

## List of Publications

### **Impact of daily caffeine intake and timing on electroencephalogram-measured sleep in adolescents**

Jessica R. Lunsford-Avery, Scott H. Kollins, Sujay Kansagra, Ke Will Wang, Matthew M. Engelhard  
J Clin Sleep Med. 2022;18(3):877–884. Published Online: March 1, 2022 <https://doi.org/10.5664/jcsm.9736>  
Duke University School of Medicine  
Duke University

### **The complicated impact of media use before bed on sleep: Results from a combination of objective EEG sleep measurement and media diaries**

Morgan E. Ellithorpe, Ezgi Ulusoy, Allison Eden, Lindsay Hahn, Chia-Lun Yang, Robin M. Tucker  
Journal of Sleep Research, 08 February 2022; <https://doi.org/10.1111/jsr.13551>  
University of Delaware  
Michigan State University

### **Feasibility of two screen media reduction interventions: Results from the SCREENS pilot trial**

Rasmussen MGB, Pedersen J, Olesen LG, Kristensen PL, Brønd JC, Grøntved A  
LoS ONE 2021 16(11): e0259657. <https://doi.org/10.1371/journal.pone.0259657>  
Centre of Research in Childhood Health, Research Unit for Exercise Epidemiology, Department of Sports Science and Clinical Biomechanics  
University of Southern Denmark

### **Manual Annotation of Time in Bed Using Free-Living Recordings of Accelerometry Data**

Esben Lykke Skovgaard, Jesper Pedersen, Niels Christian Møller, Anders Grøntved and Jan Christian Brønd  
Sensors 2021, 21, 8442. <https://doi.org/10.3390/s21248442>  
Centre of Research in Childhood Health, Research Unit for Exercise Epidemiology, Department of Sports Science and Clinical Biomechanics  
University of Southern Denmark

### **How much does sleep vary from night-to-night? A quantitative summary of intraindividual variability in sleep by age, gender, and racial/ethnic identity across eight-pooled datasets**

Brett A. Messman, Joshua F. Wiley, Yang Yap, Natasha Yan Chi Tung, Isamar M. Almeida, Jessica R. Dietch, Daniel J. Taylor, Danica C. Slavish  
This research was supported by National Institute of Allergy and Infectious Diseases grant 1R01AI128359-01 and the 2021 International Collaborative Research Award sponsored by the Society for Health Psychology (SfHP)  
University of North Texas  
Monash University  
University of Arizona

### **FLUID study: study protocol for an open-label, single-centre pilot study to investigate the effect of Lemborexant on sleep management in Japanese subjects aged 50 years and older with Insomnia Disorder**

Ipppei Okada, Kunihiro Iwamoto, Seiko Miyata, Akihiro Fujimoto, Masaki Tanaka, Manabu Amano, Nao Matsuyama, Toshiaki Taoka, Shinji Naganawa, Norio Ozaki  
BMJ Open (2021) 11:e054885; <https://bmjopen.bmj.com/content/11/11/e054885>  
Nagoya University  
Eisai Co Ltd

## List of Publications

**Napping on the night shift and its impact on blood pressure and heart rate variability among emergency medical services workers: study protocol for a randomized crossover trial**

P. Daniel Patterson, Leonard S. Weiss, Matthew D. Weaver, David D. Salcido, Samantha E. Opitz, Tiffany S. Okerman, Tanner T. Smida, Sarah E. Martin, Francis X. Guyette, Christian Martin-Gill, and Clifton W. Callaway  
Trials (2021) 22:212; <https://doi.org/10.1186/s13063-021-05161-4>  
University of Pittsburgh

**Sleep quality and glycaemic variability in a real-life setting in adults with type 1 diabetes**

Rachel Brandt, Minsun Park, Kristen Wroblewski, Laretta Quinn, Esra Tasali, Ali Cinar  
Diabetologia, 64:2159–2169, 2021  
Illinois Institute of Technology  
University of Illinois at Chicago  
University of Chicago

