
PUBLICATION LIST OF SALOME KURTH

* Publications of particular significance are marked.

IF refers to 5-year journal impact factor, ISI Journal Citation Reports (JCR).

1. PUBLICATIONS

Submitted / Under Review (3)

- 1) *An Infant Sleep Electroencephalographic Marker of Thalamocortical Connectivity Predicts Behavioral Outcome in Late Infancy*
Jaramillo V, Schoch S, Markovic A, Kohler M, Huber R, Lustenberger C, **Kurth S**, Preprinted at OSF Preprints
- 2) *Bedtime to the brain: How infants sleep habits intertwine with sleep neurophysiology*
Schoch S, Jaramillo V, Markovic A, Huber R, Kohler M, Jenni O, Lustenberger C, **Kurth S**, [Preprinted at OSF Preprints](#)
- 3) * *From Alpha Diversity to ZZZ: Exploring associations among sleep, gut bacteria and behavioral development in infancy*
Schoch S, Castro-Meija JL, Krych L, Kot W, Leng B, Kohler M, Huber R, Rogler G, Biedermann L, Walser JC, Nielsen D, **Kurth S**, [Preprinted at OSF Preprints](#)

Peer-reviewed (42)

- 1) [Association of transportation noise with sleep during the first year of life: a longitudinal study](#)
Blume C, Schoch S, Vienneau D, Rööslü M, Kohler M, Moeller A, **Kurth S***, Usemann J*, *Shared last authorship, 2021, Environmental Research (IF 6.50)
- 2) [Altered EEG markers of synaptic plasticity in a human model of NMDA receptor deficiency: anti-NMDA receptor encephalitis](#)
Gefferie SR, Maric A, Critelli H, Gueden S, Kurlemann G, **Kurth S**, Nosadini M, Plecko B, Ringli M, Rostásy K, Sartori S, Schmitt B, Suppiej A, Van Bogaert P, Wehrle FM, Huber R, Bölsterli BK, [Preprinted at medRxiv](#), in press, NeuroImage (IF 7.08)
- 3) * [Sleep behavior of infants with infantile hemangioma treated with propranolol](#)
Theiler M*, Knöpfel N*, Von Der Heydt S, Schwieger-Briel A, Luchsinger I, Smith A, Kernland-Lang K, Waelchli R, Neuhaus K, Kohler M, Gnannt R, Schoch S*, Weibel L*, **Kurth S***, *Shared first and last authorship, in press, Eur J Pediatr (IF 2.28)
- 4) [Severe Effects of the COVID-19 Confinement on Young Children's Sleep: A Longitudinal Study Identifying Risk Factors and Protective Arrangements](#)
Markovic A, Mühlematter C, Beaugrand M, Camos V, **Kurth S**, 2021, J Sleep Res (IF 3.70)
- 5) * [Which are the central aspects of infant sleep? The dynamic of sleep composites across infancy](#)
Schoch S, Huber R, Kohler M, **Kurth S**, 2020, Sensors (IF 3.28)
- 6) [Actigraphy in sleep research with infants and young children: current practices and future benefits of standardized reporting](#)

