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EDUCATION, TRAINING, AND POSITIONS

2002 – 2006	Bachelor of Science, Cellular Biology, Chemistry Minor Western Washington University
2006 – 2008	Master of Science, Nutrition and Exercise Sciences Montana State University, Mentor: Dr. Mary Miles
2008 – 2013	Ph.D., Human Nutrition (Molecular Option), Oregon State University, Mentor: Dr. Donald Jump
2013 – 2018	Postdoctoral Fellow, Sleep and Chronobiology Laboratory University of Colorado Boulder, Mentor: Dr. Kenneth P. Wright
2019 – 2020	Assistant Professor, Research Track, Department of Integrative Physiology, University of Colorado Boulder
2020 –	Assistant Professor, Tenure Track, Department of Health and Kinesiology University of Utah

RESEARCH EXPERIENCE (2,746 Citations)

PEER REVIEWED JOURNAL ARTICLES

Fritz, J., Huang, T., **Depner, C**., Zeleznik, O., Cespedes, F., Li, W., Stone, K., Manson, J., Clish, C., Sofer, T., Schernhammer, E., Rexrode, K., Redline, S., Wright, K., and Vetter, C. Sleep duration, plasma metabolites, and obesity and diabetes: A metabolome-wide association study in US women. SLEEP. 2023 Jan 11;46(1):zsac226.

Klerman EB, Brager A, Carskadon MA, **Depner CM**, Foster R, Goel N, Harrington M, Holloway PM, Knauert MP, LeBourgeois MK, Lipton J, Merrow M, Montagnese S, Ning M, Ray D, Scheer FAJL, Shea SA, Skene DJ, Spies C, Staels B, St-Onge MP, Tiedt S, Zee PC, Burgess HJ. Keeping an eye on circadian time in clinical research and medicine. Clin Transl Med. 2022 Dec;12(12):e1131.

Zimmerman, G., Kubicki, M., and **Depner, C**. Commentary: Inconsistent findings for the impact of insufficient sleep and circadian misalignment on appetitive hormones. J Physiol. 2022.

Goldstein, C., and **Depner, C**. Miles to go before we sleep…a step toward transparent evaluation of consumer sleep tracking devices. SLEEP. 2021; Feb 12;44(2):zsab020.

Depner, C., Melanson, E., Eckel, R., Higgins, J., Bergman, B., Perreault, L., Knauer, O., Birks, B., and Wright, K. Effects of *ad libitum* food intake, insufficient sleep and weekend recovery sleep on energy balance. SLEEP. 2021; Jun 1:zsab136.

Cogswell, D., Bisesi, P., Markwald, R., Cruickshank-Quinn, C., Quinn, K., McHill, A., Melanson, E., Reisdorph, N., Wright, K., and **Depner, C.** Identification of a preliminary plasma metabolome-based biomarker for circadian phase in humans. J Biol Rhythms. 2021;36(4):369-383.

Depner, C., Rice, J., Tussey, E., Eckel, R., Bergman, B., Higgins, J., Melanson, E., Kohrt, W., Wright, K., and Swanson, C. Bone turnover marker responses to sleep restriction and weekend recovery sleep. Bone. 2021; 152:116096.

Cable, J., Schernhammer, E., Hanlon, E., Vetter, C., Cedernaes, J., Makarem, N., Dashti, H., Shechter, A., **Depner, C**., Ingiosi, A., Blume, C., Tan, X., Gottlieb, E., Benedict., Van Cauter, E., and St-Onge, MP. Sleep and circadian rhythms: pillars of health-a Keystone Symposia report. Ann NY Acad Sci. 2021; 1506(1):18-34.

Depner, C., Devine, J., Khosla, S., de Zambotti, M., Robillard, R., Vakulin, A., and Drummond, S. Wearable Technologies for Developing Sleep and circadian biomarkers: A summary of workshop discussions. SLEEP. 2020; 43(2).

Depner, C., Cogswell, D., Bisesi, P., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Melanson, E., Reisdorph, N., and Wright, K. Developing preliminary blood metabolomics-based biomarkers of insufficient sleep in humans. SLEEP. 2020; Jul 13;43(7):zsz321.

Haspel JA, Anafi R, Brown MK, **Depner, C**., et al. Perfect timing: circadian rhythms, sleep, and immunity - an NIH workshop summary. JCI Insight. 2020; 5(1):131487.

Wright, K., Linton, S., Withrow, D., Casiraghi, L., Lanza, S., de la Iglesia, H., Vetter, C., and **Depner, C**. Sleep in university students prior to and during COVID-19 Stay-at-Home orders. Curr Biol. 2020; Jul 20;30(14):R797-R798.

Depner, C., Melanson, E., Eckel, R., Snell-Burgeon, J., Perreault, L., Bergman, B., Higgins, J., Guerin, M., Stothard, E., and Wright, K. Ad libitum weekend recovery sleep fails to prevent metabolic dysregulation during a repeating pattern of insufficient sleep and weekend recovery sleep. Curr Biol. 2019; 29(6), 957-967.

Sprecher, K., Ritchie, H., Burke, T., **Depner, C**., Smits, A., Dorrestein, P., Fleshner, M., Knight, R., Lowery, C., Turek, F., Vitaterna, M., and Wright, K. Trait-like Vulnerability of High Order Cognition and Ability to Maintain Wakefulness during Combined Sleep Restriction and Circadian Misalignment. SLEEP. 2019; 42(8).

Depner, C., Melanson, E., McHill, A., and Wright, K. Mistimed food intake and sleep alters 24-hour time-of-day patterns of the human plasma proteome. Proc Natl Acad Sci U S A. 2018; 115(23), E5390-5399.

Stothard, E., McHill, A., **Depner, C**., Birks, B., Moehlman, T., Ritchie, H., Guzzetti, J., Chinoy, E., LeBourgeois, M., Axelsson, J., and Wright, K. Circadian entrainment to the natural light-dark cycle across seasons and the weekend. Curr Biol. 2017; 27, 1-6.
Lytle, K., **Depner, C**., Wong, C. and Jump, D. Docosahexaenoic acid attenuates western diet induced hepatic fibrosis in Ldlr-/- mice by targeting the TGFβ-Smad3 pathway. J Lipid Research. 2015; 56, 1936-1946.

***Depner, C**., *Eckel, R., Perreault, L., Markwald, R., Smith, M., McHill, A., Higgins, J., Melanson, E., and Wright, K. Morning circadian misalignment during short sleep duration impacts insulin sensitivity. Curr Biol. 2015; 25, 1-7. **(*co-first author)**

Arble, D., Bass, J., Behn, C., Butler, M., Challet, E., Czeisler, C., **Depner, C**., Elmquist, J., Franken, P., Grandner, M., Hanlon, E., Keene, A., Joyner, M., Karatsoreos, I., Kern, P., Klein, S., Morris, C., Pack, A., Panda, S., Ptacek, L., Punjabi, N., Sassone-Corsi, P., Scheer, F., Saxena, R., Seaquist, E., Thimgan, M., Van Cauter, E., and Wright, K. Impact of sleep and circadian disruption on energy balance and diabetes: A summary of workshop discussions. SLEEP. 2015; 38(12), 1849-1860.

Cooke, R., Cappellozza, B., Guarnieri, F., **Depner, C**., Lytle, K., Jump, D., Bohnert, D., Cerri, R., and Vasconcelos, J. Effects of calcium salts of soybean oil on factors that influence pregnancy establishment in Bos indicus beef cows. J Animal Science. 2014; 92(5), 2239-2250.

