## Alpar S. Lazar, PhD MSc BSc BA

Contact information: University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ, UK Phone: +44 (0) 07883271351, Email: a.lazar@uea.ac.uk

## EMPLOYMENT HISTORY

2020 - present	School of Health Sciences, University of East Anglia, UK Senior Lecturer in Dementia and Complexity in Later Life
2016 – 2020	School of Health Sciences, University of East Anglia, UK Lecturer in Dementia and Complexity in Later Life
2011 - 2016	John van Geest Centre for Brain Repair, Clinical Neurosciences University of Cambridge, UK Research Associate
2008 - 2011	Surrey Sleep Research Centre, University of Surrey, UK Post-doctoral Research Fellow in sleep and cognition

# **EDUCATION**

2010	Doctorate in Psychology – PhD (Qualification: Summa cum laude) Doctoral School of Mental Health, Semmelweis University, Budapest, Hungary
2003	Master of Science Degree in Molecular Medicine and Neuroscience University of Medicine and Pharmacy 'Iuliu Hatieganu', Cluj-Napoca, Romania
2001	Bachelor of Science Degree in Psychology Babes-Bolyai University, Cluj-Napoca, Romania

#### **CURRENT POSITIONS OF RESPONSIBILITY**

2018-present	Lead principle investigator - Sleep and Brain Research Unit, School of Health Sciences, University of East Anglia (UEA)
2019-present	Member of the ARUK Cambridge Network Centre
2016-present	Member of the University Biomedical & Clinical Review Committee, UEA
2016-present	Member of the University Dementia Research Network, UEA

# **GRANTS AND FELLOWSHIPS**

**2019-ongoing** UEA Innovation development fund. (Project title: "sCAVA - Sleep Assessment Using the CAVA Device (principle investigator: Dr Alpar Lazar: £63,164.00)

**2019 - ongoing:** Seed award in science (Project title: 'Investigating a common developmental origin for sensory issues and disturbed sleep, in Autism). Wellcome trust (co-investigator: £99,300.00)

**2017- ongoing:** Seed award in science (Project title: Early sleep and circadian markers of Alzheimer's disease: The impact of APOE-ε4 on circadian rhythm and sleep-wake homeostasis in humans). Wellcome trust (principle investigator: Dr Alpar Lazar: £97,673.00)

**2018-ongoing:** Dementia Care PhD studentships: partnership between UEA, CLAHRC East of England, and the Norfolk and Suffolk Primary and Community Care Research Office (Dem Care) (Co-investigator: £100.000)

**2015** – **2016**: Research fellowship (Project title: The efficacy and tolerability of two non-pharmaceutical interventions to improve sleep quality and daily life of patients with Huntington's disease: A randomized trial). Jacques and Gloria Gossweiler Foundation, Bern, Switzerland (fellowship Dr Alpar Lazar: £128,290.00).

**2011** – **2015**: Project title: Sleep and metabolism in pre-manifest HD) (Co-investigator, £538,764.00).

#### **PUBLICATIONS**

Muzni K, Groeger JA, Dijk D-J, **Lazar AS**. Self-reported sleep quality is more closely associated with mental and physical health than chronotype and sleep duration in young adults: A multi-instrument analysis. *J Sleep Res.* 2020 (In press)

Bartlett DM, Domínguez DJF, Lazar AS, Kordsachia CC, RankinTJ, Lo J, Govus AD, Power BD, Lampit A, Eastwood PR, Ziman M, Cruickshank T. Multidisciplinary Rehabilitation Reduces Hypothalamic Grey Matter Volume Loss in Individuals with Preclinical Huntington's Disease: A Nine-Month Pilot Study. *J Neurol Sci.* 2020, 408: 116522

Lázár ZI, Dijk DJ, **Lázár AS.** Infraslow oscillations in human sleep spindle activity. *J Neurosci Methods*. 2019, 316: 22-34.

