



CURRICULUM VITAE

DR. CHRISTINE BLUME

PERSONAL INFORMATION

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Nationality	European (Swiss Residence Permit C)

RESEARCH INTERESTS

Human sleep; auditory & cognitive processing during sleep; human chronobiology; effects of daylight, artificial light, and physical activity; insomnia

EMPLOYMENT HISTORY

since 05.2023	Podcast co-host of the <i>Deutschlandfunk Nova</i> science podcast “Über Schlafen”.
since 04.2022	SNSF Ambizione Fellow at the Centre for Chronobiology of the University of Basel, Switzerland. Research topic: “Effects of daylight and physical activity on sleep and the human biological clock.”
since 11.2021	Freelance science communication trainer at <i>Nationales Institut für Wissenschaftskommunikation</i> (NaWik gGmbH), Karlsruhe, Germany
since 06.2021	Assistant psychologist (cognitive-behavioural therapy for insomnia; CBT-I) in the Sleep Clinic of the Psychiatric Hospital of the University of Basel (UPK), Basel, Switzerland
12.2020 - 08.2022	Freelance consultant for content development in the “Virtual Sleep Laboratory” project (Initiative WISS2025 Land Salzburg, Austria)

04.2021 - 03.2022	Post-doctoral researcher (PI) at the Centre for Chronobiology, University of Basel, Switzerland (Grant for outstanding junior researchers from the University of Basel). Research topic: "Effects of calibrated changes in light colour on the human circadian clock."
01.2019 - 03.2021	Erwin-Schrödinger Fellow at the Centre for Chronobiology, University of Basel, Switzerland (advisor: Prof. Christian Cajochen; Austrian Science Fund FWF J-4243). Research topic: "Effects of pre-sleep light on cognitive processing during wakefulness and sleep."
01.2017 - 12.2018	Post-doctoral researcher in the project "Consciousness research across healthy vigilance states and disorders of consciousness" funded by the Austrian Science Fund (FWF Y-777), University of Salzburg, Austria Scientific coordinator of the Doctoral College "Imaging the Mind" (FWF W-1233), University of Salzburg, Austria
10.2013 - 12.2016	Research associate in the project "Consciousness research across healthy vigilance states and disorders of consciousness" (FWF Y-777), University of Salzburg, Austria
02. - 09.2013	Student employee in the project group "Human Resources Development International" at Würth Industrie Service GmbH & Co. KG, Bad Mergentheim, Germany
04.2012 - 07.2013	Tutor at Department of Psychology I for Biological Psychology, Clinical Psychology and Psychotherapy, University of Würzburg, Germany
05.2009 - 07.2010	Student collaborator in a business psychology project, conceptualisation and implementation of a development centre for Würth Industrie Service GmbH & Co. KG, Bad Mergentheim, Germany

EDUCATION

10.2019	Further Training "Cognitive-behavioural therapy for insomnia" (CBT-I), University Hospital Freiburg, Freiburg, Germany
12.2016	Paris-Lodron-University Salzburg, Austria, Doctorate in natural sciences (Dr. rer. nat.), grade "summa cum laude"; Thesis title: "Circadian Variations in Consciousness – Insights from Healthy Sleep and Brain-Injured Patients"
04.2014 - 12.2016	PhD candidate in the Doctoral College "Imaging the Mind" (FWF W-1233), University of Salzburg, Austria
10.2013 - 12.2016	PhD candidate at the Paris-Lodron-University of Salzburg, Austria, Centre for Cognitive Neuroscience (CCNS), Laboratory for „Sleep and Consciousness Research“. Advisor: Univ.-Prof. Dr. Manuel Schabus
11.2012	Julius-Maximilians-University Würzburg, Germany, Diploma in psychology
10.2010 - 06.2011	Studies of psychology, neurobiology & pharmacology at Pembroke College, University of Cambridge, UK
04.2007 - 03.2013	Studies of psychology (diploma) at the Julius-Maximilians-University Würzburg, Germany

SHORTLISTED FOR PROFESSORSHIPS

02.2023	Shortlisted for a Junior Professorship (W1, tenure track to W2) in “Circadian Medicine” at the Charité Universitätsmedizin Berlin, Germany
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APPROVED RESEARCH PROJECTS