Depner, C., Philbrick, K., and Jump, D. Docosahexaenoic acid attenuates hepatic inflammation, oxidative stress, and fibrosis without decreasing hepatosteatosis in a LDL-/- mouse model of western diet-induced hepatosteatosis. J Nutrition. 2013; 143(3), 315-323.

Depner, C., Traber, M., Bobe, G., Kensicki, E., Bohren, K., Milne, G., and Jump, D. A metabolomic analysis of omega-3 fatty acid-mediated attenuation of western diet-induced non-alcoholic steatohepatitis in LDLR-/- mice. PLOS ONE. 2013; 8(12):e83756.

Depner, C., Torres-Gonzalez, M., Tripathy, S., Milne, G., and Jump, D. Menhaden oil decreases high-fat diet induced markers of hepatic damage, steatosis, inflammation, and fibrosis in obese $LDLR^{-/-}$ mice. J Nutrition. 2012; 142(8), 1495-1503.

Depner, C., Kirwan, R., Frederickson, S., and Miles, M. Enhanced inflammation with high carbohydrate intake during recovery from eccentric exercise. Eur J Applied Physiology. 2010; 109(6), 1067-1076.

Miles, M., **Depner, C**., Kirwan, R., and Frederickson, S. Influence of macronutrient intake and anthropometric characteristics on plasma insulin after eccentric exercise. Metabolism: Clinical and Experimental. 2010; 59(10), 1456-1464.

Miles, M., Andring, J., Pearson, S., Gordon, L., Kasper, C., **Depner, C.,** and Kidd, J. Diurnal variation, response to eccentric exercise, and association of inflammatory mediators with muscle damage variables. J Applied Physiology. 2008; 104, 451-458.

REVIEW ARTICLES (PEER REVIEWED)

Tobin, S., Williams, P., Baron, K., and **Depner, C**. Challenges and opportunities for applying wearable technology to sleep medicine and research. Sleep Med Clin. 2021; 16(4), 607-618.

Withrow, D., Bowers, S., **Depner, C**., Gonzalez, A., Reynolds, A., and Wright, K. Sleep and circadian disruption and the gut microbiome-possible links to dysregulated metabolism. Curr Opin Endocr Metab Res. 2021; 17, 26-37.

Jump, D., **Depner, C**., Lytle, K., Tripathy, S. Omega-3 polyunsaturated fatty acids as a treatment strategy for nonalcoholic fatty liver disease. Pharmacol Ther. 2018;181, 108-125.

Jump, D., **Depner, C**., Tripathy, S., and Lytle, K. Impact of dietary fat on the development of non-alcoholic fatty liver disease in Ldlr-/- mice. Pro Nutr Soc. 2016; 75(1), 1-9.

Jump, D., **Depner, C**., Tripathy, S., and Lytle, K. Potential for dietary ω-3 fatty acids to prevent nonalcoholic fatty liver disease and reduce the risk of primary liver cancer. Adv Nutr. 2015; 6(6), 694-702.

Depner, C., Stothard, E., and Wright, K. Metabolic consequences of sleep and circadian disorders. Curr Diab Rep. 2014; 14(7), 507-515.

Jump, D., Tripathy, S., and **Depner, C**. Fatty acid-regulated transcription factors in the liver. Ann Rev of Nutr. 2013; 33, 249-269.

Jump, D., **Depner, C**., and Tripathy, S. Omega-3 fatty acid supplementation and cardiovascular disease. J Lipid Res. 2012; 53(12), 2525-2545.

BOOK CHAPTERS

Robbins, R., Quan, S., Bertisch, S., **Depner, C**., and Redline, S. Sleep, sleep disorders, and the internet. The Encyclopedia of Sleep and Circadian Rhythms. *Accepted*, publication date in 2023.

Kubicki, M., Ryan, J., Shaw, J., and **Depner, C**. Overview: Wearable devices for monitoring sleep and circadian physiology. The Encyclopedia of Sleep and Circadian Rhythms. *Accepted*, publication date in 2023.

Broussard J., Reynolds A., **Depner C.,** Ferguson S., Dawson D., Wright KP. Jr. Circadian Rhythms versus Daily Patterns in Human Physiology and Behavior. In V. Kumar Ed. Biological Timekeeping: Clocks, Rhythms and Behaviour, 2017.

Depner, C., Lytle, K., Tripathy, S., and Jump, D. 2013. Chapter 13: Omega-3 Fatty Acids and Non-alcoholic Fatty Liver Disease. CRC Press; Taylor and Francis Publishers, 2013.

ORGANIZED RESEARCH SYMPOSIUM FOR PROFESSIONAL MEETING

Metabolic Dysregulation During Sleep and Circadian Disruption: Methods, Mechanisms, and Countermeasures. SLEEP/APSS Annual Conference, 2017.

INVITED LECTURES

Sleep Disruption, Circadian Misalignment, and Adverse Cardiometabolic Risk. Sleep Grand Rounds, University of Utah. 2023.

Discussion Group Leader: No More Actiwatch, What Now? Sleep Research Society Online Forum. 2022.

Developing Biomarkers of Adverse Cardiometabolic Risk Linked to Short Sleep Duration: Will they Work? Rutgers University, Graduate Seminar in Kinesiology and Applied Physiology. 2022.

Developing Molecular Biomarkers of Sleep and Circadian Rhythms: Challenges and Opportunities. National Institutes of Health Workshop: "Optimal Instruments for Measurement of Dietary Intake, Physical Activity, and Sleep Among Adults". 2022.

University of Utah Graduate School Expo—Careers in Allied Health. Panel member representative for Department of Health and Kinesiology. 2022.

Sleep Disruption, Circadian Misalignment, and Adverse Cardiometabolic Risk. Annual SLEEP/APSS Conference—Trends in Sleep Medicine. 2022.

Developing Biomarkers of Sleep and Circadian Disruption and Related Metabolic Impairments. Keystone Conference "Sleep and Circadian Rhythms: Pillars of Health". 2021.

Developing Biomarkers of Sleep and Circadian Disruption and Related Adverse Health Outcomes. University of Utah Health Behavior Seminar Series. 2021.

Single Time-Point Determination of Circadian Rhythms. National Institutes of Health Workshop: "Circadian Medicine: Applying Circadian Biology Discovery to Heart, Lung and Blood Therapeutics". 2021.

Insufficient Sleep and Circadian Disruption: Role in Nutrition and Metabolic Disease. University of Colorado Anschutz Medical Campus, Nutrition Dietetic Program. 2021.

Biomarkers of Habitual Insufficient Sleep and Related Cardiometabolic Risk. University of Utah Sleep Wake Center Seminar Series. 2021.

Individual Differences in Energy Balance Responses to Insufficient Sleep and Weekend Recovery Sleep. Harvard (Brigham and Women's Hospital), Division of Sleep and Circadian Disorders. 2021.

Sleep and Circadian Disruption: Contributions to Adverse Metabolic Risk. University of Iowa, Department of Health and Human Physiology. 2020.

Sleep and Circadian Physiology in Health and Disease. University of Colorado Anschutz Medical Campus, Department of Neurology. 2020.

Consumer Wearables to Advance Sleep Disorder Science and Management. American Thoracic Society International Conference. 2020.

Big Data Workshop, Metabolomics in Sleep and Circadian Science. University of Colorado Boulder Sleep and Circadian Summer School. 2020.