- Schoch S, **Kurth S***, Werner H* *Shared last authorship, 2020, J Sleep Res (IF 3.70)
- 7) [Characterization of overnight slow wave slope changes across development in an age-, amplitude- and region-dependent manner.](#)
Jaramillo V, Volk C, Maric A, Furrer M, Fattinger S, **Kurth S**, Lustenberger C, Huber R, 2020, SLEEP (IF 5.87)
- 8) [Sleep EEG slow wave activity in medicated and unmedicated children and adolescents with attention-deficit/hyperactivity disorder](#)
Furrer M, Jaramillo V, Volk C, Ringli M, Aellen R, Wehrle FM, Pugin F, **Kurth S**, Brandeis D, Schmid M, Jenni O, Huber R, 2019, Translational Psychiatry (IF 5.18)
- 9) [The experience-dependent increase in deep sleep activity is reduced in children with attention-deficit/hyperactivity disorder](#)
Furrer M, Ringli M, **Kurth S**, Brandeis D, Jenni O, Huber R, 2019, Sleep Medicine (IF 3.93)
- 10) [Endocrine responses during CPAP-withdrawal in obstructive sleep apnoea: data from two randomized controlled trials](#)
Thiel S, Haile SR, Peitzsch M, Schwarz E, Sievi N, **Kurth S**, Beuschlein F, Kohler M, Gaisl T, 2019, Thorax (IF 8.89)
- 11) * [A simple sleep EEG marker in childhood predicts brain myelin 3.5 years later](#)
LeBourgeois M, Dean D, Deoni S, Kohler M, **Kurth S**, 2019, NeuroImage (IF 7.08)
- 12) * [Actimetry in infant sleep research: an approach to facilitate comparability](#)
Schoch S, Jenni O, Kohler M, **Kurth S**, 2019, SLEEP (IF 5.87), Openly accessible [analysis codes](#)
- 13) [Across-night dynamics in traveling slow waves throughout childhood.](#)
Schoch S, Riedner B, Deoni S, Huber R, LeBourgeois M, **Kurth S**, 2018, SLEEP (IF 5.87)
- 14) [How do children fall asleep? A high-density EEG study of slow waves in the transition from wake to sleep.](#)
Spiess M, Bernardi G, **Kurth S**, Wehrle F, Ringli M, Jenni OG, Huber R, 2018, NeuroImage 178: 23-35 (IF 7.08)
- 15) [Theta waves in children's waking electroencephalogram resemble local aspects of sleep during wakefulness](#)
Fattinger S, **Kurth S**, Ringli M, Jenni O, Huber R, 2017, Scientific Reports 7(1): 11187 (IF 5.87)
- 16) * [Travelling slow oscillations during sleep – a marker of brain connectivity in childhood.](#)
Kurth S, Riedner B, Dean DC, O'Muircheartaigh J, Huber R, Jenni OG, Deoni SC, LeBourgeois MK, 2017, SLEEP 40(9) (IF 5.87)
- 17) [Chronic social stress leads to altered sleep homeostasis in mice.](#)
Olini N, Rothfuchs I, Azzinnari D, Pryce CR*, **Kurth S***, Huber R* *Shared last authorship, 2017, Behav Brain Res 327: 167-173 (IF 3.06)
- 18) [High-density electroencephalographic recordings during sleep in children and adolescents with acquired brain injury.](#)

