



**WILLIAM C. DEMENT**  
**SLEEP AND CHRONOBIOLOGY**  
**BEHAVIORAL SCIENCE RESEARCH**  
**APPRENTICESHIP**

**Retreat Colloquium**

18-20 August 2019

Marcuvitz Auditorium, Sidney Frank Hall  
Brown University, Providence, RI

# Summer Sleep Retreat, 2019

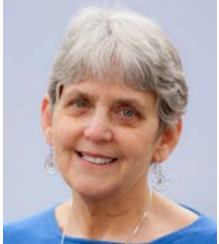
## Summer Sleep Retreat, 2019

| Sunday | Event                                                                               | Topic                                         |                                                                                                             |
|--------|-------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 1700   | Dinner & Fun                                                                        | BBQ at Avalon at Center Place;<br>Fun & Games |                                                                                                             |
|        |                                                                                     |                                               |                                                                                                             |
| Monday | Event                                                                               | Speaker                                       | Topic                                                                                                       |
| 0915   | Snack                                                                               |                                               |                                                                                                             |
| 0945   |    | Earl Crew, PhD<br>Young Investigator          | Sleep in Parkinson’s disease:<br>Clinical correlates and<br>relationships with other non-<br>motor symptoms |
| 1030   | Break                                                                               |                                               |                                                                                                             |
| 1100   |   | Spencer Nielson<br>Dement Fellow              | A New Sleep Tracking Device:<br>The Actigraph                                                               |
| 1130   |  | Maggie Westerland<br>Dement Fellow            | Monitoring Sleep: Past, Present,<br>and Future                                                              |
| 1145   |  | Cherryse Ulsa<br>Dement Fellow                | The Effects of Sleep and Alcohol<br>on Hippocampus-Dependent<br>Learning in Adults                          |

## Summer Sleep Retreat, 2019

| <b>Monday</b> | <b>Event</b>                                                                        | <b>Speaker</b>                               | <b>Topic</b>                                                                          |
|---------------|-------------------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------|
| <b>1200</b>   | <b>Lunch</b>                                                                        |                                              |                                                                                       |
| <b>1300</b>   |    | Emily Abel, MS<br>Young Investigator         | Sleep in Children with and At-Risk for Autism Spectrum Disorder                       |
| <b>1400</b>   | <b>Break</b>                                                                        |                                              | <b>Poster Viewing</b>                                                                 |
| <b>1500</b>   |   | Daphne Boudreau,<br>Dement Fellow            | Sleep Spindles and IQ Among Children                                                  |
| <b>1515</b>   |  | Reed Smith,<br>Dement Fellow                 | CLOCK Gene Variants and Effects on Sleep Duration                                     |
| <b>1530</b>   |  | Sammy Dahliwal,<br>MSc<br>Young Investigator | The Role of Napping and Daily Stress Appraisals in the Onset of Postpartum Depression |
| <b>1630</b>   | <b>Small Groups</b>                                                                 |                                              | Break Out Sessions                                                                    |
| <b>1800</b>   | <b>Dinner</b>                                                                       |                                              |                                                                                       |
| <b>1915</b>   | <b>Fun Night</b>                                                                    |                                              |                                                                                       |

## Summer Sleep Retreat, 2019

| <b>Tuesday</b> | <b>Event</b>                                                                        | <b>Speaker</b>                                       | <b>Topic</b>                                          |
|----------------|-------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------|
| <b>0900</b>    | <b>Snack</b>                                                                        |                                                      |                                                       |
| <b>0930</b>    |    | Anne Venner, PhD<br>Young Investigator               | Neural Circuits Governing Arousal State Control       |
| <b>1030</b>    | <b>Break</b>                                                                        |                                                      |                                                       |
| <b>1100</b>    |   | Emily Pitts,<br>Dement Fellow                        | Association of Circadian Phase and Puberty            |
| <b>1115</b>    |  | Abby Cirelli,<br>Dement Fellow                       | Sleep Spindles as a Function of ADHD Symptom Severity |
| <b>1130</b>    |  | Desana Kocavska,<br>MD, PhD<br>Visiting Investigator | Population-based Neuroscience of Pediatric Sleep      |
| <b>1215</b>    |  | Mary A. Carskadon,<br>PhD, Program Director          | Thanks and Farewell                                   |
| <b>1230</b>    | <b>Lunch</b>                                                                        |                                                      |                                                       |

# Summer Sleep Retreat, 2019

## Young Investigator Presentations

**Earl Crew, BA, MS, PhD**

**Postdoctoral Fellow, Alpert Medical School Brown University**

### **Sleep in Parkinson's disease: Clinical correlates and relationships with other non-motor symptoms**

While the motor symptoms of Parkinson's disease (PD) are often the primary clinical focus, the non-motor symptoms of PD (sleep, mood, pain, cognition) are frequently cited as some of the most debilitating consequences of the disease affecting quality of life. This presentation will provide an overview of sleep and circadian dysfunction in PD and present a series of findings from my predoctoral/dissertation work investigating associations between sleep and other non-motor symptoms in PD. Implications will be discussed with regard to possible targets for intervention to improve the clinical management of patients with PD.