The Impact of Weekend Recovery Sleep on Insulin Sensitivity and Energy Balance. University of Utah Diabetes and Metabolism Research Center Research Recharge. 2020.

Metabolic and Cognitive Health Consequences of Insufficient Sleep. University of Utah, Department of Psychology, Behavioral Medicine Research Seminar. 2020.

Insufficient Sleep and Circadian Disruption: Role in Nutrition and Metabolic Disease. Northern Colorado Dietetic Association. 2019.

Developing Metabolomics-Based Biomarkers of Insufficient Sleep in Humans. Keynote lecture for the Annual Colorado Sleep Symposium. 2019.

Inflammatory Responses During Insufficient Sleep and Circadian Misalignment: From Molecules to Microbes. National Institutes of Health Workshop: Sleep Insufficiency, Circadian Misalignment, and the Immune Response. 2019.

Developing Biomarkers of Insufficient Sleep in Humans Using Untargeted Plasma Metabolomics. Beaumont Metabolomics Symposium. 2019.

Sleep and Circadian Disruption: Role in Nutrition, Energy Metabolism, & Metabolic Health. University of Utah, Department of Health, Kinesiology, and Recreation. 2019.

Sleep and Circadian Disruption: Role in Nutrition, Energy Metabolism, & Metabolic Health. Washington University, Division of Geriatrics and Nutritional Science. 2019.

Insufficient Sleep and Circadian Disruption: Role in Nutrition and Metabolic Disease. University of Northern Colorado Department of Biology Seminar. 2018.

Insufficient Sleep and Circadian Disruption: Role in Nutrition and Metabolic Disease. Regis University Neuroscience Seminar. 2018.

Waking Up the Microbiome: Effect of Sleep Loss on Cognition and the Microbiome. Colorado State University Microbiome Network. 2018.

Does Sleep and Circadian Health have a Role in Developing Personalized and Precision Medicine? Colorado State University, Department of Health and Exercise Science, Sleep and Circadian Seminar. 2018.

Circadian vs Behavioral Modulation of Plasma Proteins: Implications for Metabolic Dysregulation. Department of Integrative Physiology Colloquium, 2016

Insufficient Sleep and Circadian Disruption: Role in Nutrition and Metabolic Disease. Colorado Nutrition Academy Annual Meeting. 2017

Mechanisms of Insufficient Sleep and Circadian Disruption Contributing to Metabolic Disease Risk. Endocrine Research Conference, University of Colorado School of Medicine, Department of Endocrinology, Metabolism, and Diabetes. 2017

Developing a Metabolite Fingerprint of Insufficient Sleep using Metabolomics: Strengths and Limitations. International Workshop on Sleep and Circadian Biomarkers and NIH WebEx with Federal Interagency Fatigue Group. 2017

Waking-up the Microbiome: The Effect of Insufficient Sleep on Cognition and the Microbiome. Colorado Clinical and Translational Sciences Institute Annual Summit. 2017

Sleep-wake and circadian modulation of the human plasma proteome. Denver, CO. SLEEP/APSS Annual Conference. 2016

Insufficient sleep induced morning circadian misalignment and sex differences in its association with insulin sensitivity. Colorado Clinical and Translational Sciences Institute Annual Summit. 2014

PROFESSIONAL RESEARCH PRESENTATIONS AND PUBLISHED ABSTRACTS

Thomas, J., **Depner, C**., Drummond, M., Winett, R., Davy, D., and Halliday, T. The Effects of AM vs PM Resistance Exercise on Cardiometabolic Outcomes in Adults with Prediabetes. American College of Sports Medicine annual meeting. 2023, Denver, CO.

Zimmerman, G., Ou, I., Kubicki, M., Maio, M., Thomas, J., Tobin, S., de Hart, N., Petrocelli, J., Miranda, V., **Depner, C**., Drummond, M., and Halliday, T. The Effects of Whey Protein Supplementation on Body Composition and Performance in Adolescent Soccer Players. American College of Sports Medicine annual meeting. 2023, Denver, CO.

Kubicki, M., Baron, K., Wright, K., and **Depner, C**. Effects of a Sleep Extension Intervention on Multiple Dimensions of Sleep Health. Advances in Sleep and Circadian Science. 2023, Clearwater, FL.

Stegman, A., Kubicki, M., Baron, K., Wright, K., and **Depner, C**. Impact of Sleep Extension on the Timing and Duration of Food Intake in People with Habitual Insufficient Sleep. Advances in Sleep and Circadian Science. 2023, Clearwater, FL.

Cox, R., Blumenstein, A., Burke, T., **Depner, C**., Guerin, M., Hay-Arthur, E., Higgins, J., Knauer, O., Lanza, S., Markwald, R., Melanson, E., McHill, A., Morton, S., Ritchie, H., Smith, M., Smits, A., Sprecher, K., Stothard, E., Withrow, D., and Wright, K. Dim light melatonin offset (DLMOff) in healthy adults and associations with chronotype. Advances in Sleep and Circadian Science. 2023, Clearwater, FL.

Sapiega, J., and **Depner, C**. Impact of shiftwork on risk of diabetes and cardiovascular disease. Research on Capitol Hill (presentation to Utah Legislatures). 2022, Salt Lake City, UT.

Depner, C., Robbins, R., Grandner, M., Khosla, S., Macedo, D. Sleep, the Internet, and Social Media. SLEEP. 2022, Charlotte, NC.

Kubicki, M., McHill, A., Melanson, E., Reisdorph, N., Wright, K., and **Depner, C**. Effects of simulated night-shiftwork induced circadian misalignment on the human plasma metabolome. SLEEP. 2022, Charlotte, NC.

Cox, R., Ritchie, H., Sprecher, K., Burke, T., Smits, A., Knauer, O., Guerin, M., Stothard, E., **Depner, C**., and Wright, K. Chronotype and affective response to sleep restriction, sleep deprivation, and circadian misalignment. SLEEP. 2022, Charlotte, NC.

Zimmerman, G., Melanson, E., Wright, K., Kubicki, M., Creasy, S., and **Depner, C**. Associations between sleep duration and sedentary behavior in health young adults. SLEEP. 2022, Charlotte, NC.

Cox, R., Marshall, T., Withrow, D., Ritchie, H., Sprecher, K., Burke, T., Smits, A., Knauer, O., Guerin, M., Stothard, E., **Depner, C**., and Wright, K. Individual differences in subjective mood response to combined sleep restriction and circadian misalignment. European Biological Rhythms Society Annual Meeting. 2022, Zurich, Switzerland.

Withrow, D., Blumenstein, A., Lanza, S., Sprecher, K., Armstrong, M., **Depner, C**., Reisdorph, N., and Wright, K. Targeted Plasma Metabolomics of Endocannabinoids and Acylethanolamides in Response to Combined Sleep Restriction and Circadian Misalignment. European Biological Rhythms Society Annual Meeting. 2022, Zurich, Switzerland.

Ryan, J., Day, H., Egger, M., **Depner, C**., and Shaw, J. Shorter sleep duration as a risk for excessive postpartum weight retention. Diabetes and Metabolism Research Center Annual Retreat. 2022, Salt Lake City, UT.

Williams, P., Carlson, S., Curtis, B., Baron, K., **Depner, C**., Baucom, B., Morrow, C., and Craig, B. Examination of the sleep cycle mobile smartphone app in military couples: associations with actigraphy and sleep diaries. American Psychosomatic Society Annual Meeting. 2022, Long Beach, CA.