**Beneficial effects of a high protein breakfast on fullness disappear after a night of short sleep in nonobese, premenopausal women**

Chia-Lun Yang, Robin M. Tucker  
Physiology & Behavior, Volume 229, 1 February 2021, 113269  
Michigan State University

**Evaluation of the Consensus Sleep Diary in a community sample: comparison with single-channel EEG, actigraphy, and retrospective questionnaire**

Jessica R. Dietch and Daniel J. Taylor  
Journal of Clinical Sleep Medicine, Published Online: March 5, 2021; <https://doi.org/10.5664/jcsm.9200>  
Stanford University School of Medicine  
University of Arizona

**Self-administered electroencephalography based sleep assessment: compliance and perceived feasibility in children and adults**

Jesper Pedersen, Martin Gillies Banke Rasmussen, Line Grønholt Olesen, Peter Lund Kristensen, and Anders Grøntved  
Sleep Science Practice 5, 8 (2021); <https://doi.org/10.1186/s41606-021-00059-1>  
University of Southern Denmark

**Associations between daily affect and sleep vary by sleep assessment type: What can ambulatory EEG add to the picture?**

Brett A. Messman, Danica C. Slavish, Jessica R. Dietch, Brooke N. Jenkins, Maiaten Brink and Daniel J. Taylor  
Sleep Health, Available online 14 January 2021; <https://doi.org/10.1016/j.sleh.2020.11.009>  
University of North Texas  
Chapman University  
Stanford University

## List of Publications

### **Performance of an ambulatory electroencephalogram sleep monitor in patients with psychiatric disorders**

Seiko Miyata, Kunihiro Iwamoto, Masahiro Banno, Junichi Eguchi, Satoshi Kaneko, Akiko Noda, Norio Ozaki  
Journal of Sleep Research, 28 December 2020; <https://doi.org/10.1111/jsr.13273>; 2020  
Nagoya University  
Chubu University  
The KAITEKI Institute - think tank and global research institute of Mitsubishi Chemical Holdings Corporation

### **Feasibility of Self-Administered Electroencephalography-Based Sleep Assessment in Children and Adults: Data From The SCREENS Pilot Trial**

Jesper Pedersen, Martin Gillies Banke Rasmussen, Line Grønholt Olesen, Peter Lund Kristensen and Anders Grøntved  
Sleep Science and Practice, Under Review, Oct 2020  
University of Southern Denmark

### **Ambulatory EEG-measured sleep associated with attention-deficit/hyperactivity disorder symptom severity among adolescents**

J. Lunsford-Avery; S. Kollins; C. Keller; M. Engelhard  
Journal of Sleep Research, Volume29, Issue S1  
Special Issue: Abstracts of the 25th Congress of the European Sleep Research Society, 22-24 September 2020  
Duke University Medical Center

### **Deep learning for automated sleep staging using instantaneous heart rate**

Niranjan Sridhar, Ali Shoeb1, Philip Stephens, Alaa Kharbouch, David Ben Shimol, Joshua Burkart, Atiyeh Ghoreyshi and Lance Myers  
Nature, npj Digital Medicine 3, 106 (2020)  
Verily Life Sciences (aka Google Life Sciences)

### **Wearable Sleep-EEG Device Use in Adolescents: A Feasibility and Acceptability Study**

Jessica Ruth Lunsford-Avery; Casey Keller; Scott H Kollins; Andrew D Krystal; Leah Jackson; and Matthew Morrow Engelhard  
JMIR mHealth and uHealth, Accepted August 2020  
Duke University

### **The Cycle of Daily Stress and Sleep: Sleep Measurement Matters**

Danica C Slavish, PhD, Justin Asbee, MA, Kirti Veeramachaneni, Brett A Messman, BA, Bella Scott, BA, Nancy L Sin, PhD, Daniel J Taylor, PhD, Jessica R Dietch, PhD  
Annals of Behavioral Medicine, kaaa053, <https://doi.org/10.1093/abm/kaa053>; August 2020  
University of North Texas  
University of Arizona  
Stanford University School of Medicine