Simor P, Harsányi A, Csigó K, Miklós G, Lazar AS, Demeter G. Eveningness is associated with poor sleep quality and negative affect in obsessive-compulsive disorder. *J Behav Addict*. 2018, 8: 1-11.

Bartlett DM, Domínguez DJF, Reyes A, Zaenker P, Feindel KW, Newton RU, Hannan AJ, Slater JA, Eastwood PR, Lazar AS, Ziman M, Cruickshank T. Investigating the Relationships Between Hypothalamic Volume and Measures of Circadian Rhythm and Habitual Sleep in Premanifest Huntington's Disease. *Neurobiol Sleep and Circadian Rhythms*. 2018, 6: 1-8.

Szatmari S, Orban-Kis K, Mihaly I, Lazar AS. [Diabetes, dementia, depression, distress] *Ideggyogy Sz.* 2017, 70: 293-299. review. Hungarian.

Ronai KZ, Szentkiralyi A, Lazar AS, Lazar ZI, Papp I, Gombos F, Zoller R, Czira ME, Lindner AV, Mucsi I, Bodizs R, Molnar MZ, Novak M. Association of symptoms of insomnia and sleep parameters among kidney transplant recipients. *J Psychosom Res.* 2017, 99: 95-104.

Ronai KZ, Szentkiralyi A, Lazar AS, Ujszaszi A, Turanyi C, Gombos F, Mucsi I, Bodizs R, Molnar MZ, Novak M. Depressive Symptoms are Associated with Objectively Measured Sleep Parameters in Kidney Transplant Recipients. *J Clin Sleep Med.* 2017, 13: 557–564.

Bartlett DM, Cruickshank TM, Hannan AJ, Eastwood PR, Lazar AS, Ziman MR. Neuroendocrine and neurotrophic signaling in Huntington's disease: Implications for pathogenic mechanisms and treatment strategies. *Neurosci Biobehav Rev.* 2016, 71: 444-454. Review.

Atherton KE, Nobre AC, **Lazar AS**, Wulff K, Whittaker RG, Dhawan V, Lazar ZI, Zeman AZ, Butler CR. Slow wave sleep and accelerated forgetting. *Cortex*. 2016, 84: 80-89.

Santhi N\*, Lazar AS\*, McCabe PJ, Lo JC, Groeger JA, Dijk DJ. Sex differences in the circadian regulation of sleep and waking cognition in humans. *Proc Natl Acad Sci U S A*. 2016, 113: E2730-9. (\* joint first author)

**Lazar AS**, Panin F, Goodman AOG, Lazic SE, Lazar ZI, Mason SL, Rogers L, Murgatroyd PR, Watson L, Singh P, Borowsky B, Shneerson JM, Barker RA. Sleep deficits but no metabolic deficits in premanifest Huntington's disease. *Ann Neurol*. 2015, 78: 630-48.

**Lazar AS**, Lazar ZI, Dijk DJ. The circadian regulation of slow waves in human sleep. *Neuroimage*. 2015, 116:123-34.

Collins LM, Begeti F, Panin F, Lazar AS, Cruickshank T, Ziman M, Mason SL, Barker RA. Novel Nut and Bolt Task Quantifies Motor Deficits in Premanifest and Manifest Huntington's Disease. *PLoS Curr.* 2015 Sep 8; 7.

Mason SL, Zhang J, Begeti F, Guzman NV, Lazar AS, Rowe JB, Barker RA, Hampshire A. The role of the amygdala during emotional processing in Huntington's disease: from pre-manifest to late stage disease. *Neuropsychologia.* 2015, 70: 80-9.

Kuan WL, Kasis A, Yuan Y, Mason SL, Lazar AS, Barker RA, Goncalves J. Modelling the natural history of Huntington's disease progression. *J Neurol Neurosurg Psychiatry*. 2015, 86: 1143-9.

Videnovic A, Lazar AS, Barker RA, Overeem S. 'The clocks that time us'-circadian rhythms in neurodegenerative disorders. *Nat Rev Neurol*. 2014, 10: 683-93.