Withrow, D., Gonzalez, A., Sprecher, K., **Depner, C**., Burke, T., Fleshner, M., Lowry, C., Turek, F., Vitaterna, M., Dorrestein, P., Knight, R., and Wright, K. Stability of gut microbiome alpha diversity during combined sleep restriction and circadian misalignment. SLEEP. 2021.

Linton, S., Sprecher, S., **Depner, C**., Burke, T., Dorrestein, P., Fleshner, M., Knight, R., Lowry, C., Turek, F., Vitaterna, M., and Wright, K. Individual differences in skin temperature responses to cold pressor stress during combined sleep restriction and circadian misalignment. SLEEP. 2021.

Depner, C. Human metabolomics-based biomarkers of insufficient sleep and their association with cognitive performance. 3rd Congress of the Asian Society of Sleep Medicine. 2021, Beijing, China.

Depner, C., Reisdorph, N., and Wright, K. Identification of a stable human metabolomics-based biomarker of insufficient sleep and its association with cognitive performance. SLEEP. 2020.

Withrow, D., **Depner, C**., Boland, E., Briks, B., Melanson, E., Higgins, J., Eckel, R., Perreault, L., Bergman, B., and Wright, K. Sex differences in evening relative macronutrient utilization and associated weight gain during insufficient sleep. SLEEP. 2020.

Cogswell, D., Bissesi, P., Cruickshank-Quinn, C., Quinn, K., McHill, A., Melanson, E., Reisdorph, N., Wright, K., and **Depner, C**. Identification of a plasma metabolome-based biomarker for dim light melatonin offset and onset in humans. SLEEP. 2020.

Withrow, D., **Depner, C**., Markwald, R., Smith, M., McHill, A., Melanson E., Higgins, J., Eckel, R., Perreault, L., and Wright, K. Sex differences in nocturnal substrate oxidation during insufficient sleep. Society for Research on Biological Rhythms Meeting. 2020.

Fritz, J., Huang, T., Zeleznik, O., Rexrode, K., **Depner, C**., Feliciano, E., Stone, K., Manson, J., Sofer, T., Schernhammer, E., Redline, S., and Vetter, C. Sleep duration and plasma metabolites: A metabolome-wide association study in US women. SLEEP. 2020.

Depner, C., Melanson, E., McHill, A., and Wright, K. Circadian regulated protein interaction networks linked to DNA repair and cell cycle regulation. Advances in Sleep and Circadian Science. 2019; Clearwater, FL.

Sprecher, K., Ritchie, H., Burke, T., **Depner, C**., Dorrestein, P., Fleshner, M., Knight, R., Lowry, C., Turek, F., Vitaterna, M., and Wright, K. Trait-like vulnerability of ability to maintain wakefulness and vigilance during sleep loss and circadian misalignment. Advances in Sleep and Circadian Science. 2019; Clearwater, FL.

Depner, C. Sleep and circadian biomarkers. Symposium Title: Wearable Technology: Toward Regulation and Implementation in Sleep and Circadian Science. SLEEP. 2019, San Antonio TX.

Cogswell, D., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Melanson, E., Reisdorph, N., Wright, K., and **Depner, C**. Preliminary identification and validation of a plasma metabolome-based biomarker for circadian phase in humans. SLEEP. 2019, San Antonio TX.

Depner, C., Melanson, E., Eckel, R., Snell-Bergeion, J., Perreault, L., Bergman, B., Higgins, J., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Altered energy intake and plasma metabolites during insufficient sleep are associated with reduced insulin sensitivity in humans. SLEEP. 2019, San Antonio TX.

Sprecher, K., Vargas, F., Pena-Gonzalez, A., Burke, T., **Depner, C**., Dorrestein, P., Fleshner, M., Knight, R., Lowry, C., Turek, F., Vitaterna, M., and Wright, K. Greater change in fecal metabolome associated with lower ability to maintain wakefulness during sleep restriction and circadian misalignment. SLEEP. 2019, San Antonio TX.

Depner, C., Bisesi, P., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Plasma metabolite fingerprint of insufficient sleep. Gordon: Sleep Regulation and Function. 2018; Galveston, TX.

Depner, C., Melanson, E., McHill, A., and Wright, K. Circadian regulated protein interaction networks linked to DNA repair and cell cycle regulation. Society for Research on Biological Rhythms Meeting. 2018; Amelia Island, FL.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Melanson, E., Reisdorph, N., and Wright, K. A putative biomarker fingerprint of insufficient sleep derived from the human plasma metabolome. SLEEP. 2018; Baltimore, MD.

Depner, C., Bisesi, P., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Plasma metabolite biomarker score segregates individuals between adequate versus insufficient sleep. Metabolomics. 2018, Seattle, WA.

Vargas, F., **Depner, C**., Gonzalez Pena, A., Knight, R., Wright, K., and Dorrestein, P. The effect of sleep and circadian disruption on the human metabolome. American Society for Mass Spectrometry Annual Meeting. 2017; Indianapolis, IN.

Vargas, F., **Depner, C**., Gonzalez Pena, A., Knight, R., Wright, K., and Dorrestein, P. The link between dietary inputs, stressors and the gut microbiome – military perspective. American Chemical Society Annual Meeting. 2017; San Francisco, CA.

Depner, C., Melanson, E., McHill, A., DeSouza, C., and Wright, K. Simulated night-shift work alters the balance and 24h pattern of the coagulation-fibrinolysis axis. SLEEP. 2017; Boston, MA.

Barandiaran, A., Ryan, B., Stothard, E., **Depner, C**., Byrnes, W., and Wright, K. Changes in distal-to-proximal skin temperature gradient after 4 days of simulated micro-gravity. SLEEP. 2017; Boston, MA.

Morton, S., **Depner, C**., Melanson, E., Guzzetti, J., and Wright, K. Power spectral analyses in broad band EEG frequencies after sleep restriction and weekend recovery sleep. SLEEP. 2017; Boston, MA.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Insufficient sleep alters plasma metabolites linked to insulin resistance and diabetes risk. Metabolomics. 2017; Brisbane, Australia.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Sex differences and effect of sleep loss on the human plasma metabolome. Gordon: Sleep Regulation and Function. 2016; Galveston, TX.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Morning circadian misalignment during insufficient sleep is associated with changes in plasma metabolites linked to metabolic dysregulation. Society for Research on Biological Rhythms Meeting. 2016; Palm Harbor, FL.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Sex differences and effects of insufficient sleep on the human plasma metabolome. SLEEP. 2016; Denver, CO.

Depner, C., Melanson, E., Perreault, L., Eckel, R., Higgins, J., and Wright, K. Altered food intake patterns during insufficient sleep and impact from weekend recovery sleep. SLEEP. 2016; Denver, CO.

Stothard, E., Moehlman, T., Guzzetti, J., **Depner, C**., Ritchie, H., Birks, B., Axelsson, J., LeBourgeois, M., and Wright, K. Impact of weekend exposure to the modern versus natural light-dark cyle on circadian timing in humans. SLEEP. 2016; Denver, CO.

Ritchie, H., **Depner, C**., and Wright, K. Impact of sustained sleep loss and weekend recovery sleep on vigilance performance and subjective sleepiness. SLEEP. 2016; Denver, CO.

Morton, S., **Depner, C**., Melanson, E., Guzzetti, J., and Wright, K. Weekend recovery sleep after a work week of short sleep. SLEEP. 2016; Denver, CO.