12.2023 - 11.2025	“Light therapy as add-on therapy tool to Cognitive Behavioural Therapy for Insomnia (CBT-I)”. Seed Money funding from the European Campus EUCOR (EUR 34.000,-; role: co-applicant; principal investigator: Prof. Dr. Kai Spiegelhalter, University of Freiburg, Germany)
12.2022	Grant for project costs from the <i>Novartis Foundation for Biological-Medical Research</i> (CHF 59.166,-; role: principal investigator)
11.2022	Grant for project costs from the <i>Fonds zur Förderung von Lehre und Forschung</i> from the <i>Freiwillige Akademische Gesellschaft (FAG)</i> Basel (CHF 15.600,-; role: principal investigator)
04.2022 - 03.2026	“Beneficial effects of daytime light exposure and physical activity on the human circadian clock and sleep (DayCiS)”. Ambizione Grant from the <i>Swiss National Science Foundation</i> (SNSF; CHF 930.449,-; role: principal investigator)
04.2021 - 03.2022	“Effects of calibrated changes in light colour on the human circadian clock”. One-year grant from the University of Basel Research Fund for Outstanding Junior Researchers (CHF 79.412,-; role: principal investigator)
12.2019	Grant for project costs from the <i>Novartis Foundation for Biological-Medical Research</i> (CHF 55.111,-; role: principal investigator)
04.2019	Grant for project costs from the <i>Forschungsförderungsfonds</i> of the Psychiatric Hospital of the University of Basel (CHF 31.500,-; role: principal investigator)
05.2019	Grant for project costs from the <i>Freiwillige Akademische Gesellschaft (FAG)</i> Basel (CHF 20.000,-; role: principal investigator)
01.2019 - 03.2021	“Effects of Evening Light Exposure on Cognitive Processing”. Erwin-Schrödinger Fellowship (Austrian Science Fund FWF J-4243; EUR 189.405,-; role: principal investigator)

PRIZES, AWARDS, FELLOWSHIPS, & GRANTS

06.2022	Science communication award of the <i>German Psychological Society (DGPs) Section Biological & Neuropsychology</i>
04.2022	Antelope Career Programme, University of Basel, Switzerland (CHF 4.000,-)
12.2021	Christian-Doppler Award of the <i>Land Salzburg</i> 2021 in the division Molecular Biosciences and Neurosciences (together with Monika Angerer, University of Salzburg)
10.2020	Early-Career Sleep Science Award of the <i>German Sleep Society (DGSM)</i>
09.2018	Giselher-Guttmann Award 2018 of the <i>Austrian Society for Neuropsychology (GNPÖ)</i> Poster Prize of the Young <i>Austrian Neuroscience Association (ANA)</i> at the “Salzburg Neuroscience Day”

05.2017	Young Investigators Award of the University of Salzburg, Austria
01.2014 - 12.2016	Doctoral scholarship from the Konrad-Adenauer-Stiftung e.V. (approx. EUR 49.000,-)
10.2010 - 06.2011	One-year grant from the German Academic Exchange Service (DAAD) for a stay at the University of Cambridge, UK (EUR 14.000,-)
12.2007 - 11.2012	Excellence scholarship from the Studienstiftung des Deutschen Volkes e.V./ German Academic Foundation

TEACHING ACTIVITIES

09.-12.2023	Practical seminar “Schlafstörungen und ihre Behandlung” (Faculty of Psychology, University of Basel)
11.2023	Teacher in the two-day seminar “Cognitive-behavioural therapy for insomnia” at the Psychiatric Hospital of the University of Basel, <i>Basel, Switzerland, November 17-18 2023</i> .
11.2023	Seminar “Introduction to science communication” (1 day; Graduate School of Psychology, Faculty of Psychology of the University of Basel)
06.2023	Seminar “Psychotherapie bei Psychosen: Das <i>Feeling Safe</i> Programm – Modul Schlaf” for <i>Postgraduale Studiengänge in Psychotherapie, Basel, Switzerland, June 29 2023</i> (half day).
05.2023	Seminar “Science communication on social media” (Graduate Center of the University of Basel)
09.-12.2022	Practical seminar “Schlafstörungen und ihre Behandlung” (Faculty of Psychology, University of Basel)
10.2022	Teacher in the two-day seminar “Cognitive-behavioural therapy for insomnia” at the Psychiatric Hospital of the University of Basel, <i>Basel, Switzerland, October 28-29 2022</i> . Workshop and panel discussion “How does science make it to the media?” at the Annual Conference of the Daylight Academy, <i>Zurich, Switzerland, October 13 2022</i> .
09.2022	Workshop “Science Communication - Out of the Ivory Tower and into Society” at the Sleep Europe conference, <i>Athens, Greece, September 27-30 2022</i> .
08.2022	Invited lecturer at the interdisciplinary summer school “Measuring Light and Illumination” of the Daylight Academy, <i>Chexbres, Switzerland, August 15-19 2022</i> .
04./ 05.2022	Seminar “Science communication on social media” (Graduate Center of the University of Basel; average evaluation: 4.5 [worst 1 - best 5])
03. & 06.2021	Invited lecturer for the LIGHTCAP European Training Network (https://lightcap.eu/) on EEG, sleep, and chronobiological research methods. <i>Online</i> .
03./ 04.2020	Invited lecturer at a Spring Academy of the Studienstiftung des Deutschen Volkes. Course title: “What the eye tells the internal clock.”, <i>Annecy, France</i> (cancelled due to COVID-19)
02.2020	Invited lecturer at the Winter School of the Doctoral College ‘Imaging the Mind’ of the University of Salzburg. Course title: “Rhythms of the Body and Mind.”, <i>Werfenweng, Austria</i> .
06.2019	Finalist of the <i>Excellence in Teaching Award</i> of the University of Salzburg for the seminar “Rhythms of the Body and Mind: Circadian Regulation of Physiology and Cognition as well as Clinical Conditions”