- Mouthon A, Meyer-Heim A, **Kurth S**, Ringli M, Pugin F, Van Hedel HJA, Huber R, 2017, *Neurorehabil Neural Repair* 31: 462-474 (IF 4.84)
- 19) [*Acute Sleep Restriction Increases Dietary Intake in Preschool-Age Children.*](#)
Mullins E, Miller AL, Cherian SS, Lumeng JC, Wright KP, **Kurth S**, LeBourgeois MK, 2017, *J Sleep Res* 26: 48-54 (IF 3.70)
- 20) * [*Increased sleep depth in developing neural networks: new insights from sleep restriction in children.*](#)
Kurth S, Dean DC, Achermann P, O'Muircheartaigh J, Huber R, Deoni SC, LeBourgeois MK, 2016, *Front Hum Neurosci* 10: 456 (IF 4.02)
- 21) [*Development of nap neurophysiology: preliminary insights into sleep regulation in early childhood.*](#)
Kurth S, Lassonde JM, Pierpoint LA, Rusterholz T, Jenni OG, McClain IJ, Achermann P, LeBourgeois, MK, 2016, *J Sleep Res* 25: 646-654 (IF 3.70)
- 22) [*Sleep moderates the association between response inhibition and self-regulation in early childhood.*](#)
Schumacher A, Miller A, Watamura SE, **Kurth S**, Lassonde J, LeBourgeois MK, 2016, *J Clin Child Adolesc Psychol* 46: 222-235 (IF 4.84)
- 23) [*Developmental changes in sleep spindle characteristics and sigma power across early childhood.*](#)
McClain IJ, Lustenberger C, Achermann P, Lassonde J, **Kurth S***, LeBourgeois MK*
*Shared last authorship, 2016, *Neural Plast* 2016: 3670951 (IF 3.42)
- 24) [*Sleep physiology in toddlers: effects of missing a nap on subsequent night sleep.*](#)
Lassonde JM, Rusterholz T, **Kurth S**, Schumacher AM, Achermann P, LeBourgeois MK, 2016, *Neurobiol Sleep Circ Rhythms* 1: 19-26 (IF n/a – new journal)
- 25) [*Developmental trajectories of EEG sleep slow wave activity as a marker for motor skill development during adolescence: a pilot study.*](#)
Lustenberger C, Mouthon AL, Tesler N, **Kurth S**, Ringli M, Buchmann A, Jenni OG, Huber R, 2016, *Dev Psychobiol* 59: 5-14 (IF 2.79)
- 26) [*High-density electroencephalographic recordings during sleep in children with disorders of consciousness.*](#)
Mouthon A, Van Hedel HJA, Meyer-Heim A, **Kurth S**, Ringli M, Pugin F, Huber R, 2016, *NeuroImage-Clin* 11: 468-475 (IF 4.81)
- 27) [*Topography of slow sigma power during sleep is associated with processing speed in preschool children.*](#)
Doucette M*, **Kurth S***, Chevalier N, Munakata Y, LeBourgeois MK * Shared first authorship, 2015, *Brain Sciences* 5(4): 494-508 (IF n/a – new journal)
- 28) [*Caffeine consuming children and adolescents show altered sleep behavior and deep sleep.*](#)
Aeppli A*, **Kurth S***, Tesler N, Jenni OG, Huber R * Shared first authorship, 2015, *Brain Sciences* 5(4): 441-55 (IF n/a – new journal)
- 29) [*Myelination is associated with processing speed in early childhood: preliminary insights.*](#)

- Chevalier N, **Kurth S**, Doucette MR, Wiseheart M, Deoni SC, Dean DC, O'Muircheartaigh J, Blackwell KA, Munakata Y, LeBourgeois MK, 2015, PLoS One 10(10) (IF 3.35)
- 30) * [*Sleep slow-wave activity reveals developmental changes in experience-dependent plasticity.*](#)
 Wilhelm I, **Kurth S**, Ringli M, Mouthon AL, Buchmann A, Geiger A, Jenni OG, Huber R, 2014, J Neurosci 34(37): 12568-75 (IF 6.52)
- 31) [*Spike wave location and density disturb sleep slow waves in patients with CSWS \(continuous spike waves during sleep\).*](#)
 Bölsterli Heinzle BK, Fattinger S, **Kurth S**, LeBourgeois MK, Ringli M, Bast T, Critelli H, Schmitt B, Huber R, 2014, Epilepsia 55(4): 584-91 (IF 5.18)
- 32) * [*Development of brain EEG connectivity across early childhood: does sleep play a role?*](#)
Kurth S, Achermann P, Rusterholz T, LeBourgeois MK, 2013, Brain Sciences 3(4): 1445-1460 (IF n/a – new journal)
- 33) [*The sleep EEG topography in children and adolescents shows sex differences in language areas.*](#)
 Ringli M*, **Kurth S***, Huber R, Jenni OG * Shared first authorship, 2013, Int J Psychophysiol 89(2): 241-245 (IF 3.31)
- 34) [*The effects of caffeine on sleep and maturational markers in the rat.*](#)
 Olini N, **Kurth S**, Huber R, 2013, PLoS One 8(9) (IF 3.35)
- 35) [*Topography of sleep slow wave activity in children with attention-deficit/hyperactivity disorder.*](#)
 Ringli M, Souissi S, **Kurth S**, Brandeis D, Jenni OG, Huber R, 2013, Cortex 49(1): 340-347 (IF 4.97)
- 36) * [*Mapping the electrophysiological marker of sleep depth reveals skill maturation in children and adolescents.*](#)
Kurth S, Ringli M, LeBourgeois MK, Geiger A, Buchmann A, Jenni OG, Huber R, 2012, NeuroImage 63(2): 959-65 (IF 7.08)
- 37) [*Sleep electroencephalography topography and children's intellectual ability.*](#)
 Geiger A, Huber R, **Kurth S**, Ringli M, Achermann P, Jenni OG, 2012, Neuroreport 23(2): 93-97 (IF 1.49)
- 38) [*Anatomical markers of sleep slow wave activity derived from structural magnetic resonance images.*](#)
 Buchmann A, **Kurth S**, Ringli M, Geiger A, Jenni OG, Huber R, 2011, J Sleep Res 20(4): 506-13 (IF 3.70)
- 39) [*EEG sleep slow-wave activity as a mirror of cortical maturation.*](#)
 Buchmann A, Ringli M, **Kurth S**, Schaerer M, Geiger A, Jenni OG, Huber R, 2011, Cereb Cortex 21(3): 607-15 (IF 6.80)
- 40) [*The sleep EEG as a marker of intellectual ability in school age children.*](#)
 Geiger A, Huber R, **Kurth S**, Ringli M, Jenni OG, Achermann P, 2011, Sleep 34(2): 181-89 (IF 5.87)

