mood-related behavior in animal models?

Rachel Kolko, PhD

Addressing sleep and circadian rhythms during the perinatal period to promote maternal and infant health

Learning objectives:

1. Describe changes in maternal sleep and circadian rhythms that occur during the perinatal period and their role in maternal-infant obesity risk
2. Discuss behavioral intervention approaches that target sleep and circadian rhythms among pregnant and postpartum individuals, including adaptations to address the unique challenges of the perinatal period

'Sleep and Circadian Rhythms in Operational Settings'

Alice LaGoy, M.S.

Can't afford to lose sleep: the operational relevance of sleep loss related decrements in sensorimotor function

Learning objectives:

1. Discuss the prevalence of sleep loss in operational settings
2. Describe the importance of sensorimotor function to operational performance
3. Discuss the impact of sleep loss on different aspects of sensorimotor function

Michelle Stepan, Ph.D.

Cognitive Deficits caused by Sleep loss are Mitigated by Firefighter-relevant Physical Exertion

Learning objectives:

By the end of this talk, you should be able to:

- Describe how sleep loss and acute physical exertion independently affect cognitive processes
- Identify the role of physical exertion in mitigating cognitive deficits caused by sleep loss, including potential mechanisms

P. Daniel Patterson, Ph.D., N.R.P.

Sleep, fatigue, and safety among paramedics and other first responders

Learning objectives:

- 1: To gain awareness of the magnitude of poor sleep quality and fatigue among emergency responders
- 2: To gain awareness of the first ever evidence based guideline for fatigue risk management - which happens to be tailored to emergency responders
- 3: Shift work - long shifts - are not going away - To gain awareness of intra-shift strategies that may help mitigate fatigue and the impact that shift work has on health

David J. Kupfer Keynote Lecture

The Impact of Circadian Misalignment on Health

Kenneth Wright, PhD

This talk will highlight mechanisms by which circadian misalignment dysregulates human physiology with implications for human health.

CME Accreditation and Designation Statement

In support of improving patient care, the University of Pittsburgh is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME) and the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Physicians

The University of Pittsburgh School of Medicine designates this live activity for a maximum of 4.25 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Nursing (CNE)

The maximum number of hours awarded for this Continuing Nursing Education activity is 4.25 contact hours.

Other health care professionals

Other health care professionals will receive a certificate of attendance confirming the number of contact hours commensurate with the extent of participation in this activity.

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Faculty Disclosure

All individuals in a position to control the content of this education activity including members of the planning committee, speakers, presenters, authors, and/or content reviewers have disclosed all relevant financial relationships with any entity producing, marketing, re-selling, or distributing health care goods or services, used on, or consumed by, patients.

The following relevant financial relationships were disclosed:

Adam Bramoweth, PhD

Consultant: Noctem LLC

Daniel Buysse, MD

Consultant: BeHealth, American Academy of Physician’s Assistants, Bayer, CME Institute, Ebb Therapeutics, Eisai, Weight Watchers, International, Emmi Solutions

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Faith Luyster, PhD

Grant/Research Support: Inspire Medical Systems, Inc

Colleen McClung, PhD

Grant/Research Support: Janssen Pharmaceuticals

Consultant: Janssen Pharmaceuticals

Sanjay Patel, MD

Grant/Research Support: Bayer Pharmaceuticals, Philips Respironics

Consultant: American Academy of Sleep Medicine

Rebecca C. Thurston, PhD

Consultant: Astellas Pharma, Pfizer, Procter & Gamble

No other planners, members of the planning committee, speakers, presenters, authors, content reviewers and/or anyone else in a position to control the content of this education activity have relevant financial relationships to disclose.

Program Schedule

9:00am - 9:55 am

Ballroom A

Registration & Continental Breakfast

9:55 - 10:00am

Ballroom B

Welcoming Remarks

Introduction: [Adriane Soehner, PhD](#)
Assistant Professor of Psychiatry

10:00am - 11:20am

Ballroom B

**Morning Symposium :
Sleep, Circadian Rhythms, and Mother-Infant Health**

Chair: [Meredith Wallace, PhD](#)
Associate Professor of Psychiatry, Statistics, and Biostatistics

Panelists: [Rachel Kolko, PhD](#)
Assistant Professor of Psychiatry
Addressing Sleep and Circadian Rhythms during the Perinatal Period to Promote Maternal and Infant health

[Marquis Hawkins, PhD](#)
Assistant Professor of Public Health
Sleep Moderates the Associations Between Physical Activity and Gestational Weight Gain

[Lauren DePoy, PhD](#)
Postdoctoral Scholar, Psychiatry
Gestational Circadian Rhythm Disruption Induces Sex-specific Substance Use-related Phenotypes in Mice

Discussant: [Janet M Catov, PhD, MS](#)
Associate Professor of Obstetrics, Gynecology and Reproductive Sciences, Epidemiology, and Clinical and Translational Sciences
Director, Health and Clinical Research, Magee-Womens Research Institute

11:40am - 12:40pm

Ballroom B

David J. Kupfer Keynote Lecture

Keynote [Kenneth Wright, PhD](#)
Lecturer: Professor, Department of Integrative Physiology
University of Colorado, Boulder
The Impact of Circadian Misalignment on Health

12:40pm - 1:40pm

Ballroom A

Lunch / Exhibitor Session

1:40pm - 3:00pm

Ballroom B

**Afternoon Symposium:
Sleep and Performance in Operational Settings**

Chair: [Kathryn Roecklein, PhD](#)
Associate Professor of Psychology

Panelists: [Alice LaGoy](#)
Graduate Student, Sports Medicine and Nutrition
Can't Afford to Lose Sleep: The Operational Relevance of Sleep Loss Related
Decrements in Sensorimotor Function

[Michelle Stepan, PhD](#)
Postdoctoral Scholar, Psychiatry
Cognitive Deficits Caused by Sleep Loss are Mitigated by Physical Exertion: Implications
for Firefighters

[Daniel Patterson, Ph.D., N.R.P.](#)
Associate Professor of Emergency Medicine
James O. Page Professor of Emergency Healthcare Worker Safety
Sleep and fatigue mitigation in Emergency Medical Services

Discussant: [Daniel J. Buysse, MD](#)
Professor of Psychiatry and Clinical and Translational Science

3:20pm - 4:00pm

Ballroom B

Data Blitz

Chair: [Adam Bramoweth, PhD](#)
Research Health Scientist & Staff Psychologist
VA Pittsburgh Healthcare System

4:00pm - 5:00pm

Ballroom A

Networking Cocktail Reception & Poster Session

5:00pm - 5:15pm

Ballroom A

Awards & Closing Remarks

Presenter: [Adriane Soehner, PhD](#)
Assistant Professor of Psychiatry

5:15pm

Ballroom A

Adjournment

PROGRAM FACULTY

Name/Credentials, Academic title (or other appropriate title), Institutional affiliation, City and State

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