2018	Lecture "Physiology of conscious and unconscious processes" (1 semester) Seminar "Rhythms of the Body and Mind: Circadian Regulation of Physiology and Cognition as well as Clinical Implications" (1 semester; nominated for the <i>Excellence in Teaching Award</i> of the University of Salzburg, average evaluation: 7 [worst 0 - best 7])
2017/18	Lecture "From Single Neurons to Consciousness" (1 semester)
08./ 09.2017	Invited lecturer at a Summer Academy of the Studienstiftung des Deutschen Volkes. Course title: "Rhythms of the Body and Mind: Circadian and Sleep-Wake-Dependent Regulation of Physiology and Cognition", <i>Krakow, Poland, August 28-September 7 2017.</i>
2016-2019	Lecture with practical part "Methods in Cognitive Neuroscience" (3 semesters)
2015-2017	Lecture "Cognition, Sleep, and Consciousness" (2 semesters)
2017/16	Lecture "Cognitive Neuroscience" (1 semester)
2014-2018	Empirical seminars on sleep, cognition, and circadian rhythms involving MEG and EEG recordings (6 semesters)

SUPERVISION OF JUNIOR SCIENTISTS

since 2022	Co-supervision of PhD candidates <ul style="list-style-type: none"> i. Ann-Sophie Loock, University of Basel, Switzerland ii. Drew Cooper, Charité Universitätsmedizin Berlin, Germany
10.2017 – 07.2022	Co-supervision of a PhD candidate (Monika Angerer; University of Salzburg, Austria; grade "summa cum laude")
since 2014	Co-supervision of 23 (6 ongoing) master theses. Topics: "The effects of a colour-opponent cone circuit on (nocturnal) melatonin suppression and dim light melatonin onset (DLMO)" (ongoing); "Light-Induced Melatonin Suppression in Children and Adolescents: A Scoping Review." (2019-21); "Can functional sleepwear improve thermoregulation and sleep quality?" (2019-21); "The relationship between subjective and objective sleep quality and the influence of evening light exposure" (2019/20); "The circadian temperature rhythm and light treatment in patients with severe disorders of consciousness" (2018/19); "Circadian Rhythms and Heart Rate Variability in Patients with Disorders of Consciousness" (2018/19); "The stress response in observers of parent-child interaction videos & influences on the determination of relationship quality" (2017/18); "Neural oscillations underlying the processing of emotional and self-relevant auditory stimuli during wakefulness and light sleep" (2016/17); "Neural and Cardiological Signatures of Conscious Processing and Circadian Rhythms in Brain-Injured Patients" (2016/17); "Only awake or possibly conscious after all? In search of synchronous circadian rhythms in selected physiological parameters in patients with severe disorders of consciousness." (2016/17); "Investigating Circadian Rhythms in Disorders of Consciousness Patients" (2015/16); „Detecting consciousness in disorders of consciousness via ERPs and spectral EEG - A comparison with healthy controls“ (2015/16) "Effects of exogenous light stimulation to stabilise circadian rhythms in DOC patients and the effects on general cognitive processing in healthy volunteers" (2014/15)

REVIEWING & EDITORIAL ACTIVITIES

Journals

Archives of Women's Mental Health (2019); Brain (since 2017); British Journal of Psychiatry (2023); Clinical Neurophysiology (2020); Clinical EEG & Neuroscience (2016); Clocks & Sleep (since 2019); Communications Biology (2022); Current Biology (since 2017); Experimental Psychology (2021); Mind, Brain, and Education (2019); NeuroImage (2019); PLOS One (2014); Psychophysiology (since 2014); Journal of Biological Rhythms (2020); Journal of Pineal Research (2021); Journal of Sleep Research (since 2020); Social Neuroscience (2014); Science (2014); Scientific Reports (since 2015); SLEEP (since 2019); Sleep Medicine (2020); Somnologie (2021)

02. - 12.2020

Guest editor for a special issue "Effects of Pre-Sleep Artificial Light on Cognition and Sleep" in *Clocks & Sleep*

Funding institutions

Danish Council for Independent Research (2014); German Research Foundation (DFG; 2014); Medical Research Council (MRC; 2014); Konrad-Adenauer-Stiftung e.V. (since 2019)

MEMBERSHIPS & COMMITTEE ACTIVITIES

Memberships

European Sleep Research Society (ESRS); Swiss Society for Sleep Research, Sleep Medicine and Chronobiology (SSSSC); German Psychological Society (DGPs)

since 06.2023

Elected member of the Daylight Academy

since 09.2022

Elected member of the *Scientific Committee* of the European Sleep Research Society (ESRS)

since 09.2022

Early-career researcher representative in the committee for the strategic improvement of research and teaching at the Psychiatric Hospital of the University of Basel, Switzerland.

since 01.2021

Member of the Early Career Researcher Committee of the division "Biological Psychology" of the German Psychological Society (DGPs)

since 09.2020

Elected member of the *Early Career Researcher Network Committee* of the European Sleep Research Society (ESRS)

Member of the ESRS *Communication & Digital Committee*

06.2023

Member of the dissertation committee for Dr. Stephanie Huwiler (ETH Zurich, Switzerland)

06.2022 - 01.2023

Member of the habilitation committee for Dr. Maren Cordi (University of Fribourg, Switzerland)

