

JONAS OBLESER

Prof. Dr. rer. nat. habil., Dipl.-Psych., *1975, Waiblingen, Germany
jonas.obleser@uni-luebeck.de · jonasobleser.com

Chair in Physiological Psychology and Research Methods,
Department of Psychology,
University of Lübeck, Lübeck, Germany

RESEARCH INTEREST

- Neural Dynamics and Neural Computations in Cognition
- Auditory Perception and Cognition
- Methodological and Statistical Advances in Neuroscience
- Translational Neuroscience in Hearing Loss and Ageing

EDUCATION

- 2015 Habilitation (*venia legendi*: Psychology), Dr. rer. nat. habil., University of Leipzig
- 2004 Dr. rer. nat. (PhD), *summa cum laude*, Psychology, University of Konstanz, Germany (Referees: Prof. Thomas Elbert, Prof. Carsten Eulitz, Prof. Aditi Lahiri)
- 2001 Diplom (MSc equivalent), Psychology, University of Konstanz, Germany
- 1994 Abitur (A-Level equivalent)

EMPLOYMENT

- 2016 Chair (W3) in Physiological Psychology and Research Methods, Department of Psychology, University of Lübeck, Lübeck, Germany
- 2016 Five months of parental leave (*part-time*)
- 2015 Professor (W2) in Research Methods and Statistics, Department of Psychology, University of Lübeck, Lübeck, Germany
- 2014 Visiting scholar, NYU Langone Medical Center and Nathan Kline Institute, New York, New York, USA, Prof. P. Lakatos
- 2013 Six months of parental leave (*full-time*)
- 2011 2015 Head of the Max Planck Research Group “Auditory Cognition”, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany
German Associate Professor-equivalent (W2), non-tenured
- 2007 2010 Senior Postdoctoral Researcher, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, Prof. A.D. Friederici

- 2005–2007 Research Fellow,
Institute of Cognitive Neuroscience, University College London, UK, Prof. S.K. Scott
- 2004–2005 Postdoctoral Researcher,
Departments of Linguistics and Psychology, University of Konstanz, Germany, Prof. A. Lahiri, Prof. C. Eulitz
- 2001–2003 Research assistant (PhD student),
Department of Psychology, University of Konstanz, Germany
- 2004 Visiting scholar,
Center for Functional and Molecular Imaging, Georgetown University School of Medicine, Washington, DC, USA
- 2002 Visiting scholar,
Georgetown University, Washington, DC, USA, Prof. J.P. Rauschecker
- 1998–1999 Intern,
Behavioural Neuroscience Research group, University of Konstanz, Germany, Prof. T.R. Elbert
- 1997–2001 Undergraduate research assistant,
Psychophysiological Laboratories of the Department of Psychology, Profs. T.R. Elbert & B.S. Rockstroh; Department of Psychology, University of Konstanz, Germany, Prof. G. Trommsdorff

FUNDING

- 2016–2020 The listening challenge: How ageing brains adapt (AUDADAPT),
ERC Consolidator Grant
€ 2,000,000
- 2017–2020 Modulating neural network dynamics of speech comprehension: The role of the angular gyrus
DFG (Co-PI: Gesa Hartwigsen, MPI Leipzig)
€ 370,000
- 2019–2021 Modelling bimodal benefit
Cochlear Inc. (Co-PI: Malte Wöstmann)
€ 96,000
- 2011–2015 Max Planck Research Group “Auditory Cognition”,
Max Planck Society, Germany,
€ 1,500,000
- 2012–2015 Understanding the hearing impaired brain,
Siemens Audiology Solutions,
€ 120,000
- 2015–2018 Neural adaptive control in the hearing aid (NEURO-CHAT),
Oticon Foundation (Co-PI: T. Lunner, Eriksholm)
€ 100,000

- 2015 2016 Towards the brain-informed, brain-controlled hearing aid (BIT-CHAT),
Volkswagen Foundation (Co-PI: T. Lunner, Eriksholm)
€ 100,000
- 2011 2013 Investigating Semantic Networks using Dynamic Causal Modelling with MEG
Elekta Inc. (PI: B. Maess),
€ 100,000
- 2004 2006 Neural mechanisms of spatiotemporal coding of speech,
Baden-Württemberg Foundation gGmbH,
€ 50,000
- 2001 2005 Contributions to two collaborative research grants,
German Science Foundation (SFB 471 and FOR 348; PIs: C. Eulitz, A. Lahiri),
including € 100,000 for MR-compatible EEG system

