

Rebecca Ludwig OTR/L PhD

Department of Rehabilitation Science
University of Oklahoma Health Sciences
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Education

PhD in Rehabilitation Science	Aug 2018-May 2023
<ul style="list-style-type: none">University of Kansas Medical Center (KUMC)	
Certificate in Health Psychology	Jan 2020-2022
<ul style="list-style-type: none">University of Kansas	
Master of Occupational Therapy	Dec 2015
<ul style="list-style-type: none">Concordia University Wisconsin	
Bachelor of Science, Major in Rehabilitation Science	Dec 2014
<ul style="list-style-type: none">Concordia University Wisconsin	

Work Experience

University of Oklahoma Health Sciences 1220 N Stonewall Ave, Oklahoma City, OK	July 2023- Present
Associate Professor in the Doctor of Occupational Therapy program teaching research courses and clinical courses.	
University of Kansas Health System -Main Hospital, Indian Creek Campus 3901 Rainbow Blvd. Kansas City, KS	Jan 2018-July 2023
Occupational therapist (PRN): Assist in discharge planning for post hospital care. Assess activities of daily living. Diagnoses ranging from orthopedic, cardiac, and neurological deficits with an emphasis on neurological diagnoses.	
St. Luke's Hospital 4401 Wornall Rd, Kansas City, MO	Jan 2016-Jan 2018
Occupational therapist (PRN): Assist in discharge planning for post hospital care. Assess activities of daily living. Diagnoses ranging from orthopedic, cardiac, and neurological deficits with an emphasis on neurological diagnoses.	

Research Experience

Graduate Research Assistant (50% effort)	Jun 2019-July 2023
KUMC Department of Physical Therapy and Rehabilitation Science Sleep, Health, and Wellness laboratory (Director: Katie Siengsukon, PT, PhD) Research project: SIESTA: Sleep Intervention to Enhance Cognitive Status & reduce β Ta Amyloid Role in lab: Provide Cognitive Behavioral Therapy for Insomnia intervention and active control for participants on NIH R01-funded study. Lead case series (Ludwig et al. <i>under review</i>). Lead survey study (Ludwig et al. <i>accepted for publication</i>). Assist with data analysis. Mentor DPT students.	

Peer-Reviewed Publications

Ludwig R, D'Silva L, Vaduvathiriyam P, Rippee MA, Siengsukon C. Sleep Disturbances in the Acute Stage of Concussion are Associated With Poorer Long-Term Recovery: A Systematic Review. *Physical medicine and rehabilitation*. 2020;12(5):500-11.

Ludwig R, Vaduvathiriyam P, Siengsukon C. Does cognitive-behavioral therapy improve sleep outcomes in individuals with traumatic brain injury: a scoping review. *Brain Injury*. 2020;34(12):1569-78.

Siengsukon CF, Nelson E, Williams-Cooke C, **Ludwig R**, Beck ES, Jr., Vidoni ED, Mahnken JD, Stevens S, Drerup M, Bruce J, Burns J. Cognitive behavioral therapy for insomnia to enhance

cognitive function and reduce the rate of A β deposition in older adults with symptoms of insomnia: A single-site randomized pilot clinical trial protocol. *Contemporary Clinical Trials*. 2020;99:106190.

Ludwig R, Vaduvathiriyam P, Siengsukon CF. (2021). Sleep quality in chronic stage of concussion is associated with poor outcomes: A systematic review. *Journal of Concussion*.

Ludwig R, Eakman A, Bath-Scheel C, Siengsukon C. (2022) Occupational therapy perception and attitude about sleep: A survey study. *American Journal of Occupational Therapy*

Harris, T. P., Zaeske, L. M., **Ludwig, R.**, Baker, S., Lynch, S., Thuringer, A., Bruce, J., Siengsukon, F. C.). Social support predicts sleep quality in people with multiple sclerosis during the COVID-19 pandemic. *Journal of Behavioral Medicine*.

Ludwig R, D'Silva L, Radel J, Rippee M, Eakman A, Morris J, Drerup M, Siengsukon C. (2022) Assessing CBT-I to Improve Sleep Outcomes in Individuals with Concussion (SLiC): A Randomized Delayed Clinical Trial Protocol *JMIR Research Protocols*

Ludwig R, Eakman A, Siengsukon C. (2023) Sleep promotion education in acute care: Occupational therapy case series. *Open journal in Occupational Therapy*

Ludwig R, D'Silva L, Radel J, Rippee M, Eakman A, Morris J, Drerup M, Siengsukon C. (2023) CBT-I to Improves Sleep Outcomes in Individuals with Concussion (SLiC): A pilot Randomized Delayed Clinical Trial

Manuscripts in Submitted

Ludwig R., D'Silva L, Radel J, Rippee M, Eakman A, Morris J, Drerup M, Siengsukon C. (2023) Cognitive behavioral therapy for insomnia to improves neurofilament light and phosphorylated tau biomarkers in individuals with a concussion.