CLINICAL PRACTICE

since 2020

Cognitive-behavioural therapy for insomnia, *Psychiatric Hospital of the University of Basel, Basel, Switzerland*

OUTREACH ACTIVITIES (SHORT SUMMARY)

since 05.2023	Co-Host Podcast “ Über Schlafen ” by <i>Deutschlandfunk Nova</i>
since 02.2023	Associate editor at “ InMind Magazine ”
12.2021-05.2023	Weekly guest on <i>Deutschlandfunk Nova</i> ’s Sunday programme
10.2022	SWR Odyso: Gesund schlafen – wann ist Schlaf besonders erholsam? (SWR; 27/10/22, watch here)
	“Sleep well – With Michael Mosley“. BBC Radio 4 (15/10/22, listen here)
05.2022	Invited speaker at <i>TEDxBasel</i> : “How daylight could help you sleep” (watch here)
03.2022	Sleep expert for SRF Puls: “Gesunder Schlaf – wie geht das?” (SRF; watch here ; 28/03/22)
01.2022	ARD Buffet: Was kann man tun, um besser einzuschlafen? (ARD; watch here ; 14/01/22)
11.2018 -11.2021	Regular expert on the <i>Deutschlandfunk Nova</i> (German public broadcasting service) radio programme for topics related to sleep and circadian rhythms (33 interviews)
11.2021	“Schlaf und Medienkonsum” – Interview with ORF/Ö1 Mittagsjournal (06/11/21, read the summary here)
06.2021	“Was Du bei Schlafproblemen tun kannst.” Article on higgs.ch (23/06/21).
05.2021	Expert on the topic of “Sleep” for “Die grosse TerraX Show” (ZDF, Germany)
03.2021	Talk on “Sleep and the biological clock” at the “Woche des Gehirns 2021” at the University of Basel, Switzerland (15/03/21, watch here ; language: German)
11.2020	Publication in ‘Psychoscope’ for a non-expert audience about the effects of the COVID-19 ‘lockdown’ on sleep. ‘Psychoscope’ is the magazine of the Swiss Federation of Psychologists.
10.2020	Expert on the <i>ZEIT Wissen Podcast</i> on the question, whether we can ‘store’ sleep like camels can store water.
10.2020	Kabel 1 ‘Abenteuer Leben am Sonntag’. Communication about (healthy) sleep in a TV documentary.
09.2020	ORF1 ‘Fannys Friday’. Sleep expert in an Austrian science TV show for young people.
07.2020	Short piece for a lay audience about the findings of my study regarding the effects of the COVID-19 ‘lockdown’ on sleep published in <i>The Science Breaker</i> (science communication journal).
04.2020	Blog post with recommendations for healthy sleep during the ‘lockdown’ on <i>SciFive</i> , the science blog of the University of Basel.
	For a full overview, please see www.christine-blume.com/media

ORGANISATION OF CONFERENCES & WORKSHOPS

01. - 07.2018	Local organiser for the “Salzburg Mind-Brain Annual Meeting” (SAMBA) 2018
07.2018	Organisation of the summer school of the Doctoral College “Imaging the Mind”, University of Salzburg, Austria

10.2017	Organisation of a workshop on “Career planning” for the Doctoral College “Imaging the Mind”, University of Salzburg, Austria
03.2017	Organisation of a Debating workshop for students of the Doctoral College “Imaging the Mind”, Salzburg, Austria
10.2015 - 07.2016	Member of the core Organisational Committee for the 28th World Schools Debating Championship (WSDC) in <i>Stuttgart, Germany, 19-29 July 2016</i>

PUBLICATIONS

Preprints	Spitschan M., Hammad G., Blume C. , Schmidt C., Skene D.J., Wulff K. Santhi N., Münch M. (2023). Metadata recommendations for light logging and dosimetry datasets. doi: https://doi.org/10.21203/rs.3.rs-3452267/v1
2023	<p>Blume C., Cajochen C., Schöllhorn I., Slawik H.C., & Spitschan M. (2023). Effects of calibrated blue-yellow changes in light on the human circadian clock. <i>Nature Human Behaviour</i>. doi: https://doi.org/10.1038/s41562-023-01791-7</p> <p>Spitschan M., Kervezee L., Lok R., McGlashan E., Najjar R.P. for the ENLIGHT Consortium (2023). ENLIGHT Consensus Checklist and Guidelines for reporting laboratory studies on the non-visual effects of light in humans. <i>eBioMedicine</i>. doi: https://doi.org/10.1016/j.ebiom.2023.104889</p> <p>Schöllhorn I.*, Stefani O., Blume C., & Cajochen C.* (2023). Seasonal variation in the responsiveness of the melanopsin system to evening light: why we should report season when collecting data in human sleep and circadian studies. <i>Clocks & Sleep</i>. https://doi.org/10.3390/clockssleep5040044</p>
2022	<p>Blume C., Niedernhuber M., Spitschan M., Slawik H.C., Meyer M.P., Bekinschtein T.*, & Cajochen C.* (2022). Melatonin suppression does not automatically alter sleepiness, vigilance, sensory processing, or sleep. <i>SLEEP</i>. doi: https://doi.org/10.1093/sleep/zsac199</p> <p>van der Lande G., Blume C., Annen J. (2022). Sleep and circadian disturbance in disorders of consciousness: current methods and the way towards clinical implementation. <i>Seminars in Neurology</i>. doi: https://doi.org/10.1055/a-1893-2785</p> <p>Wisłowska M., Klimesch W., Jensen O., Blume C., & Schabus M. (2022). Sleep-specific processing of auditory stimuli is reflected by alpha and sigma oscillations. <i>Journal of Neuroscience</i>. doi: https://doi.org/10.1523/JNEUROSCI.1889-21.2022</p> <p>Angerer M., Schabus M., Pichler G., Angerer B., Scarpatetti M., & Blume C. (2022). From Dawn to Dusk – Mimicking Natural Daylight Exposure Improves Circadian Rhythm Entrainment in Patients with Severe Brain Injury. <i>SLEEP</i>. doi: https://doi.org/10.1093/sleep/zsac065</p> <p>Angerer M., Wilhelm F.H., Liedlgruber M., Pichler G., Angerer B., Scarpatetti M., Blume C.*, & Schabus M.* (2022). Does the Heart Fall Asleep? - Diurnal Variations of Heart Rate Variability in Patients with Disorders of Consciousness. <i>Brain Sciences</i>. doi: https://doi.org/10.3390/brainsci12030375</p>

