Stanford



Renske Lok

Postdoctoral Scholar, Psychiatry

NIH Biosketch available Online

1 Curriculum Vitae available Online

Bio

BIO

I obtained my PhD degree at the University of Groningen, for studying effects of light on human alertness, thermoregulation and sleep. Thereafter, I decided to pursue a postdoctoral fellowship at Stanford University Center for Sleep Sciences and Medicine. Here, I am developing skills to study a combination of basic and translational concepts of human sleep, in which we try to assess the association between sleep patterns and various diseases, as well as the influence of light exposure on human sleep.

HONORS AND AWARDS

- Trainee Innovator Award, Department of Psychiatry and Behavioral Science, Stanford University (2022)
- Best dissertation of the year in the field of Behavioral and Cognitive neurosciences, University of Groningen (2021)
- Young Investigators Research Forum Scholarship, American Academy of Sleep Medicine (2021)
- Merit award winner based on scientific excellence, Society for Research on Biological Rhythms (2020)
- Best Open Access Publication, University of Groningen (2020)
- Travel grant, Society for Light treatment and Biological Rhythm (2018)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Board member, Society for Light Treatment and Biological Rhythms (2018 present)
- Clinical Advisor, Center for Environmental Therapeutics (2021 present)
- Trainee Subcommittee member, Sleep Research Society (2021 present)
- Scientific Advisor, Good Light Group (2022 present)

PROFESSIONAL EDUCATION

- Doctor of Science, Rijksuniversiteit Groningen (2019)
- Master of Science, Rijksuniversiteit Groningen (2014)
- Master, University of Groningen, Neuroscience (2015)
- PhD, University of Groningen, the Netherlands, Chronobiology

STANFORD ADVISORS

• Jamie Zeitzer, Postdoctoral Faculty Sponsor

LINKS

• LinkedIn: https://www.linkedin.com/in/renske-lok-54577a72/

• Lab website: https://sleep.sites.stanford.edu/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

I'm interested in questions regarding perceived experiences and measured markers of those experiences, for example how do perceived sleep quality relate to sleep quality measured, or how does daytime sleepiness relate to sleep quality at night.

Other interests include effects of daytime light exposure on nighttime sleep, circadian clock phase changes by flashes of light, and how stability and variability in daily rhythms can predict health and disease

Publications

PUBLICATIONS

- The sleep-circadian interface: A window into mental disorders. Proceedings of the National Academy of Sciences of the United States of America Meyer, N., Lok, R., Schmidt, C., Kyle, S. D., McClung, C. A., Cajochen, C., Scheer, F. A., Jones, M. W., Chellappa, S. L. 2024; 121 (9): e2214756121
- Impaired 24-h activity patterns are associated with an increased risk of Alzheimer's disease, Parkinson's disease, and cognitive decline. Alzheimer's research & therapy

Winer, J. R., Lok, R., Weed, L., He, Z., Poston, K. L., Mormino, E. C., Zeitzer, J. M. 2024; 16 (1): 35

• Fatigued but not sleepy? An empirical investigation of the differentiation between fatigue and sleepiness in sleep disorder patients in a cross-sectional study. Journal of psychosomatic research

Suh, S., Lok, R., Weed, L., Cho, A., Mignot, E., Leary, E. B., Zeitzer, J. M. 2024; 178: 111606

• ENLIGHT: A consensus checklist for reporting laboratory-based studies on the non-visual effects of light in humans. EBioMedicine Spitschan, M., Kervezee, L., Lok, R., McGlashan, E., Najjar, R. P.

2023; 98: 104889

• A threshold by any other name: is five minutes of wake 'long' enough to degrade sleep quality? Sleep

Lok, R., Chawra, D., Zeitzer, J. M. 2023

• Moving time zones in a flash with light therapy during sleep. Scientific reports

Lok, R., Duran, M., Zeitzer, J. M. 2023; 13 (1): 14458

• PERILS OF THE NIGHTTIME: IMPACT OF BEHAVIORAL TIMING AND PREFERENCE ON MENTAL AND PHYSICAL HEALTH

Zeitzer, J., Lok, R., Weed, L., Winer, J. OXFORD UNIV PRESS INC.2023

• PHASE SHIFTING IN RESPONSE TO LIGHT FLASH SEQUENCES DURING SLEEP

Lok, R., Zeitzer, J.
OXFORD UNIV PRESS INC.2023

• The Impact of Missing Data and Imputation Methods on the Analysis of 24-Hour Activity Patterns. Clocks & sleep

