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## PUBLICATION LIST OF SALOME KURTH

\* Publications of particular significance are marked.

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

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### 1. PUBLICATIONS

#### Submitted / Under Review (2)

- 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](#)

#### Peer-reviewed (43)

- 1) \* [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**, 2022, Progress in Neurobiology (IF 14.16)
- 2) [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)
- 3) [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, Kurlermann 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, 2021, NeuroImage (IF 7.08)
- 4) \* [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, 2021, Eur J Pediatr (IF 2.28)
- 5) [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)
- 6) \* [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)
- 7) [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)

- 8) [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)

- 9) [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)

- 10) [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)

- 11) [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)

- 12) \* [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)

- 13) \* [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](#)

- 14) [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)

- 15) [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)

- 16) [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)

- 17) \* [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)

- 18) [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)

- 19) [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)
- 20) [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)
- 21) \* [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)
- 22) [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)
- 23) [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)
- 24) [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)
- 25) [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)
- 26) [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)
- 27) [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)
- 28) [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)
- 29) [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)

- 30) [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)
- 31) \* [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)
- 32) [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)
- 33) \* [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)
- 34) [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)
- 35) [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)
- 36) [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)
- 37) \* [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)
- 38) [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)
- 39) [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)
- 40) [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)
- 41) [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)

42) [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)

43) \* [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**, [Schlafmuster von Babys hängt mit Darmbakterien zusammen](#), 2021, Interview, Swiss National Science Foundation, [Detailed Press Review](#)
- **Media Release**, [Le sommeil influe sur la flore intestinale dès notre plus jeune âge](#), 2021, RTS, National Radio
- **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 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 2021](#), 2021, 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
- **Co-Chair and Co-Organizer**, [Sleep and Health Symposium 2020](#), 2020, Center of Competence Sleep & Health Zurich, University of Zurich
- **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

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#### 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)