Archer SN, Laing EE, Möller-Levet CS, van der Veen DR, Bucca G, Lazar AS, Santhi N, Slak A, Kabiljo R, von Schantz M, Smith CP, Dijk DJ. Mistimed sleep disrupts circadian regulation of the human transcriptome. *Proc Natl Acad Sci U S A*. 2014, 111: E682-91.

**Lazar AS**, Santhi N, Hasan S, Lo JC, Johnston J, von Schantz M, Archer SN, Dijk DJ. Intrinsic Circadian Period and the Melatonin Rhythm in Men and Women: Predictors of Sleep during the Weekend and in the Laboratory. *J Sleep Res.* 2013, 22: 155-9.

Hasan S\*, Santhi N\*, Lazar AS\*, Slak A, Lo J, von Schantz M, Archer SN, Johnston JD, Dijk DJ. Assessment of circadian rhythms in humans: comparison of real-time fibroblast reporter imaging with plasma melatonin. *FASEB J.* 2012, 26: 2414-23. (\*joint first authors)

**Lazar AS**, Slak A, Lo JC, Santhi N, von Schantz M, Archer SN, Groeger JA, Dijk DJ. Sleep, diurnal preference, health, and psychological well-being: a prospective single-allelic-variation study. *Chronobiol Int.* 2012, 29: 131-46.

Lo JC, Groeger JA, Santhi N, Arbon EL, Lazar AS, Hasan S, von Schantz M, Archer SN, Dijk DJ. Effects of Partial and Acute Total Sleep Deprivation on Performance across Cognitive Domains, Individuals and Circadian Phase. *PLOS One*. 2012, 7: e45987.

Lindner A, Fornadi K, Lazar AS, Czira ME, Dunai A, Zoller R, Veber O, Szentkiralyi A, Kiss Z, Toronyi E, Mucsi I, Novak M, Molnar MZ. Periodic limb movements in sleep are associated with stroke and cardiovascular risk factors in patients with renal failure. *J Sleep Res.* 2012, 21: 297-307.

**Lazar AS**, Lázár ZI, Bíró A, Gyori M, Tárnok Z, Prekop C, Keszei A, Stefanik K, Gádoros J, Halász P, Bódizs R. Reduced fronto-cortical brain connectivity during NREM sleep in Asperger syndrome: an EEG spectral and phase coherence study. *Clin Neurophysiol*. 2010, 121: 1844-54.

Molnar MZ, Lazar AS, Lindner A, Fornadi K, Czira ME, Dunai A, Zoller R, Szentkiralyi A, Rosivall L, Shapiro CM, Novak M, Mucsi I. Sleep apnea is associated with cardiovascular risk factors among kidney transplant patients. *Clin J Am Soc Nephrol*. 2010, 5: 125-32.

Bódizs R, Körmendi J, Rigó P, **Lázár AS**. The individual adjustment method of sleep spindle analysis: methodological improvements and roots in the fingerprint paradigm. *J Neurosci Methods*. 2009, 178: 205-13.

Lázár AS, **Bódizs R**. [The structure and patterns of sleep in autism spectrum disorders]. *Psychiatr Hung*. 2008, 23: 109-28. Review. Hungarian.

Bódizs R, **Lázár AS**, Rigó P. Correlation of visuospatial memory ability with right parietal EEG spindling during sleep. *Acta Physiol Hung.* 2008, 95: 297-306.

Bódizs R, Kis T, **Lázár AS**, Havrán L, Rigó P, Clemens Z, Halász P. Prediction of general mental ability based on neural oscillation measures of sleep. *J Sleep Res.* 2005, 14: 285-92.

Bódizs R, **Lázár AS**. Schizophrenia, slow wave sleep and visuospatial memory: sleep-dependent consolidation or trait-like correlation? *J Psychiatr Res.* 2006, 40: 89-90. No abstract available.

Bódizs R, Sverteczki M, Lázár AS, Halász P. Human parahippocampal activity: non-REM and REM elements in wake-sleep transition. *Brain Res Bull.* 2005, 65: 169-76.