Manuscripts in Preparation

Scientific Presentations

Ludwig R, D'Silva L, Vaduvathiriyam P, Rippee MA, Siengsukon, CF. (2019). Sleep is associated with poorer recovery following concussion: A systematic review. Platform presented at American Congress of Rehabilitation Medicine annual conference 2019.

Ludwig R, Vaduvathiriyam P, Siengsukon CF. (2020). Does cognitive behavioral therapy improve sleep outcomes in individuals with traumatic brain injury: A scoping review. Accepted for Poster presentation at American Occupational Therapy Association annual conference (cancelled due to Covid-19)

Ludwig R, Vaduvathiriyam P, Siengsukon C. Sleep quality in Chronic stage of concussion is associated with poor outcomes: A systematic review. Symposium presented at American Congress of Rehabilitation Medicine annual conference 2020

Ludwig R, Vaduvathiriyam P, Siengsukon CF. (2020). Does cognitive behavioral therapy improve sleep outcomes in individuals with traumatic brain injury: A scoping review. Platform presented at Society of Behavioral Sleep Medicine 2020

Ludwig R, Eakman A, Bath-Scheel C, Siengsukon C. (2021) Occupational therapy perception and attitude about sleep: A survey study. Platform Presentation at Student Research forum University of Kansas Medical Center

Ludwig R. (August 2021) Sleep in concussion. Presentation at the monthly Kansas University Medical Center Multidisciplinary Sleep Conference

Ludwig R, Siengsukon CF. (2021). Assessing CBT-I to Improve Sleep Outcomes in Individuals with Concussion (SLiC): A randomized clinical trial protocol. Poster presented at Society of Behavioral Sleep Medicine 2021

Drerup M, Siengsukon C, **Ludwig R**, Kane A, Roth A. (2021) Taking sleep to the streets: Innovative delivery models for sleep health promotion and insomnia treatment across disciplines. Symposium presented at Society of Behavioral Sleep Medicine 2021

Ludwig R, Eakman A, Bath-Scheel C, Siengsukon C. (2022) Occupational therapy perception and attitude about sleep: A survey study. Poster presented at AOTA 2022

Teaching Experience

Graduate Teaching Assistant (50% effort) **Aug 2018-May 2019**
KUMC Department of Occupational Therapy Education
Assisted in year 1 OT course work (OTCH 622,682,738) and clinical rotations on KUMC campus.
Lead lectures; grade; facilitate lab activities.

Awards

Outstanding presentation in rehabilitation science research at student research forum	April 2022
Outstanding GRA in PTRSAT department award	Oct 2021
Bittel family leadership award	Oct 2020
T-32 for Neurological and Rehabilitation Sciences Training Program trainee	Jun 2020
KU School of Health Professions travel award	Feb 2020

Leadership

Society of Behavioral Sleep Medicine	Aug 2021-Jan 2022
Student representative for the education committee	
Student representative on the Board of Directors	
Student Interest Group in Rehabilitation Science	Aug 2018-present
KUMC Department of Physical Therapy and Rehabilitation Science	
• President-elect	Jan-Dec 2019
○ Initiate establishing travel fund for PhD students	
• President	Jan 2020-Jan 2021
○ Arrange speakers for formal meetings; manage funding budget; represent PhD students at departmental faculty monthly meetings	

Professional Activities

Student Interest Group in Rehabilitation Science	Aug 2018-present
KUMC Department of Physical Therapy and Rehabilitation Science	
• Member: attend meetings, collaborate with group members	
Society of behavioral Sleep Medicine	July 2021- present
• Student representative on education committee	

Antiracist Task Force
Short-term work group

July 2020- present

- Member: attend meetings, collaborate with group members, Ph.D. representative

Professional Affiliations

American Occupational Therapy Association

Jan 2017-present

- Active member

Society of Behavioral Sleep Medicine

Mar 2019-present

- Active member

Licenses and Certifications

Kansas license Occupational Therapist, National Board-Certified Occupational Therapist, Current Basic Life Support certified, Cognitive Behavioral Therapy for Insomnia certified