Morton, S., **Depner, C**., Melanson, E., Guzzetti, J., and Wright, K. Spectral analysis of EEG activity during weekend recovery sleep. Neuroscience Annual Meeting. 2016; San Diego, CA.

Depner, C., Eckel, R., Perreault, L., Markwald, R., Smith, M., McHill, A., Higgins, J., Melanson, E., and Wright, K. Insufficient sleep induced morning circadian misalignment and sex differences in its association with reduced oral insulin sensitivity. INSPIRE "Circadian Rhythms and Glucose Metabolism". 2015; Viareggio, Italy.

Depner, C., Melanson, E., Eckel, R., Higgins, J., Snell-Bergeon, J., and Wright, K. Insufficient sleep induced positive energy balance occurs rapidly and is sustained with chronic insufficient sleep. SLEEP. 2015; Seattle, WA.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Effects of a simulated work week of insufficient sleep on the human plasma metabolome. Metabolomics. 2015; San Francisco, CA.

Depner, C., Markwald, R., Cruickshank-Quinn, C., Quinn, K., Reisdorph, N., and Wright, K. Sex differences in the human plasma metabolome and effects of insufficient sleep. NIH Common Fund Metabolomics Annual Meeting. 2015; Lexington, KY.

Depner, C., Eckel, R., Perreault, L., Markwald, R., Smith, M., McHill, A., Higgins, J., Melanson, E., and Wright, K. Sex differences in insulin sensitivity during insufficient sleep and associated circadian misalignment. SLEEP. 2014; Minneapolis, MN.

Depner, C., and Wright, K. Cognitive impairments during insufficient sleep followed by weekend recovery sleep. Colorado Sleep Symposia. 2014; Boulder, CO.

Depner, C., Eckel, R., Perreault, L., Higgins, J., Melanson, E., Snell-Bergeon, J., and Wright, K. Does weekend recovery sleep prevent insufficient sleep induced weight gain? Colorado Clinical and Translational Sciences Institute Summit. 2014; Longmont, CO.

Depner, C., Eckel, R., Perreault, L., Markwald, R., Smith, M., McHill, A., Higgins, J., Melanson, E., and Wright, K. Insufficient sleep induced morning circadian misalignment and sex differences in its association with insulin sensitivity. Lake Arrowhead Sleep Workshop. 2014; Lake Arrowhead, CA.

Depner, C., Eckel, R., Perreault, L., Markwald, R., Smith, M., McHill, A., Higgins, J., Melanson, E., and Wright, K. Insufficient sleep induced morning circadian misalignment and sex differences in its association with insulin sensitivity. Colorado Biological Mass spectrometry Society Fall Meeting. 2014; Denver, CO.

Depner, C., Bohren, K., Morin-Kensicki, E., and Jump, D. Dietary C20-22 ω3 PUFA regulate hepatic oxidized PUFA levels and attenuate markers of diet induced non-alcoholic steatohepatitis (NASH) in LDLR-/- mice. Experimental Biology. 2013; Boston, MA.

Depner, C., Bohren, K., Morin-Kensicki, E., and Jump, D. Dietary C20-22 ω-3 PUFA influence hepatic phospholipid remodeling while attenuating markers of diet-induced non-alcoholic steatohepatitis (NASH) in *Ldlr-/-* mice. Kern Lipid Conference. 2013; Vail, CO.

Depner, C., and Jump, D. Effect of ω-3 PUFA on diet induced non-alcoholic fatty liver disease (NAFLD) development and progression in C57BL/6J mice. Experimental Biology. 2012; San Diego, CA.

Depner, C., Torres-Gonzalez, M., Tripathy, S., and Jump, D. Effect of ω-3 PUFA on high fat diet induced fatty liver and inflammation in C57BL/6J mice. Diet and Optimum Health Conference. 2011; Corvallis, OR.

Miles, M**., Depner, C**., Kirwan, R., and Frederickson, S. Insulin resistance post-eccentric exercise is influenced by macronutrient intake and waist to hip ratio. International Society of Exercise and Immunology International Meeting. 2009; Tubingen, Germany.

Depner, C., Frederickson, S., Rhodes, K., Bond, K., Barry, R., Kirwan, R., and Miles, M. Post-exercise carbohydrates increase the magnitude of the inflammatory response. American College of Sports Medicine Annual Meeting. 2009; Seattle, WA.

Depner, C., Kraft, E., Enkhbaatar, P., Yamamoto, Y., Leonard, S., Traber, L., Traber D., and Traber, M. Aerosolized gamma-tocopherol treatment post-burn and smoke injury conserves plasma alpha-tocopherol in sheep. Diet and Optimum Health Conference. 2009; Portland, OR.

Depner, C., Miles, M., Andring, J., Gordon, L., and Kidd, J., IL-6 bio-availability varies with basal CRP concentration, and is unaffected by eccentric exercise. American College of Sports Medicine Annual Meeting. 2008; Indianapolis, IN.

Miles, M**., Depner, C**., Gordon, L., and Kidd, J. IL-6-174 G/C gene polymorphism *in vivo* effects on inflammation: Basal levels, diurnal variation, and changes induced by eccentric exercise. American College of Sports Medicine Annual Meeting. 2008; Indianapolis, IN.

Miles, M., Andring, J., Gordon, L., **Depner, C**., and Kidd, J. Acute inflammation response varies according to differences in basal C-reactive protein concentrations. International Society of Exercise and Immunology International Meeting. 2007; Sendai, Japan.

ACADEMIC AND PROFESSIONAL HONORS

Sleep Research Society NIH Grant Reviewer Training Program, 2022
Co-Chair Wearables and Remote Assessment Roundtable, Sleep Research Society Foundation Industry Advisory Council, 2021
SLEEP Top Journal Reviewer, 2020, 2021
National Institutes of Health Loan Repayment Program Award Renewal, NHLBI, 2020 – 2021
Young Investigator Travel Award, Advances in Sleep and Circadian Science, 2019

Young Investigator Travel Award, Gordon Conference: Sleep Regulation and Function, 2018
Co-Chair International Biomarkers Workshop on Wearables in Sleep and Circadian Science, Sleep Research Society, 2018
National Institutes of Health Loan Repayment Program Award Renewal, NIDDK 2018, – 2020
National Institutes of Health NRSA Postdoctoral Fellowship, 2017 – 2019
Poster Presentation Runner-Up, Colorado Biological Mass Spectrometry Society, 2017
Sleep and Circadian "Omics" Research Training Award, Sleep Research Society, 2017
Merit Award for SLEEP Meeting, Sleep Research Society, 2017
Young Investigator Award, American Academy of Sleep Medicine, 2017
Early Career Travel Award, Metabolomics Society, 2017
Highest Ranked Abstract, Gordon Conference: Sleep Regulation and Function, 2016
Merit Award, Society for Research on Biological Rhythms Meeting, 2016
Merit Award for SLEEP Meeting, Sleep Research Society, 2016
Sleep Research Society Foundation Early Career Development Fellowship, 2016 – 2017
National Institutes of Health Loan Repayment Program Award, 2016 – 2018
Young Investigator Travel Award for NIDDK Meeting: "Impacts of Sleep and Circadian Disruption on Energy Balance and Diabetes", Sleep Research Society, 2015
Young Investigator Research Forum, American Academy of Sleep Medicine, 2015
Merit Award for SLEEP Meeting, Sleep Research Society, 2015
Sleep Deprivation Section Investigator Award, American Academy of Sleep Medicine, 2015
Young Investigator Travel Award, Lake Arrowhead Sleep Workshop, 2014
Young Investigator Award, Colorado Biological Mass Spectrometry Society, 2014
Early Career Investigator Travel Award, Kern Lipid Conference, 2013
Thayer Raymond Fellowship, Oregon State University, 2012 – 2013
Jewell Fields Rohlfing Fellowship, Oregon State University, 2011 – 2012
Margy Woodburn Fellowship, Oregon State University, 2010 – 2011
Woods/Foster Fellowship, Oregon State University, 2010 – 2011
Helen Charley Fellowship in Foods and Nutrition, Oregon State University 2009 – 2013
Annie McDonald Lindsay Fellowship, Oregon State University, 2008 – 2009, 2012 – 2013