2021

Ameen M. S., Heib D. P., **Blume C.**, & Schabus M. (2022). The brain selectively tunes to unfamiliar voices during sleep. *Journal of Neuroscience*. doi: <https://doi.org/10.1523/JNEUROSCI.2524-20.2021>

Cable J., Schernhammer E., ..., **Blume C.**, ..., & St-Onge, M.-P. (2021). Sleep and circadian rhythms: pillars of health—a Keystone Symposia report. *Annals of the New York Academy of Sciences*. doi: <https://doi.org/10.1111/nyas.14661>

Blume C.*, Schoch S. F.*, Vienneau D., Rösli M., Kohler M., Möller A., Kurth S., & Uesmann J. (2021). Association of transportation noise with sleep during infancy: a longitudinal study. *Environmental Research*. doi: <https://doi.org/10.1016/j.envres.2021.111776>

Bahr A.*, **Blume C.***, Eichhorn K.*, & Kubon S.* (2021). With #IchBinHanna, German academia protests against a law that forces researchers out. *Nature Human Behaviour*. doi: <https://doi.org/10.1038/s41562-021-01178-6>

Wielek T., **Blume C.**, Wislowska M., del Giudice R., & Schabus M. (2021). Decoding brain responses to names and voices across different vigilance states. *Sensors*. doi: <https://doi.org/10.3390/s21103393>

Blume C. & Cajochen C. (2021). ‘SleepCycles’ package for R - A free software tool for the detection of sleep cycles from sleep staging. *MethodsX*. doi: <https://doi.org/10.1016/j.mex.2021.101318>

2020

Spitschan M., Schmidt M.H., & **Blume C.** (2020). Transparency and open science principles in reporting guidelines in sleep research and chronobiology journals. *Wellcome Open Research*. doi: <https://doi.org/10.12688/wellcomeopenres.16111.1>

Blume C., Schmidt M.H., & Cajochen C. (2020). Effects of the COVID-19 lockdown on human sleep and rest-activity rhythms. *Current Biology*. doi: <https://doi.org/10.1016/j.cub.2020.06.021>

Angerer M., Schabus M., Raml M., Pichler G., Kunz A.B., Scarpatetti M., Trinka E., & **Blume C.** (2020). Actigraphy in brain-injured patients – A valid measurement for assessing circadian rhythms? *BMC Medicine*. doi: <https://doi.org/10.1186/s12916-020-01569-y>

Blume C. & Schabus M. (2020). Perspective: Daylight Saving Time - An Advocacy for a Balanced View and Against Fanning Fear. *Clocks & Sleep* 2(1):19-25. doi: <https://doi.org/10.3390/clockssleep2010003>

2019

Blume C., Hauser T., Gruber WR, Heib DPJ, Winkler T., & Schabus M. (2019). „How does Austria sleep?” Self-reported sleep habits and complaints. *Sleep and Breathing*. doi: <https://doi.org/10.1007/s11325-019-01982-5>

Blume C.*, Garbaza C.*, & Spitschan M.* (2019). Effects of light on human circadian rhythms, sleep and mood. *Somnologie*. doi: <https://doi.org/10.1007/s11818-019-00215-x>

Blume C., Angerer M., Raml M., del Giudice R., Santhi N., Pichler G., Scarpatetti M., Kunz A. B., Trinka E., & Schabus M. (2019). Healthier Rhythm, Healthier Brain? Integrity of Circadian Melatonin and Temperature Rhythms Relates to the Clinical State of Brain-Injured Patients. *European Journal of Neurology*. doi: <https://doi.org/10.1111/ene.13935>