Weed, L., Lok, R., Chawra, D., Zeitzer, J. 2022; 4 (4): 497-507

 Bright Light During Wakefulness Improves Sleep Quality in Healthy Men: A Forced Desynchrony Study Under Dim and Bright Light (III) JOURNAL OF BIOLOGICAL RHYTHMS

Lok, R., Woelders, T., Gordijn, M. M., van Koningsveld, M. J., Oberman, K., Fuhler, S. G., Beersma, D. M., Hut, R. A. 2022: 7487304221096910

 Bright Light Decreases Peripheral Skin Temperature in Healthy Men: A Forced Desynchrony Study Under Dim and Bright Light (II). Journal of biological rhythms

Lok, R., Woelders, T., van Koningsveld, M. J., Oberman, K., Fuhler, S. G., Beersma, D. G., Hut, R. A. 2022: 7487304221096948

Bright Light Increases Alertness and Not Cortisol in Healthy Men: A Forced Desynchrony Study Under Dim and Bright Light (I). Journal of biological rhythms

Lok, R., Woelders, T., van Koningsveld, M. J., Oberman, K., Fuhler, S. G., Beersma, D. G., Hut, R. A. 2022: 7487304221096945

• ISOLATED REM SLEEP BEHAVIOR DISORDER IS ASSOCIATED WITH 24-HOUR RHYTHM DISRUPTION

Winer, J., Lok, R., Cahuas, A., Bueno, F., Poston, K., Mormino, E., Zeitzer, J., During, E. OXFORD UNIV PRESS INC.2022: A125

• SLEEP-WAKE STABILITY AND VARIABILITY IN THE MIDDLE-AGED ADULT POPULATION: A UK BIOBANK STUDY

Lok, R., Weed, L., Chawra, D., Winer, J., Zeitzer, J. OXFORD UNIV PRESS INC.2022: A73-A74

• N2 AND WAKEFULNESS DRIVE SUBJECTIVE SLEEP SATISFACTION IN ADULTS

Lok, R., Chawra, D., Hon, F., Ha, M., Kaplan, K., Zeitzer, J. OXFORD UNIV PRESS INC. 2022: A99

• Circadian photoreception: The impact of light on human circadian rhythms. Progress in brain research

Zeitzer, J. M., Lok, R. 2022; 273 (1): 171-180

• Impact of daytime spectral tuning on cognitive function. Journal of photochemistry and photobiology. B, Biology

Lok, R., Joyce, D. S., Zeitzer, J. M. 2022; 230: 112439

• Objective underpinnings of self-reported sleep quality in middle-aged and older adults: the importance of N2 and wakefulness. *Biological psychology* Lok, R., Chawra, D., Hon, F., Ha, M., Kaplan, K. A., Zeitzer, J. M. 2022: 108290

 Bright Light Decreases Peripheral Skin Temperature in Healthy Men: A Forced Desynchrony Study Under Dim and Bright Light (II) Journal of Biological Rhythms

Lok, R.

2022

 Physiological correlates of the Epworth Sleepiness Scale reveal different dimensions of daytime sleepiness. Sleep advances: a journal of the Sleep Research Society

Lok, R., Zeitzer, J. M. 2021; 2 (1): zpab008

A Temporal Threshold for Distinguishing Off-Wrist from Inactivity Periods: A Retrospective Actigraphy Analysis. Clocks & sleep

Lok, R., Zeitzer, J. M. 2020; 2 (4): 466–72

Gold, silver or bronze: circadian variation strongly affects performance in Olympic athletes SCIENTIFIC REPORTS

Lok, R., Zerbini, G., Gordijn, M. M., Beersma, D. M., Hut, R. A. 2020; 10 (1): 16088

• Daytime melatonin and light independently affect human alertness and body temperature JOURNAL OF PINEAL RESEARCH

Lok, R., van Koningsveld, M. J., Gordijn, M. M., Beersma, D. M., Hut, R. A. 2019; 67 (1): e12583

• Light, Alertness, and Alerting Effects of White Light: A Literature Overview JOURNAL OF BIOLOGICAL RHYTHMS

Lok, R., Smolders, K. J., Beersma, D. M., de Kort, Y. W.

2018; 33 (6): 589-601

• White Light During Daytime Does Not Improve Alertness in Well-rested Individuals JOURNAL OF BIOLOGICAL RHYTHMS Lok, R., Woelders, T., Gordijn, M. M., Hut, R. A., Beersma, D. M. 2018; 33 (6): 637-648