PROFESSIONAL SERVICE

Sleep Research Society Advocacy Committee, two-day trip to Washington DC to meet with House and Senate Representatives to advocate for permanent standard time and more sleep funding through the National Institutes of Health, CDC, and Department of Defense. 2023.
Associate Editor, Frontiers Sleep and Metabolism 2023 –
Co-Chair, Health Behavior Seminar Series, Diabetes and Metabolism Research Center, University of Utah, 2022 -
Poster Reviewer, University of Utah Undergraduate Research Symposium, Fall 2022
Poster Reviewer, University of Utah Undergraduate Research Symposium, Spring 2022
Grant Reviewer, University of Utah Clinical Translational Science Institute Peer Grant Review Program, 2022
Research Committee, University of Utah, Department of Health and Kinesiology, 2022 –
Editorial Board Member, SLEEP, 2022 –
Discussion Leader, Transitioning to Faculty. Diabetes and Metabolism Research Center Annual Retreat, University of Utah, 2022.
Poster Reviewer, University of Utah Undergraduate Research Symposium, Spring 2021
Diabetes and Metabolism Research Center Annual Retreat Organizing Committee Member, University of Utah, 2021 - 2022

Grant Review Panel Member, Swiss National Science Foundation, 2021
Annual SLEEP Conference Organizing Committee Member for Sleep Research Society, Associated Professional Sleep Societies, 2020 – 2022
Section Editor, Encyclopedia of Sleep, 2020 – 2023
Poster Reviewer, University of Utah Undergraduate Research Symposium, Fall 2020
Sleep Research Society Foundation, Annual Appeals Committee Member, 2019 – 2021
University of Colorado Boulder Institutional Review Board Member, 2019 – 2020
Grant Review Panel Member, Colorado Clinical and Translational Science Institute PILOT Project Program, 2019 – 2020
Graduate Student Mentor for the Society for Research on Biological Rhythms Mentoring Program, 2018
Steering Committee Gordon Research Seminar: Sleep Regulation and Function, 2016
Sleep Research Society, Scientific Offerings Committee, 2016 – 2019
Sleep Research Society, Trainee and Education Advisory Committee, Organizing Committee for Trainee Day at SLEEP conference, 2015 – 2016
University of Colorado Boulder Clinical Translational Research Center Study Monitoring Committee, 2015 – 2020

JOURNAL PEER-REVIEWER

2016
American Society of Nutrition for Experimental Biology (abstract reviewer)
Endocrine
Journal of Nutrition
Sleep Health: Journal of the National Sleep Foundation

2017
American Journal of Physiology
Behavioral Sleep Medicine
Journal of Clinical Sleep Medicine
Neurobiology of Sleep and Circadian Rhythms
Nutrients
SLEEP Professional Meeting (abstract reviewer)

2018
Annals of Medicine
Clinical Proteomics
International Journal of Cardiology
Journal of Clinical Sleep Medicine
SLEEP
SLEEP Professional Meeting (abstract reviewer)

2019
Diabetologia
Journal of Clinical Sleep Medicine
Nutrients
Physiology
PLOS One
Scientific Reports
SLEEP
Sleep Health

Sleep Medicine
SLEEP Professional Meeting (abstract and session reviewer)

2020
Journal of Clinical Endocrinology and Metabolism
Journal of Clinical Sleep Medicine
Journal of Sleep Research
Neurobiology of Sleep and Circadian Rhythms
PLOS One
Proceedings of the National Academy of Sciences (PNAS)
Psychoneuroendocrinology
Research Quarterly for Exercise and Sport
SLEEP (13 manuscript reviews)
SLEEP Professional Meeting (session reviewer)
Sleep Medicine

2021
Appetite
European Journal of Clinical Nutrition
Federation of the American Societies for Experimental Biology (FASEB)
Journal of Clinical Endocrinology and Metabolism
Journal of Physiology
Mitochondrion
Nutrients
PLOS One
Proceedings of the National Academy of Sciences (PNAS)
Scientific Reports
SLEEP (7 manuscript reviews)
SLEEP Professional Meeting (session reviewer)
Sleep Health

2022
American Journal of Respiratory and Critical Care Medicine
Clinical and Translational Medicine
Frontiers in Immunology
Journal of Clinical Endocrinology and Metabolism
Journal of Clinical Sleep Medicine
Journal of Physiology
Nature and Science of Sleep
Nutrients
Proceedings of the National Academy of Sciences (PNAS)
SLEEP
Sleep Health

TEACHING AND MENTORING

TEACHING EXPERIENCE OREGON STATE UNIVERSITY

NUTR 312, Issues in Nutrition and Health, 2010, Role: Graduate Teaching Assistant
NUTR 312, Issues in Nutrition and Health, 2011, Role: Graduate Teaching Assistant
NUTR 312, Issues in Nutrition and Health, 2012, Role: 1 lecture

TEACHING EXPERIENCE UNIVERSITY OF COLORADO BOULDER

IPHY 4010/6010, Sleep Medicine Seminar, 2015, Role: 1 lecture
IPHY 4580, Sleep Physiology, 2015, Role: 1 lecture
IPHY 4010/6010, Sleep Medicine Seminar, 2016, Role: 2 lectures
IPHY 4580, Sleep Physiology, 2016, Role: 1 lecture
IPHY 4010/6010, Sleep Medicine Seminar, 2017, Role: 2 lectures
IPHY 4010/6010, Sleep Medicine Seminar, 2018, Role: Co-Instructor
IPHY 4580, Sleep Physiology, 2018, Role: 1 lecture
IPHY 3580, Sleep, Circadian Rhythms and Health, 2018, Role: 1 lecture
Reisdorph Lab Hands-On Metabolomics Training Workshop, 2019, Role: 2 lectures
IPHY 4010/6010, Sleep Medicine Seminar, 2019, Role: Lead Instructor

TEACHING EXPERIENCE UNIVERSITY OF UTAH

KINES 7830, Journal Readings, Spring 2021, Role: Lead Instructor
KINES 6950, Sleep and Circadian Physiology and Chronic Disease, Spring 2022, Role: Lead Instructor

UNDERGRADUATE SLEEP AND CIRCADIAN RESEARCH TRAINING PROGRAM

I maintain an active undergraduate student research training program focused on clinical translational sleep and circadian physiology. This program provides students with the opportunity to gain hands-on research experience that directly enhances their undergraduate education. Students must commit one year of work to the lab, and on average work between 5-10 hours per week on our research projects. The first semester of this program largely focuses on training in sleep and circadian research procedures and ethical issues related to human participant research. The second and subsequent semesters provide weekly opportunities for students to work participant study visits and help conduct our ongoing research including data analysis. Throughout their time in the lab all students participate in weekly lab meetings and monthly sleep and circadian journal clubs. These activities provide enhanced educational opportunities in research methodologies, critical thinking, and professional development.