2018

Wisłowska M., **Blume C.**, Angerer M., Wielek T., & Schabus M. (2018). Approaches to Sleep in Severely Brain Damaged Patients – Further comments and replies to Kotchoubey & Pavlov. *Clinical Neurophysiology*. doi: <https://doi.org/10.1016/j.clinph.2018.08.029>

Blume C., del Giudice R., Wisłowska M., Heib D. P. J., & Schabus M. (2018). Standing sentinel during sleep: continued evaluation of environmental stimuli in the absence of consciousness. *NeuroImage*. doi: <https://doi.org/10.1016/j.neuroimage.2018.05.056>

Schabus M., Wisłowska M., Angerer M., & **Blume C.** (2018). Sleep and Circadian Rhythms in Severely Brain-Injured Patients – A Comment. *Clinical Neurophysiology*. doi: <https://doi.org/10.1016/j.clinph.2018.03.048>

Wielek T., Lechinger J., Wisłowska M., **Blume C.**, Ott P., Wegenkittl S., del Giudice R., Heib D. P. J., Mayer H. A., Laureys S., Pichler G., & Schabus M. (2018). Sleep in patients with disorders of consciousness characterized by means of machine learning. *PLoS One*, 13(1), e0190458. doi: <https://doi.org/10.1371/journal.pone.0190458>

2017

Blume C., Lechinger J., Santhi N., del Giudice R., Gnjezda M.-T., Pichler G., Scarpatetti M., Donis J., Michitsch G., & Schabus M. (2017). Significance of circadian rhythms in severely brain-injured patients: A clue to consciousness? *Neurology*. doi: <https://doi.org/10.1212/wnl.0000000000003942>

2016

del Giudice R., **Blume C.**, Wisłowska M., Lechinger J., Heib D. P. J., Pichler G., Chinchilla M., Machado C. & Schabus M. (2016). Can self-relevant stimuli help assessing patients with disorders of consciousness? *Consciousness and Cognition*, 44, 51-60. <https://doi.org/10.1016/j.concog.2016.06.013>

del Giudice R., **Blume C.**, Wisłowska M., Wielek T., Heib D.P.J. & Schabus M. (2016). The Voice of Anger: Oscillatory EEG Responses to Emotional Prosody. *PLoS One*, 11(7). doi: <https://doi.org/10.1371/journal.pone.0159429>

Blume C., Santhi N., & Schabus M. (2016). ‘nparACT’ package for R - A free software tool for the non-parametric analysis of actigraphy data. *MethodsX*. doi: <https://doi.org/10.1016/j.mex.2016.05.006>

Lechinger J., Wielek T., **Blume C.**, Pichler G., Michitsch G., Donis J., Gruber W., Schabus, M. (2016). Event-related EEG power modulations and phase connectivity indicate the focus of attention in an auditory own name paradigm. *Journal of Neurology*, 1-14. doi: <https://doi.org/10.1007/s00415-016-8150-z>

Blume C., del Giudice, R, Lechinger J., Wisłowska M., Heib D. P. J., Hoedlmoser K., & Schabus, M. (2016). Preferential processing of emotionally and self-relevant stimuli persists in unconscious N2 sleep. *Brain and Language*. doi: <https://doi.org/10.1016/j.bandl.2016.02.004>

2015

Blume C.*, del Giudice R.*, Wisłowska M.*, Lechinger J., & Schabus M. (2015). Across the consciousness continuum—from unresponsive wakefulness to sleep. *Frontiers in Human Neuroscience*, 9, 105. doi: <https://doi.org/10.3389/fnhum.2015.00105>

Blume C., Lechinger J., del Giudice R., Heib DPJ., & Schabus M. (2015). EEG oscillations reflect the complexity of social interactions in a non-verbal social cognition task using animated triangles. *Neuropsychologia*, 57, 330-340. doi: <https://doi.org/10.1016/j.neuropsychologia.2015.06.009>

- 2014** | **Blume C., & Herbert C. (2014).** The HisMine-Paradigm: A new paradigm to investigate self-awareness employing pronouns. *Social Neuroscience*, 9(3), 289-299. doi: <https://doi.org/10.1080/17470919.2014.886616>

SOFTWARE

- 2020** | ‘SleepCycles’ package for R released on CRAN. The package detects sleep cycles (NREM and REM periods) from sleep staging data. <https://cran.r-project.org/package=SleepCycles>
- 2016** | ‘nparACT’ package for R released on CRAN. The package computes non-parametric indices of circadian rhythmicity for actimetry data. <https://CRAN.R-project.org/package=nparACT>