FUNDING (SMALLER-SCALE SUPPORT)

- 2018 International Hearing Foundation (PI: Malte Wöstmann),
€ 11,000
- 2017 Industry Support for SNAP 2017 workshop,
Oticon Foundation, DK; Sivantos, GER; Audifon, GER; Brain Products, GER;
€ 15,000
- 2014 Scientific Exchange Fellowship,
Erasmus Mundus programme Auditory Cognitive Neuroscience,
€ 7,000

APPOINTMENTS AND OFFERS

- 2018 Professorial Research Fellow, School of Psychology, University of Birmingham (*de-
clined*)
- 2016 Chair (W3) in Physiological Psychology and Research Methods, Department of Psy-
chology, University of Lübeck (*accepted*)
- 2015 Chair (W3) in Physiological Psychology, Department of Psychology,
University of Bielefeld (*declined*)
- 2015 Full Professorship (W2) for Research Methods and Statistics, Department of Psycho-
logy, University of Lübeck (*accepted*)
- 2013 Associate Professorship, Department for Electrical Engineering,
Technical University of Denmark (DTU), Copenhagen (*declined*)
- 2010 Head of a Max Planck Research Group (associate professor-equivalent),
Max Planck Society (*accepted*)

AWARDS AND HONOURS

- 2014 Young Investigator Award,
Advances and Perspectives in Auditory Neuroscience Symposium (APAN), Wash-
ington, DC, November 2014
- 2012 Fellowship in the Mentoring programme for outstanding young scientists,
Biopsychology section of the German Society for Psychology (DGPs)
- 2010 Associate Faculty Member,
International Max Planck Research School “NeuroCom”
- 2004 Postdoctoral Elite Support Programme,
Baden-Württemberg Foundation gGmbH
- 2003 Promotionspreis (PhD Award),
Society of the University of Konstanz
- 2002 Young Investigators Award,
13th International Conference on Biomagnetism, Jena, Germany
- 2001 PhD Scholarship (Manfred-Ulmer-Fellowship),
Wissenschaft und Gesellschaft Foundation, Konstanz, Germany

HONOURS FOR SUPERVISED WORKS

- 2017 Trainee Malte Wöstmann: PhD award, Research Academy Leipzig
Trainee Leonhard Waschke: G.A. Lienert Travel Fellowship,
3 months training at USCD
Trainee Lea-Maria Schmitt: Colin Cherry Poster Award, Speech in Noise Workshop,
Groningen
- 2015 Trainee Lorenz Fiedler: Best Poster Award at the Entrainment of Brain Oscillations
Workshop, Oldenburg
Trainee Sophie Herbst: RAW 2015 non-faculty/student award at the Rovertto Atten-
tion Workshop
- 2014 Trainee Anna Wilsch: Erasmus Mundus Exchange Fellowship,
10 months postdoctoral training at NYU
Trainee Björn Herrmann: DAAD travel fellowship to attend Neuroscience 2014
Trainee Malte Wöstmann: Colin Cherry Poster Award, Speech in Noise Workshop,
Marseille
- 2013 PhD student Antje Strauß and Postdoc Mathias Scharinger: DAAD travel fellowships
to attend “Society for Neurobiology of Language” 2013
- 2012 Trainees Molly Henry and Björn Herrmann: Publication in the trainees-only section
“Journal Club” in The Journal of Neuroscience
- 2012 Trainee Björn Herrmann: PhD award, Research Academy Leipzig
- 2012 PhD student Julia Erb: DAAD travel fellowship to attend Neuroscience 2012

MEMBERSHIPS

- 2017 German Statistical Society (DStatG)
 2013 Society for Psychophysiological Research
 2012 Deutscher Hochschulverband
 2012 Deutsche Gesellschaft für Psychologie (DGPs)
 2011 Society for the Neurobiology of Language
 2005 Society for Neuroscience
 2001 Cognitive Neuroscience Society