University of Utah Fall Semester 2020: 5 undergraduate students
University of Utah Spring Semester 2021: 5 undergraduate students
University of Utah Summer Semester 2021: 7 undergraduate students
University of Utah Fall Semester 2021: 9 undergraduate students
University of Utah Spring Semester 2022: 7 undergraduate students
University of Utah Summer Semester 2022: 7 undergraduate students
University of Utah Fall Semester 2022: 9 undergraduate students

MENTORED UNDERGRADUATE STUDENTS

Chong, Alisha: Undergraduate Research Opportunities Program Award, University of Utah, "Effects of Increasing Sleep Duration on CRP, Insulin Sensitivity, and Blood Pressure in Adults with Habitual Insufficient Sleep", Spring 2023.

Chang, Joshua: Bennion Scholar Community Captstone Project, University of Utah, "Enhancing Volunteer Training for the Hospital Elder Lifer Program", 2022 – 2023.

Fell, Hailee: Health Science LEAP Program, University of Utah, "Objective sleep duration during a sleep extension intervention", 2022 – 2023.

Giles, Diane: Health Science LEAP Program, University of Utah, "Objective sleep duration and quality in people who report habitual insufficient sleep", 2022 – 2023.

Chong, Alisha: Health Science LEAP Program, University of Utah, "Inflammation in people who report habitual short sleep duration", Spring 2022.

Loose, Sophia: Undergraduate Research Opportunities Program Award, University of Utah, "Comparison of Self-Reported Versus Wrist-Actigraphy Quantified Sleep Duration", Spring 2022.

Mallender, Zachery: Undergraduate Honors Thesis Primary Advisor, Department of Biology, University of Utah, "Slow Wave Sleep Spectral Power During Sleep Extension", 2021 – 2022. UROP primary mentor Summer and Fall 2022.

Sapiega, Justas: Undergraduate Research Opportunities Program Award, University of Utah, "Impact of Sleep Extension on Insulin Sensitivity", Fall 2021.

Chang, Joshua: Undergraduate Research Opportunities Program Award, University of Utah, "Correlation Between Cognitive Performance and Objective and Subjective Sleepiness during Insufficient Sleep", Spring 2021.

Sapiega, Justas: Undergraduate Research Opportunities Program Award, University of Utah, "Developing Biomarkers of Sleep Loss in Humans", Spring 2021.

Elggren, Jaxson: Undergraduate Research Opportunities Program Award, University of Utah, "Effects of Consistent Sleep Extension on Timing of Energy Intake", Spring 2021.

Needham, Landon: Undergraduate Research Opportunities Program Award, University of Utah, "Does Increased Sleep Duration Improve Cognitive Performance?", Spring 2021.

Sinha, Shaiza: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Impact of *Ad Libitum* Weekend Recovery Sleep on Energy Expenditure and Energy Balance", Fall 2019.

Kote, Shrihari: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Individual Trait-Like Vulnerability to Repeated Bouts of Insufficient Sleep", Fall 2019.

Kubicki, Michelle: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Developing a Sleep Extension Intervention to Mitigate Risk of Type 2 Diabetes", Fall 2019/Spring 2020.

Cogswell, Dasha: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Impact of Insufficient Sleep and Subsequent Weekend Recovery Sleep on Lipid Inflammatory Mediators in Human Plasma", 2017.

Bisesi, Paul: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Insufficient Sleep and Metabolic Dysregulation", 2017 summer.

Bisesi, Paul: Undergraduate Research Opportunities Award, University of Colorado Boulder, "In Search of a Biomarker of Insufficient Sleep", 2017 – 2018 academic year.

Bisesi, Paul: Undergraduate honor's thesis, University of Colorado Boulder, "To Mark the Time: Towards a Biomarker of Insufficient Sleep.", 2017 – 2018 academic year.

Rotenbakh, Leah: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Biomarkers of Insufficient Sleep and Sleepiness", 2017 - 2018.

Walters, Lauren: Undergraduate Research Opportunities Award, University of Colorado Boulder, "Biomarkers of Insufficient Sleep and Sleepiness", 2017 - 2018.

Guerin, Molly: Howard Hughes Medical Institute and Biological Sciences Initiative Award, University of Colorado Boulder. "The Impact of Sleep Deprivation and Weekend Recovery Sleep on Circadian Timing", 2015 – 2016.

Knauer, Oliver: Undergraduate Research Opportunities Award, University of Colorado Boulder. "Insufficient Sleep Results in a Dysregulated Leptin Response to Overeating", 2015 – 2016.

GRADUATE STUDENT COMMITTEES

Thomas, Jason: PhD, Department of Health and Kinesiology, University of Utah, Role: Committee Member, 2022 –

Kubicki, Misia: PhD, Department of Health and Kinesiology, University of Utah, Role: Primary Faculty Advisor, 2021 -

Zimmerman, Grace: PhD, Department of Health and Kinesiology, University of Utah, Role: CO-Primary Faculty Advisor, 2021 -

Ryan, Jeanna: PhD, Department of Health and Kinesiology, University of Utah, Role: Committee Member, 2021 –

Tobin, Selene: PhD, Department of Health and Kinesiology, University of Utah, Role: Committee Member, 2021 – 2022.

Alba, Carly: MS, Department of Nutrition and Integrative Physiology, University of Utah, Role: Capstone Project Committee Member, 2021 – 2022.

Withrow, Dana: PhD, Department of Integrative Physiology, University of Colorado Boulder, "The Impact of Sleep and Circadian Disruption on Gut Microbiome Diversity and Microbiome Derived Metabolites". Role: Committee Member, 2021 – 2023.

Gombert, Marie: PhD, Department of Pediatrics, University of Valencia, Role: Committee Member, 2020 – 2022.

Cogswell, Dasha: MS, Department of Integrative Physiology, University of Colorado Boulder, "Human Metabolomics Derived Biomarkers of Circadian Phase". Role: CO-Primary Advisor, 2018 – 2019.

FUNDING

CURRENT/AWARDED

A Circadian-Based Time Restricted Eating Intervention to Lower Risk of Diabetes in People with Short Sleep Duration.
Principal Investigator: Christopher Depner Ph.D.
Margolis Foundation
Role: Principal Investigator
Dates: 1/1/2023 – 12/31/2023
Overall Goal: to test a circadian intervention designed to optimize the timing of light and food intake in people with HSSD.

Biomarkers and Altered Metabolic Pathways during Sleep Loss and Circadian Disruption.
Principal Investigator: Christopher Depner Ph.D.
NIH/NHLBI, K01HL145099
Role: Principal Investigator
Dates: 9/15/2019 – 7/31/2024; *NIH Notice of Award for institutional transfer to University of Utah awarded on 03/01/2021*.
Overall Goal: Identify biomarkers of sleep loss and circadian misalignment, and assess the impact of increased nightly sleep duration on such biomarkers and insulin sensitivity.

Linking sleep health with risk of metabolic disorders: A machine learning approach.
Principal Investigator: Christopher Depner Ph.D.
Colorado Clinical and Translational Science Institute
Dates: 5/1/2020 – 4/30/2023
Overall Goal: Determine how increased sleep duration impacts free-living energy intake and energy expenditure, and if increased after-dinner snack energy intake mediates more of the negative cardiometabolic risk associated with insufficient sleep compared to increased energy expenditure.