### **Machine Learning Derived-Interpretative Algorithm Better Differentiates Sleep And Wake Epochs And Estimates Sleep Parameters From Wrist Actigraphy Data**

Haghighyegh, S. Khoshnevis, S. Smolensky, M. H. Diller, K. R. Castriotta, R. J.  
Associated Professional Sleep Societies (APSS), 2020, 34rd Annual Meeting, Sleep (43)  
The University of Texas at Austin  
University of Southern California



## List of Publications

### **The Cycle of Daily Stress And Sleep: Sleep Measurement Matters**

Slavish, D. C.1 Asbee, J.1 Veeramachaneni, K.2 Messman, B. Scott, B. Walker, J. Sin, N. L. Taylor, D. J. Dietch, J. Associated Professional Sleep Societies (APSS), 2020, 34rd Annual Meeting, Sleep (43)  
University of North Texas  
Louis University  
University of British Columbia  
The University of Arizona  
Palo Alto Veterans Affairs Health Care System

### **Sleep Monitoring With A Single Channel EEG Recorder in Patients with Psychiatric Disorders**

Miyata, S. Iwamoto, K. Banno, M. Ito, Y. Noda, A. Ozaki, N.  
Associated Professional Sleep Societies (APSS), 2020, 34rd Annual Meeting, Sleep (43)  
Nagoya University  
Chubu University

### **Characteristics of Overnight Blood Glucose Levels Are Related to Sleep Quality in People with Type 1 Diabetes**

Rachel Brandt, Minsun Park, Laurie T. Quinn, Minseung Chu, Youngkwan Song, Britt M. Burton-Freeman and Ali Cinar  
Diabetes, American Diabetes Association, 2020 Jun; 69(Supplement 1): 776-p  
Illinois Institute of Technology

### **Technical Performance Verification of Wearable and Home Sensor Devices Monitoring Sleep: Best Practices**

Friso Postma, Zhanna Rozenberg, Nikolai Shokhirev, Kevin Urban, Udi Rubin, Daniela Brunner  
Biological Psychiatry 87(9):S343, May 2020  
Cohen Veterans Bioscience

### **Genetics, Sweet Preference, and Short Sleep: Important Players in Food Choice?**

Robin M. Tucker  
2020 Super Summit Sweetener Systems Conference, March 24, 2020  
Michigan State University

### **Short-term efficacy of reducing screen media use on physical activity, sleep, and physiological stress in families with children aged 4–14: study protocol for the SCREENS randomized controlled trial**

Martin Gillies Banke Rasmussen, Jesper Pedersen, Line Grønholt Olesen, Søren Brage, Heidi Klakk, Peter Lund Kristensen, Jan Christian Brønd and Anders Grøntved  
BMC Public Health 20:380, 2020  
University of South Denmark

### **Multiple Dimensions of Sweet Taste Perception Altered after Sleep Curtailment**

Edward J. Szczygiel, Sungeun Cho and Robin M. Tucker  
Nutrients, 11(9); <https://doi.org/10.3390/nu11092015>; 2019  
Michigan State University



## List of Publications

### **The Effect of Sleep Curtailment on Hedonic Responses to Liquid and Solid Food**

Edward J. Szczygiel, Sungeun Cho and Robin M. Tucker  
Foods, 8(10), 2019  
Michigan State University

### **Performance assessment of new-generation Fitbit technology in deriving sleep parameters and stages**

Shahab Haghayegh, Sepideh Khoshnevis, Michael H. Smolensky, Kenneth R. Diller & Richard J. Castriotta  
Chronobiology International; <https://doi.org/10.1080/07420528.2019.1682006>; 2019  
University of Texas at Austin

### **When Sleep-Dependent Gist Extraction Goes Awry: False Composite Memories are Facilitated by Slow Wave Sleep**

Itamar Lerner, Tony P. Kerbaj and Mark A. Gluck  
The 41st Annual Meeting of the Cognitive Science Society, page 2119-2124, Montreal, Canada, July 27th, 2019  
Rutgers University