# **BOOK CHAPTERS**

**Lazar AS**, Bodizs R, Lazar ZI. Frequency Characteristics of Sleep. In: Gable P, Miller MW, Bernat E (editors), Oxford Handbook of EEG Frequency (*In press*).

**Lazar AS** and Horvath K. Sleep-Wake Disorders. In: Balazs J. & Miklosi M. (editors), Textbook of child, adolescent and youth mental disorders. First ed. Budapest: Semmelweis Kiado es Multimedia Studio, 2018, p. 144-15411

Dijk DJ and Lazar AS. The Regulation of Human Sleep and Wakefulness: Sleep Homeostasis and Circadian Rhythmicity. In: Morin CM and Espie CA (editors), Oxford Handbook of Sleep and Sleep Disorders. Oxford University Press, inc. New York, 2012, 38-60.

**Lazar AS.** Invited referee, and postface author of the Hungarian translation of the book from Peter Spork. Das Schlafbuch (The Book of Sleep). Rowohlt Verlag, Reinbek 2007 / Athenaeum, Budapest 2009

# RECENT PLENARY/KEYNOTE LECTURES

'The circadian and sleep dependent regulation of sleep spindles and associated brain oscillatory activity: insights from health and neurodegeneration' – 2nd International Conference on Sleep Spindling, 24-26th of May 2018, Budapest, Hungary

(https://sleepspindles.akcongress.com/index.php/programme/keynote-speakers)

'Sleep and health' – Research festival, 22nd March 2017, School of Health Sciences, Faculty of Medicine and Health Sciences, University of East Anglia, Norwich, UK

'The role of sleep and circadian rhythmicity in brain health and cognition' – MRC Cognition and Brain Sciences Unit, Wednesday Lunchtime Seminars, 20 April, 2016, Cambridge, UK

'Fingerprints versus plasticity in neurodegeneration: Rhythms in the brain and behaviour at the intersection of environmental and genetic factors' – 4<sup>th</sup> INSPIRE (International Scientific Grou**P** of CIrcadian Rhythm Experts) meeting 28 April- 1 May, 2016, Viareggio, ITALY

'Disease modelling in HD using clinical and sleep related measures' – CHDI Statistical Forum, CHDI Foundation, 21-22 January 2016; Princeton, NJ

*'Sleep in neurodegenerative disorders'* – London Sleep Medicine Training Course, The London sleep centre, 14-15 February 2016, London, UK

'The role of sleep in brain health' – General neurology academic meeting, Addenbrooke's Hospital, Department of Clinical Neurosciences, University of Cambridge, UK, 26 May 2015, Cambridge, UK

'Clocks and rhythms in the brain' - Oriel College, 13 March 2015, Oxford, UK

#### RECENT MEDIA ACTIVITY

https://pintofscience.co.uk/event/sleep-navigation-and-dementia

https://www.dailymail.co.uk/health/article-6104229/Doctors-insist-slumber-best-anti-ageing-weapon.html

https://www.bbc.co.uk/news/uk-england-norfolk-47790758

https://www.northnorfolkradio.com/news/local-news/uea-launches-sleep-unit-to-study-alzheimers/

 $\underline{https://www.edp24.co.uk/news/health/new-sleep-research-unit-opens-at-norwich-s-university-of-east-anglia-1-5976726}$ 

https://www.klfm967.co.uk/news/klfm-news/2843088/this-uea-study-is-keeping-people-up-at-night/

https://www.heart.co.uk/eastanglia/news/local/uea-opens-sleep-and-dementia-research-unit/

https://www.eventbrite.co.uk/e/sleep-ageing-and-brain-health-symposium-at-the-university-of-east-anglia-tickets-58999433895

https://www.healtheuropa.eu/sleep-disturbances-dementia-research/91143/

http://archive.cambridge-tv.co.uk/dr-alpar-lazar-sleep-study/