Role of Circadian Disruption in Metabolic and Cognitive Impairments during Insufficient Sleep.
Principal Investigator: Christopher Depner Ph.D.
University of Utah College of Health Seed Grant Program
Dates: 3/1/2021 – 3/1/2023
Overall Goal: Determine the influence of the circadian clock on diabetes risk and cognitive performance in adults who maintain habitual insufficient sleep schedules. We will also test the impact of a sleep extension intervention on these same outcomes, creating essential pilot data for NIH grants.

Effects of Behavioral Sleep Extension on Alzheimer's Disease Relevant Blood Biomarkers and Cognitive Performance
Principal Investigator: Kelly Baron Ph.D.
NIH/NIA, R01NR018891
Role: CO-I
Dates: 5/15/2021 – 5/14/2023
Overall Goal: Extend the aims of our parent study to include an examination of the impact of our randomized behavioral sleep extension intervention on Alzheimer's related biomarkers (blood metabolomics) and cognitive performance measures.

UNDER REVIEW

Biomarkers of Habitual Short Sleep and Related Cardiometabolic Risk
Principal Investigator: Christopher Depner Ph.D.
NIH/NHLBI, R01HL166733
Role: Principal Investigator
Submitted Date: 2/5/2022
Percentile: 34%; funding payline 25%; planned resubmission November 2022.
Overall Goal: Identify biomarkers that link risk of type 2 diabetes with habitual short sleep duration and inform whether sleep extension reverses such risk.

Timing of Resistance Exercise on Glycemic Control in Older Adults: The T-Rex Study
Principal Investigators: Christopher Depner Ph.D. & Tanya Halliday Ph.D.
Washington University-University of Utah Diabetes Research Center Pilot Grant
Role:Co-PI
Submitted Date: 6/30/2022
Overall Goal: Identify potential mechanisms mediating health impacts of morning versus evening exercise in older adults.

Efficacy of a Circadian Intervention to Prevent Diabetes in People with Habitual Short Sleep Duration
Principal Investigator: Michelle Kubicki (PhD student)
NIH-T32
Role: Primary biological mentor
Submitted Date: 9/19/2022
Overall Goal: to test a circadian intervention designed to optimize the timing of light and food intake in people with HSSD.

COMPLETED

High-Density PSG/EEG System to Enable Fundamental and Clinical Translational Sleep and Circadian Research
Principal Investigator: Christopher Depner Ph.D.
University of Utah VPR Research Instrumentation Fund
Dates: 2021 – 2022
Overall Goal: Obtain a PSG/EEG system with the capacity for high-density EEG. Combined with planned sleep and circadian research suites in the College of Health and the University of Utah CCTS such a system will provide the needed infrastructure to launch completely new lines of fundamental and clinical translational sleep and circadian science at the University of Utah, resulting in new collaborations, increased productivity, and extramural grant funding, and promoting the University of Utah as a world leader in sleep and circadian science.

Development of a Metabolic Kitchen for Clinical and Translational Research
Role: Co-Investigator; Principal Investigator: Tanya Halliday Ph.D.
University of Utah Vice President for Research, Research Instrumentation Fund
Dates: 11/19/2020 – 11/18/2021
Overall Goal: Purchase an industrial Blast Freezer to support the development of a fully functional metabolic kitchen at the University of Utah that will be available to all investigators within the Center for Clinical and Translational Science.

The Effects of Insufficient Sleep on Bone Metabolism

Principal Investigator: Christine Swanson MD, MCR
Colorado Clinical and Translational Sciences Institute PILOT Award Program
Role: Consultant
Dates: 5/1/2019 – 4/30/2021
Overall Goal: Investigate the impact of sustained insufficient sleep and weekend recovery sleep on markers of bone metabolism in healthy adults.

Metabolic and Cognitive Consequences of Sleep Loss
Principal Investigator: Kenneth P. Wright Ph.D.
NIH/NHLBI, R01HL109076
Role: CO-I, Project Leader
Dates: 2013 – 2016
Overall Goal: Identify underlying mechanisms of the cognitive and metabolic consequences of sleep loss and the ability of weekend recovery sleep to mitigate these consequences in Humans.

Supplement to Metabolic and Cognitive Consequences of Sleep Loss
Principal Investigator: Kenneth P. Wright Ph.D.
NIH/NHLBI, R01HL109076-04S1
Role: CO-I, Primary Writer, Project Leader
Dates: 2014 – 2016
Overall Goal: Addition of metabolomics to our parent grant will enhance our understanding of metabolic pathways and mechanisms contributing to reduced insulin sensitivity and altered energy metabolism during insufficient sleep and importantly we will be able to test for the first time novel metabolites and pathways associated with the hypothesized benefits of weekend recovery sleep. Furthermore, we will analyze for sex differences in these biomarkers in response to insufficient sleep and weekend recovery sleep.

Mechanisms of Insufficient Sleep Contributing to Metabolic Disease Risk and Impact from "Weekend Recovery" Sleep
Principal Investigator: Christopher Depner Ph.D.
Sleep Research Society Foundation Early Career Development Fellowship, 011-JP-16
Role: Principal Investigator
Dates: 4/12/2016 – 2/3/2017
Overall Goal: Identify the influence of insufficient sleep on mechanisms underlying metabolic dysregulation and determine the impact of "weekend recovery" sleep on these mechanisms. Targeted metabolomics analyses focused on identifying changes in lipid inflammatory mediators during insufficient sleep and weekend recovery sleep.

Mechanisms of Insufficient Sleep Contributing to Metabolic Disease Risk and Impact from "Weekend Recovery" Sleep
Principal Investigator: Christopher Depner Ph.D.
NIH/NIDDK, F32DK111161
Role: Principal Investigator
Dates: 02/04/2017 – 02/03/2019
Overall Goal: Identify the impact of insufficient sleep and weekend recovery sleep on tissue specific insulin sensitivity, and identify potential mechanisms underlying changes in insulin sensitivity using untargeted metabolomics.

Biomarkers of Insufficient Sleep and Sleepiness
Principal Investigators: Kenneth P. Wright Ph.D. and Nichole Reisdorph Ph.D.
NIH/NHLBI, R01HL132150-01
Role: CO-I, Primary Writer, Project Leader
Dates: 09-20-2016 – 07/31/2019
Overall Goal: Identify blood biomarkers with consistent responses to insufficient sleep and that show associations with changes in performance during sleep loss. We anticipate these findings will be the first step in establishing validated biomarkers of sleep loss for use as clinical assessment of overall sleep health.

Identification of Metabolomic Alterations in Response to Insufficient Sleep
Principal Investigator: Josiane Broussard Ph.D.
Mayo Clinic Metabolomics Resource Core Pilot and Feasibility Award
Role: CO-I
Dates: 8/1/2018 – 7/31/2019
Overall Goal: Use a combination of targeted and untargeted metabolomics to assess metabolite changes during an oral glucose tolerance at baseline and during insufficient sleep.

PROFESSIONAL MEMBERSHIPS

Sleep Research Society
American Academy of Sleep Medicine

PROFESSIONAL REFERENCES

1) Dr. Kenneth Wright Jr., Postdoctoral Mentor, 303-735-6409, Kenneth.wright@colorado.edu
2) Dr. Donald Jump, PhD Major Advisor, 541-737-4007, Donald.jump@oregonstate.edu
3) Dr. Edward Melanson, Collaborator, 303-724-0935, Ed.melanson@ucdenver.edu
4) Dr. Janine Higgins, Collaborator, 720-777-2955, Janine.higgins@childrenscolorado.org