### **Computational Sleep Behavior Analysis: A Survey**

Sarah Fallmann and Liming Chen  
IEEE Access, Vol 7, page 142421-142440, 2019  
De Montfort University and Ulster University

### **Performance comparison of different interpretative algorithms utilized to derive sleep parameters from wrist actigraphy data**

Shahab Haghayegh, Sepideh Khoshnevis, Michael H. Smolensky, Kenneth R. Diller & Richard J. Castriotta  
Chronobiology International; <https://doi.org/10.1080/07420528.2019.1679826>; 2019  
University of Texas at Austin

### **Anesthesiology Resident Night Float Duty Alters Sleep Patterns: An Observational Study**

Lauren Dunn, Amanda Kleiman, Katherine Forkin, Allison Bechtel, Stephen Collins, Jennifer Potter, Christopher Kaperak, Siny Tsang, Julie Huffmyer and Edward Nemergut  
Anesthesiology 131(2):401–409, August 2019  
University of Virginia

### **Anesthesiology Resident Night Float Duty Alters Sleep Patterns: An Observational Study**

Lauren K. Dunn, M.D., Ph.D.; Amanda M. Kleiman, M.D.; Katherine T. Forkin, M.D.; Allison J. Bechtel, M.D.; Stephen R. Collins, M.D.; et al  
Anesthesiology, Newly Published on May 28, 2019; <https://doi.org/10.1097/aln.0000000000002806>; 2019  
University of Virginia & Washington State University

### **Accuracy of PurePulse photoplethysmography technology of Fitbit Charge 2 for assessment of heart rate during sleep**

Shahab Haghayegh, Sepideh Khoshnevis, Michael H. Smolensky & Kenneth R. Diller  
Chronobiology International, Published online: 16 Apr 2019  
University of Texas at Austin



## List of Publications

### **Actigraphic sleep tracking and wearables: Historical context scientific applications and guidelines, limitations, and considerations for commercial sleep devices**

Michael Grandner and Mary Rosenberger  
Sleep and Health, P.147, 2019  
University of Arizona  
Stanford University

### **Differences In Sleep Duration And Quality Between Weekdays And Weekends In Japanese Adults**

Seiko Miyata Kunihiro Iwamoto Motoo Ando Yuki Ito Aiko Noda Norio Ozaki  
Associated Professional Sleep Societies (APSS), 2019, 33rd Annual Meeting, Sleep (42)  
Nagoya University Graduate School of Medicine

### **Associations between chemosensory function, sweet taste preference, and the previous night's sleep in non-obese males**

Edward J. Szczygiel, Sungeun Cho, Margaret K. Snyder, Robin M. Tucker  
Food Quality and Preference, Volume 75, July 2019, Pages 105-112  
Michigan State University

### **Do Not Disturb, Shadyside Hospital Foundation grants lead to first-ever "sleep protection" breakthrough**

D'Antonio I. and Pituch D.W.  
The VOICE of UPMC Shadyside Winter 2017 (available online 2019)  
University of Pittsburgh Medical Center (UPMC)

### **Validity of survey measures of sleep duration, efficiency, and timing**

Dietch, J.R. and Taylor, D.J.  
Measurement and Analysis of Sleep and Circadian Dimensions Symposium  
Associated Professional Sleep Societies (APSS), 2019, 33rd Annual Meeting, Sleep (42)  
University of North Texas

### **Increased Hunger, Food Cravings, Food Reward, and Portion Size Selection after Sleep Curtailment in Women Without Obesity**

Chia-Lun Yang, Jerry Schnepp and Robin M. Tucker  
Nutrients Vol. 11(3), 663, 2019  
Michigan State University  
Bowling Green State University

### **Preliminary Results: Sleep Curtailment Results in Increased Portion Size Selection**

Chia-Lun, Yang, Christina Cobetto, Yusi Hu, Jerry Schnepp, and Robin Tucker  
Food & Nutrition Conference & Expo (FNCE), Washington D.C., Oct. 20-23, 2018  
Michigan State University  
Bowling Green State University