41) [Characteristics of sleep slow waves in children and adolescents.](#)

Kurth S, Jenni OG, Riedner BA, Tononi G, Carskadon MA, Huber R, 2010, Sleep 33(4): 475-80 (IF 5.87)

42) * [Mapping of Cortical Activity in the First Two Decades of Life: A High-Density Sleep Electroencephalogram Study.](#)

Kurth S, Ringli M, Geiger A, LeBourgeois MK, Jenni OG, Huber R, 2010, J Neurosci 30(40): 13211-219, Cover Article (IF 6.52)

2. PEER-REVIEWED BOOKS / MONOGRAPHS / REVIEW ARTICLES (3)

1) [Spatio-temporal properties of sleep slow waves and implications for development](#)

Timofeev I, Schoch S, LeBourgeois M, Huber R, Riedner B, **Kurth S**, Invited Review, 2020, Current Opinion in Physiology/ Physiology of Sleep

2) [Sleep and early cortical development.](#)

Kurth S, Olini N, Huber R, LeBourgeois MK, 2015, Current Sleep Medicine Reports 1(1): 64-73

3) [Sleep Slow Oscillations and Cortical Maturation.](#)

Kurth S, Huber R, 2012, Sleep and Brain Activity Ed Frank, M; Elsevier; ISBN: 9780123849953

Up-to-date publication list:

<http://scholar.google.ch/citations?user=J2iWmzYAAAAJ&hl=de>

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1xa9taFUhFIAZ/bibliography/47545266/public/?sort=date&direction=descending>

3. OUTREACH

Oral Presentations, for example

- **Ask the professors: Things I've always wanted to know**, 2020, "BrainStorm", Brain plasticity in children at risk for neurodevelopmental impairments, Symposium, University Children's Hospital Zurich
- [Pint of Science](#), *Babies, Bedtimes and Bacteria*, 2019, Oliver Twist Pub, Zurich
- **BrainFair Zürich, Podiumsdiskussion, «Schlaf und Ernährung»**, [Schlaf bei Kindern - ein Fenster mit Einblick in die Entwicklung](#), 2019, Diskussionsforum, Universität Zürich
- **Grundlagen: Schlaf bei Kindern. Aktuelle Forschung**, 2018, Weiterbildung Kind und Schlaf, Schweizerischen Fachverband für Neurophysiologische Diagnostik SFND
- **Das Schreibaby: Haben Schlaf und Darmflora einen Einfluss?**, 2018, Geburtshilfliches Symposium, „Das Mikrobiom - Faszinierender Organismus Was hat

das mit Geburtshilfe zu tun?“, Frauenklinik Stadtspital Triemli Zürich

- **Project 325 – interfaces and beyond**, *Sleep – the “off-state” of our brains?*, 2018, Wartburg, CH, a trans-disciplinary retreat
- **Sleep & Health Zurich 2018, Moderation Stefan Klapproth**, [Schlaf, Gesundheit und Gesellschaft](#), 2018, Public Event, University of Zurich
- Repeated contributions at Neonatology Seminar, USZ, 2016-2018