CONFERENCE, SYMPOSIUM, & INVITED TALKS

- 2023** | “Effekte der Lichtfarbe auf Photorezeptoren, zirkadiane Physiologie & Schlaf”. Talk & symposium chair at the Annual Meeting of the German Sleep Society (DGSM), *Berlin, Germany, December 08-10 2023*.
- “Blue Light’ - A Challenge for Circadian Rhythms and Sleep?”. Invited talk at the Department of Psychology of the University of Fribourg, *Fribourg, Switzerland, November 23 2023*.
- “Disturbed circadian rhythms in severely brain-injured patients – Can light therapy support recovery?”. Invited talk at the TUM Interdisciplinary ‘Future of Health’ Summit 2023, *Munich, October 10-13 2023*.
- “Effects of calibrated changes in light colour on the human circadian clock & sleep”. Talk at the European Sleep Research Society (ESRS) Meeting 2023, *online, October 04-06 2023*.
- “Effects of calibrated changes in light colour on the human circadian clock & sleep”. Talk & symposium chair at the 49th Annual Meeting of the German Psychological Society – Section Biological & Neuropsychology “Psychologie & Gehirn”, *Tübingen, Germany, June 08-19 2023*.
- “Year In Review: Human/Basic”. Invited talk at the Meeting of the Society for Light Treatment and Biological Rhythms, *Lausanne, Switzerland, May 30 – June 1 2023*.
- 2022** | “Effects of pre-sleep metamer light exposure on sleep and sensory processing”. Invited talk at the Brigham and Women’s Hospital, Division of Sleep and Circadian Disorders, *Boston, USA, November 28 2022*.
- “Light in Modern Societies - Challenges and Opportunities for Circadian Rhythms and Sleep”. Invited talk at the Autumn School “Translational Neuroscience” at the *University of Würzburg, Würzburg, Germany, November 04 2022*.
- “When we sleep, does the brain rest too?”. Invited talk at the University of Bern, *Bern, Switzerland, November 01 2022*.
- “Melatonin suppression does not automatically alter sleepiness, vigilance, sensory processing, or sleep”. Talk at the Sleep Europe conference, *Athens, Greece, September 26-30 2022*.

2021

“Communicating Sleep Science – A Personal Account”. Keynote speech at the BEACON conference of the Faculty of Psychology of the University of Basel, *Basel, Switzerland, September 16 2022.*

“Effects of Pre-Sleep Artificial Light Exposure on Sleep”. Symposium talk (online) at the Biennial Conference of the Society for Biological Rhythms Research (SRBR), *Amelia Island, Florida, USA, May 14-18 2022.*

“Effects of evening artificial light exposure on cognitive processing during sleep”. Invited talk at the meeting of the Swiss Society for Sleep Research, Sleep Medicine, and Chronobiology, *Lucerne, Switzerland, March 30-April 1 2022.*

“Effects of evening artificial light exposure on sleep”. Symposium talk at the Meeting of the German Sleep Society (DGSM), *online, October 28-30 2021.*

“When the girdle of social timing relaxes: Effects of COVID-19 ‘lockdowns’ on human chronobiology and sleep”. Keynote (online) at the Congrès de la Société Francophone de Chronobiologie, *Bordeaux, France, October 14 2021.*

“When the girdle of social timing relaxes – effects of the COVID-19 ‘lockdown’ on human rest-activity rhythms and sleep”. Symposium talk at the Annual Meeting of the International Society for Evolution, Medicine, & Public Health, *online, July 14-16 2021.*

“Wenn das Korsett sozialen Timings sich lockert – Wirkung des ‘Lockdowns’ auf Schlaf-Wach-Rhythmen und Schlafqualität”. Talk at the Annual Meeting of the Austrian Society for Sleep Medicine (ÖGSM) and Austrian Sleep Research Association (ASRA), *online, June 10-11 2021.*

“Pre-sleep artificial light exposure does not alter basic cognitive processing during sleep”. Symposium talk at the 46th Annual Meeting of the German Psychological Society – Section Biological & Neuropsychology “Psychologie & Gehirn”, *online, June 03-04 2021.*

“When the girdle of social timing relaxes – effects of the COVID-19 ‘lockdown’ on human rest-activity rhythms and sleep”. Invited talk at the Keystone eSymposium “Sleep & Circadian Rhythms: Pillars of Health”, *online, February 25 2021.*

2020

“Life in modern societies - a challenge for healthy sleep?”. Invited talk in the Zurich Sleep and Health Seminar, *online, December 4 2020.*

“Wenn das Korsett sozialen Timings sich lockert – Wirkung des ‘Lockdowns’ auf Schlaf-Wach-Rhythmen und Schlafqualität”. Invited talk at the 27th Annual Meeting of the German Sleep Society (DGSM), *online, October 29-31, 2020.*

“When the girdle of social timing relaxes – effects of the COVID-19 ‘lockdown’ on human rest-activity rhythms and sleep”. Invited talk at the 44th Annual Meeting of the Austrian Society for Pneumology and the Austrian Society for Thoracic Surgery, *online, October 14-16 2020.*

“Effects of Pre-Sleep Artificial Light Exposure on Fundamental Cognitive Processes”. Talk & symposium chair at the 25th European Sleep Research Society Meeting, *online, September 22-24 2020.*

2019

“Healthier rhythm, healthier brain? Circadian rhythm integrity & the clinical state of brain-injured patients”. Invited talk at the “Rhythms of Life, Mind, and Brain” Meeting, Taipei Medical University, *Taipei, South Korea, November 1 2019.*

“Effects of pre-sleep artificial light exposure in humans”. Invited talk at the 8th Swiss Chronobiology Meeting, *Fribourg, Switzerland, September 5 2019*.

“Standing sentinel during sleep – continued evaluation of environmental stimuli in the absence of consciousness”. Talk at the Meeting of the Swiss Society for Sleep Medicine, Sleep Research, and Chronobiology, *Fribourg, Switzerland, June 27-28 2019*.