### **精神疾患を対象とした新規睡眠評価機器 (Zmachine) のPSGを用いた妥当性検証 Validation Using the PSG of New Sleep Evaluation Device Intended for Mental Disease (Zmachine)**

Iwamoto, Kunihiro  
Japanese Society of Sleep Research 43rd Annual Meeting, Sapporo, Japan, July 2018  
Nagoya University

## List of Publications

### **A Critical Review of Consumer Wearables, Mobile Applications and Equipment for Providing Biofeedback Monitoring Stress and Sleep in Physically Active Populations**

Peake, JM, Kerr, G, and Sullivan JP  
Frontiers in Physiology, June 2018 | Volume 9 | Article 743  
Queensland University

### **Effect of Night Float on Anesthesiology Resident Sleep Patterns: An Observational Study**

Dunn L., Kleiman A., Forkin K., Quigg M., Bechtel A., Huffmyer J. and Nemergut E.  
International Anesthesia Research Society (IARS), 2018 Annual Meeting  
University of Virginia

### **Daily Covariation Of Stress and EEG-Determined Sleep**

Veeramachaneni K, Dietch JR, Slavish DC, Taylor DJ  
Associated Professional Sleep Societies (APSS), 2018, 32st Annual Meeting, Sleep (41)  
University of North Texas

### **Daily Positive Affect Predicts EEG-Determined REM Duration**

Hale BS, Messman B, Brown A, Banzuelo H, Nguyen T, Slavish D, Taylor DJ, Dietch JR  
Associated Professional Sleep Societies (APSS), 2018, 32st Annual Meeting, Sleep (41)  
University of North Texas

### **Characterization of the Relationships Between Sleep Duration, Quality, Architecture, and Chemosensory Function in Nonobese Females**

Szczygiel, EJ., Cho, S., Tucker, RM.  
Chemical Senses, 2018  
Advanced Access Publication Date: 7 March 2018  
Michigan State University

### **Sleep Devices: Wearables and Nearables, Informational and Interventional, Consumer and Clinical**

Bianchi, MT.  
Metabolism: clinical and experimental, 2018  
Advanced Access Publication Date: 8 December 2017  
Harvard Medical School/Massachusetts General Hospital

### **Landscape Analysis of Biometric Monitoring Devices (BMDs) Utilized in Assessing Cognition, Sleep and Mobility in Alzheimer's Disease and Other Age-Related Neurological Diseases**

Kern V., Rhodes J., Karlin D., Fitzer-Attas C., Ropacki M., et al  
Alzheimer's Association International Conference (AAIC), 2017  
Critical Path Institute, Biogen, Pfizer, CHDI Foundation, Loma Linda University, et al

### **Where is your (mind)fulness? It matters for sleep.**

Lipsky, J., Acero, P., Cho, L., Kreidler, P., Zhu, Z., Britton, W.  
Association for Psychological Science (APS), 2017, 29th Annual Meeting  
Brown University



## List of Publications

### **Estimation of Sleep Stages using Cardiac and Accelerometer Data from a Wrist-Worn Device**

Beattie, Z., Pantelopoulos, A., Ghoreyshi, A., Oyang, Y., Statan, A., Heneghan, C.  
Associated Professional Sleep Societies (APSS), 2017, 31st Annual Meeting, Sleep (40)  
Fitbit, Inc.

### **Advances In the Management of Chronic Insomnia**

Kay-Stacey M. and Attarian H.  
British Medical Journal (BMJ), 2016;353:i2123  
Northwestern University

### **Current research impacting long-duration space flight sleep and fatigue**

Moomaw, R.  
American Osteopathic Association (AOA), 2016, 122nd Annual Meeting  
NASA - Johnson Space Center

### **Twenty-four Hours of Sleep, Sedentary Behavior, and Physical Activity with Nine Wearable Devices**

Rosenberger, ME.<sup>1</sup>, Buman, MP.<sup>2</sup>, Haskell, WL.<sup>1</sup>, McConnell, MV.<sup>1</sup>, Carstensen, LL.<sup>1</sup>  
Medicine & Science in Sports & Exercise, 2016, Vol. 48(3), 457–465  
<sup>1</sup>Stanford University  
<sup>2</sup>Arizona State University