Other outreach, for example

- **Media Communication**, [Gut Schlafen während der Pandemie](#), 2021, Interview, WIBLO, Verein Wissenstransfer und Wissensförderung
- **Youtube Media Communication**, [Which sleep variable to analyse from actimetry and questionnaires? An example from infant sleep.](#), 2021, Science dissemination Video
- **Media Communication**, [Warum Eltern Yoga machen sollten, damit ihre Kinder besser schlafen](#), 2021, Interview, Alma&Georges, Online Magazine of the University of Fribourg
- **Youtube Media Communication (from my trainee)**, [Sleep-COVID, Andjela Markovic](#), 2021, Science dissemination Video
- **Youtube Media Communication**, [Baby Sleep Lab Research Project](#), 2021, Science dissemination and recruitment Video, >25K views
- **Co-Chair and Co-Organizer**, [Sleep and Health Symposium 2020](#), 2020, Center of Competence Sleep & Health Zurich, University of Zurich
- **Media Communication**, 2020, University of Zurich. [Tweet](#), 2020, Sleep and Health Zurich, [Tweet](#)
- **Media Communication**, [L'enfant a un autre sommeil](#), 2020, Interview, La Gruyère, Magazin
- **Media Communication**, [Experiment Lockdown: Auch in Sachen Schlaf](#), 2020, Interview, Alma&Georges, Online Magazine of the University of Fribourg
- **Media Release**, [Kinder schlafen anders Le sommeil des enfants est différent du nôtre](#), 2020, Medienmitteilung, Universität Fribourg
- **Media Communication**, [Kinder schlafen anders](#), 2020, Universitas, Magazin Universität Fribourg
- **Baby Sleep Laboratory Website**, [Science BLOG](#), 2020, in English, German and French
- **Media Communication**, *Schlaf, Kindlein, Schlaf – Bitte, Bitte!*, 2018, Interview, [Schweizer Familie](#), Magazin
- **Cover Article**, [Schlafen wie ein Baby](#), 2018, Interview, Polykum ETHZ Magazin, >20K prints
- **Media Release**, [Developing brain regions in children hardest hit by sleep deprivation](#), 2016, Medienmitteilungen UZH
- **Media Release**, [Beta Test: Another reason why kids need sleep](#), 2014, Colorado Public Radio
- **Classroom Visits USA**, CU Boulder, USA, kindergarten, international pre-college,

teaching neuroscience, sleep, research tools and research activities

- **Education Programs**, UZH, “Brain Fair”, multiple lectures to high school students (2011, 2017); educational public research events, “Scientifica” (2011), “Nacht der Forschung” (2009), and “Parcours des Wissens” (2008)
- **Sleep Research Workshops**, since 2007, KISPI, UZH, CU Boulder, USA, organization and teaching, college and high-school students
- **Classroom Visits CH**, since 2008, UZH, elementary and high school, teaching neuroscience, sleep, research tools and research activities

4. OTHER CONTRIBUTIONS TO SCIENCE

- **Co-founder** of *Digital Science Café*, an interdisciplinary peer network of academic leadership (2020-)
- **BLOG**, [Science BLOG](#), of the Baby Sleep Laboratory, in English, German and French (2019-)
- **Management board**, [Center of Competence Sleep & Health Zurich](#)
- **Co-founder** [Monitoring infants sleep by actigraphy – State of the art and future directions](#), a student-to-expert approach for research integration, dissemination and publication (2017-2020)
- **Co-founder** of [Women in Science](#) for promotion and networking of young female scientists (2016-2019)
- **Co-Founder**, [The New Sleep Research Generation](#), a platform to extend and strengthen the network within and around academia (2018-2019)