**Emily Abel, MS**

**Hilibrand Fellow, Yale Child Study Center, New Haven, CT**

### **Sleep in Children with and At-risk for Autism Spectrum Disorder**

Children with autism spectrum disorder (ASD) experience elevated sleep problems across development. These sleep problems include extended night waking, short sleep duration, early morning waking, and increased sleep onset latency and are known to impair daytime functioning and quality of life. Despite a large body of literature characterizing sleep in ASD from early childhood through adulthood, little is known about the course of sleep problems prior to a child's diagnosis. This talk will address early sleep trajectories in infants and toddlers who later develop ASD, using a multimodal assessment of sleep. Through a case series approach, we will explore whether sleep problems precede ASD symptoms in early development or whether they co-develop across time.

**Sammy Dahliwal, MSc**

**Predoctoral Fellow, Mothers and Babies Lab, George Washington University, and Children's National Sleep Research Program**

### **The Role of Napping and Daily Stress Appraisals in the Onset of Postpartum Depression**

Sleep disruption affects 85% of pregnant women, contributes to psychological distress, and may precipitate postpartum depression. Yet, the influence of daytime sleep on maternal mood remains understudied. How does compensatory "napping" affect daytime functioning, social interactions, and day-to-day stress appraisals? Does napping relate to the onset and progression of depressive symptoms independent of nighttime sleep? These questions were assessed using physiological, actigraphic, and ecological measures of pregnant women. Findings inform the understanding of habitual napping behavior in relation to stress appraisals and maternal mood, highlight current clinical applications, and implicate next steps in this ongoing work.

# Summer Sleep Retreat, 2019

## Young Investigator Presentations

**Anne Venner, PhD,**

**Instructor, Beth Israel Deaconess Medical Center, Boston, MA**

### **Neural circuits governing arousal state control**

The neural circuitry governing the control of sleep and wakefulness is complex and remains poorly understood. However, with an ever-expanding biological toolbox of tricks and techniques, the circuit mechanisms by which the brain elicits arousal or pushes one towards sleep are rapidly being uncovered and the once popular models of arousal control are undergoing exciting revisions. Here, I will present an overview of the cutting-edge techniques I employ in my own research, and provide examples of the way I have used these tools to investigate the role of several 'canonical' arousal-promoting neuronal populations in sleep-wake control.

## Special Visitor Presentation

**Desana Kocavska, MD, PhD**

**Postdoctoral Researcher, Netherlands Institute for Neuroscience, Sleep and Cognition Group**

### **Population-based Neuroscience of Pediatric Sleep**

The field of neuroscience has undoubtedly provided foundational ideas about the functions of sleep, and in particular its importance for the developing brain. These findings however have not been sufficiently translated in recommendations and clinical practice. In order to bring sleep higher on the public-health-relevance-scale, we conducted a series of large-scale longitudinal studies aiming to chart neurobiological underpinnings and consequences of sleep patterns and problems across early development. Importantly, we studied these relations in cohorts sampled from the general population, which is expected to more closely represent "real-life" settings and the continuum between typical and atypical development.

# Summer Sleep Retreat, 2019

## 2019 William C. Dement Fellows

**Daphne Boudreau**

Rising junior, University of Rhode Island

**Abby Cirelli**

Rising senior, Loyola University-Maryland

**Spencer Nielson**

Rising junior, Brigham Young University

**Emily Pitts**

Rising senior, Gonzaga University

**Reed Smith**

Rising junior, University of Alabama Birmingham

**Cherrysse Ulsa**

Rising senior, Bates College

**Maggie Westerland**

Rising junior, University of Wisconsin-Eau Claire

# Summer Sleep Retreat, 2019

## Research Apprenticeship Faculty, Staff, & Trainees

### APPRENTICESHIP FACULTY

**Alpert Medical School of Brown University,  
Department of Psychiatry and Human  
Behavior**

Mary A. Carskadon, PhD, Director

David Barker, PhD

Rachel Herz, PhD

Jared Saletin, PhD

**Alpert Medical School of Brown University,  
Department of Medicine**

Katherine M. Sharkey, MD, PhD

**CPS, Inc., Newport, RI**

Eliza Van Reen, PhD

**Lifespan Physician Group, Psychiatry**

Jared Minkel, PhD

### SLEEP LAB TRAINEES, E.P. BRADLEY HOSPITAL

Elize Koopman-Verhoeff, MSc, Visiting Scholar,  
Netherlands Institute for Health Sciences,  
Erasmus Medical Center

Patricia Wong, Psychology Resident, Behavioral  
Medicine Track, Alpert Medical School of  
Brown University

### SLEEP LAB RESEARCH STAFF, E.P. BRADLEY HOSPITAL

David Bushnell, Sr. Research Assistant

Corinne Dogherty, Volunter HS student

Allie Elkhadem, Supervising Tech

Max Elliot, Administrative Secretary

Jeffrey Giguere, Research Volunteer

Caroline Gredvig-Ardito, Data Manager & IRB  
Coordinator

Ashrita Iyengor, Research Volunteer

Leslie McCauley, Supervising Tech

Candice Montenegro, Supervising Tech

Jack Plageman, Supervising Tech

Jess Weathers, Senior Supervising Tech

Erika Yamazaki, Research Assistant

Jonathan Roberts, Former Super Tech and  
FOTSFSL!

### PERINATAL SLEEP RESEARCH STAFF, RI HOSPITAL

Julie Quattrucci, Research Assistant

### ACKNOWLEDGEMENTS

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