### **Evaluation of an Automated Single-Channel Sleep Staging Algorithm**

Wang, Y., Loparo, K., Kelly, M., Kaplan, R.  
Nature and Science of Sleep, 2015, Vol. 7, 101-111

### **Performance Evaluation of an Automated Single-Channel Sleep Staging Algorithm**

Wang, Y., Loparo, K., Kaplan, R.  
Associated Professional Sleep Societies (APSS), 2015, 29th Annual Meeting, Sleep (38)

### **A Pilot Study: Delirium in the Intensive Care Unit: Utilizing the Zmachine Sleep Monitor for Assessment**

Whitcomb, J. J., Edwards, S., Ethridge, E., Fogle, S.  
UCLA Department of Nursing, 14th Annual Research and Evidence-Based Practice Conference, 2015  
Also appears on HEHD/SOE Research Forum, Clemson University  
Clemson University

### **Performance Evaluation of an Automated Single Channel Sleep-Wake Detection Algorithm**

Kaplan, R., Wang, Y., Loparo, K., Kelly, M., Bootzin, R.  
Nature and Science of Sleep, 2014, Vol. 6, 113-122

### **Classification of Stage-1 in a Single Channel Wake-Sleep Detection System**

Kaplan, R. F., Wang, Y., Bootzin, R.R., Loparo, K.A.  
Associated Professional Sleep Societies (APSS), 2009, 23rd Annual Meeting, Sleep (32)

### **A Single Channel Wake-Sleep Detection System**

Wang, Y., Kaplan, R. F., Bootzin, R. R., and Loparo, K. A.  
Associated Professional Sleep Societies (APSS), 2008, 22nd Annual Meeting, Sleep (31)





## List of Publications

**Evaluation of an automated system for in-home behavioral treatment of chronic insomnia: Part III**

Kaplan, R. F., Wang, Y., Bootzin, R.R., Loparo, K.A.  
Associated Professional Sleep Societies (APSS), 2007, 21st Annual Meeting, Sleep (30)

**Evaluation of an automated system for in-home behavioral treatment of chronic insomnia: Part II**

Kaplan, R. F., Wang, Y., Bootzin, R.R., Loparo, K.A.  
Associated Professional Sleep Societies (APSS), 2006, 20th Annual Meeting, Sleep (29)

**Evaluation of an automated system for in-home behavioral treatment of chronic insomnia: Part I**

Kaplan, R. F., Wang, Y., Bootzin, R.R., Loparo, K.A.  
Associated Professional Sleep Societies (APSS), 2006, 20th Annual Meeting, Sleep (29)

**Very high frequency energy (Kappa) in human surface EEG: Correlation with behavioral state**

Richardson, G.S., Kaplan, R.F., Loparo, K.A., Johnson, S.E., Roth, T.  
Associated Professional Sleep Societies (APSS), 2000, 14th Annual Meeting, Sleep (23)

**Enhancing fatigue assessment in aviation settings: Correlation of EEG-based DDAS with performance**

Kaplan, R.F., Loparo, K. A., Nesthus, T.E., Schroeder, D.J.  
Aviation, Space, and Environmental Medicine, 1998, 69(3)

**Four-choice serial reaction time and visual search performance during 34 hr of sleep loss**

Nesthus, T.E., Scarborough, A.L., Schroeder, D.J., Kaplan, R.F., Loparo, K.A. , and Thorne, D.  
Aviation, Space, and Environmental Medicine, 1998, 69(3)

**Subjective sleepiness ratings and body temperature during 34 hours of sleep deprivation**

Schroeder, D.J., Nesthus, T.E., Scarborough, A., Thompson, J., Kaplan, R.F., Loparo, K.A.  
Aviation, Space, and Environmental Medicine, 1998, 69(3)