“Healthier Rhythm, Healthier Brain? Circadian rhythm integrity & the clinical state of brain-injured patients”. Talk & symposium chair at the 45th Annual Meeting of the German Psychological Society – Section Biological & Neuropsychology “Psychologie & Gehirn”, session title “Let there be (healthy) sleep! Importance of sleep for healthy body and brain functioning”, *Dresden, Germany, June 19-22 2019*.

“The Brain as a Sentinel during Sleep? Insights from Emotional Stimulus processing”. Invited talk at the University of Fribourg, *Fribourg, Switzerland, May 9 2019*.

“The brain as a sentinel during sleep? Insights from emotional stimulus processing”. Talk at the Annual Meeting of the Austrian Society for Sleep Medicine (ÖGSM) and Austrian Sleep Research Association (ASRA), *Gmunden am Traunsee, Austria, May 02-04 2019*.

“Licht & Schlaf – ein zweischneidiges Schwert”. Invited talk at the Annual Meeting of the Austrian Society for Sleep Medicine (ÖGSM) and Austrian Sleep Research Association (ASRA), *Gmunden am Traunsee, Austria, May 02-04 2019*.

2018

“Sleep & Circadian Rhythms in Severely Brain-Injured Patients”. Invited talk at the “Neuroreha” Symposium at the Asklepios Stadtklinik Bad Tölz, *Bad Tölz, Germany, July 18 2018*.

“Body rhythms in concert? Integrity of circadian rhythms is related to the state of brain-injured patients”. Talk at the 22nd meeting of the Association for the Scientific Study of Consciousness (ASSC), *Krakow, Poland, June 26-29 2018*.

“A “Sentinel Processing Mode” of the Brain during Sleep? Insights from Emotional Stimulus Processing”. Talk & symposium chair at the 44th Annual Meeting of the German Psychological Society – Section Biological & Neuropsychology “Psychologie & Gehirn”, session title “Emotion and Self-Processing in the Brain Across the Sleep-Wake Cycle”, *Gießen, Germany, May 31-June 2 2018*.

“(No) Need to Wake up? Inhibitory Function of Sleep Spindles is Tuned to Stimulus Salience”. Talk at the 3rd International Conference on Sleep Spindling, *Budapest, Hungary, May 24-26 2018*.

“Circadian Rhythms in Severely Brain-Injured Patients”. Invited talk at the Symposium “10 Years of Consciousness Research” at the Albert-Schweitzer Hospital, *Graz, Austria, March 14 2018*.

2017

“A clue to consciousness? Significance of circadian rhythms in severely brain-injured patients”. Talk at the 12th World Congress of the International Brain Injury Association (IBIA), *New Orleans, USA, March 29-April 1*.

“Circadian Variations in Consciousness – Insights from Healthy Sleep and Brain-Injured Patients”. Invited talk at the Centre for Chronobiology at the Psychiatric University Hospital Basel, *Switzerland, March 21 2017*.

2016	“Diurnal variations in consciousness – insights from rhythm research”. Symposium talk at the 20th Annual Meeting of the Association for the Scientific Study of Consciousness (ASSC), <i>Buenos Aires, Argentina, June 14-18 2016</i> .
2015	“Emotion matters! Processing of salient stimuli across consciousness states”. Talk at the 7 th Meeting of the World Sleep Society, <i>Istanbul, Turkey, October 31-November 3 2015</i> .

SKILLS & FURTHER EDUCATION

Subject-related skills

Sleep

Polysomnography, sleep scoring (AASM), actimetry, cognitive-behavioural therapy for insomnia (CBT-I)

EEG

Event-related potentials, time-frequency analyses, temporal generalisation analyses, high-density EEG

Circadian research methods

Melatonin/DLMO assessment & analysis, actimetry, phase shift protocols, lighting research

Miscellaneous

Individual assessment of physical activity levels

Transferable skills

Languages

German (mother tongue), English (C2), Spanish (B2), French (B1)

IT

R (expert), Matlab (expert), Fieldtrip (expert), BrainVision Analyzer (expert), Python (beginner)

Communication

Very experienced in communication with media (radio, TV, printed media), excellent presentation skills, moderation experience, speaking with & writing for lay audience (cf. also section “Outreach Activities”)

Further Professional Development

07.2022	Course “How to be a good supervisor” by the PhD Program Health Sciences, University of Basel, Switzerland (one day; Dr. Beate Scholz – “Scholz consulting, training, & coaching”)
10.2021	Course “Python Crash Course for Beginners” (1.5 days; GRACE – graduate center University of Basel, Switzerland)
2015	Course “Lecture Methods” (two days; Dr. Olivia Vrabl, University of Vienna, Austria) Course “How do I get my students to read?” (two days; Dr. Olivia Vrabl, University of Vienna, Austria) Course “Supervision and assessment of theses” (two days; Dr. Olivia Vrabl, University of Vienna, Austria)
2014	Course “Rhetoric & Media Use” (two days; Dr. Stefan Karlhuber, University of Salzburg, Austria)