EDITORIAL AND REVIEW SERVICE

- 2019 Reviewing Editor, *The Journal of Neuroscience*
 2016 2018 Associate Editor, *The Journal of Neuroscience*
 2016 2018 Handling Editor, *Neuroimage*
 2015 2018 Action Editor, *Brain and Language*
 2014 Guest Editor, *Brain and Language*; Special issue “The electrophysiology of language”
 2014 Review Editor, *Frontiers in Human Neuroscience*
 2010 Review Editor, *Frontiers in Psychology*
 2006 *Reviews for International funding bodies:*
 ERC European Research Council (ad hoc)
 NSF National Science Foundation (ad hoc and as review panelist),
 NIH National Institute of Health (as review panelist),
 BMBF Bundesministerium für Bildung und Forschung (review panelist)
 NWO Netherlands Organisation for Scientific Research (ad hoc)
 Action on Hearing Loss, UK (ad hoc)
 FNRS Fonds de la Recherche Scientifique, Belgium (ad hoc)
 DFG Deutsche Forschungsgemeinschaft (ad hoc)
 ARO Army Research Office (ad hoc)
 NSERC Canadian Government (ad hoc)
 MRC Medical Research Council, UK (ad hoc)
 2001 *Ad hoc reviews for:*
 Science,
 Nature Reviews Neuroscience,
 Neuron,
 Nature Communications,
 Nature Human Behaviour,
 Proceedings of the National Academy of Sciences (PNAS),
 eLife,
 Current Biology,

PloS Biology,
 Brain,
 Journal of Neuroscience (>10 reviews / year),
 Cerebral Cortex,
 PloS Computational Biology,
 Psychological Science,
 Scientific Reports,
 Cortex,
 NeuroImage,
 Human Brain Mapping,
 Journal of Cognitive Neuroscience,
 Phil Transact Royal Soc B,
 Journal of Neurophysiology,
 PloS One,
 Cognition,
 Journal of Neural Engineering,
 Frontiers in Neuroscience,
 Frontiers in Psychology,
 Brain and Language,
 Neuropsychologia,
 Psychophysiology,
 Brain Research,
 Physiological Measurements,
 Language and Cognitive Processes,
 European Journal of Neuroscience,
 Journal of the Acoustical Society of America,
 Journal of Neurolinguistics,
 NeuroReport,
 Neurobiology of Aging,
 Neuroscience Letters,
 Journal of Computational Neuroscience

INVITED TALKS

- 2019
 - Institute of Neuroscience, University of Barcelona, Spain
 - Erlanger Symposium (organised by SIVANTOS Audiology Germany)
 - Interdisciplinary Research Forum, KIND Foundation, Berlin, D
 - Speech in Noise Workshop, University of Ghent, Belgium
- 2018
 - Royal Society meeting “Attention to Sound”, Chicheley Hall, UK
 - Kavli Summer Institute in Cognitive Neuroscience, Lake Tahoe, CA
 - Cluster of Excellence “Hearing for All”, Medical University Hannover, D

- Collaborative Research Centre “Information Density and Linguistic Encoding”,
University of Saarbrücken, D
- 2017 Department of Bioengineering, Imperial College London, UK
Trinity College Dublin, Ireland
School of Psychology, Birmingham, UK
Neural Oscillations in Speech and Language Processing,
Max Planck Society, Berlin, D
- 2016 Centre of Functionally Integrative Neuroscience (CFIN), University of Aarhus, DK
Institute of Cognitive Neuroscience, UCL, London, UK
University of Groningen, NL
E.C. Donders Centre, Nijmegen, NL
- 2015 Future of Hearing Symposium, Medical University of Hanover, D
Tübingen MEG (Magnetoencephalography) Symposium, Tübingen, D
Département des Neurosciences, Geneva, CH
- 2014 Princeton Neuroscience Institute, US
Tucker-Davis Symposium on Advances and Perspectives in Auditory Neurophysiology
(APAN), Washington, DC, US
Boston Hearing Research Center, Boston University, US
Institute of Neuroscience and Psychology, Glasgow, UK
Institute of Psychology, University of Salzburg, A
Institute of Psychology, University of Bielefeld, D
Institute of Psychology, University of Münster, D
Institute of Psychology, University of Lübeck, D
Berlin School of Mind and Brain (Humboldt Graduate School), D
Psychology and Neuroscience Department, Maastricht Brain Imaging Centre, NL
Tübingen Hearing Research Centre, Universität Tübingen, D
- 2013 5th Ageing and Speech Communication (ASC) Conference, Bloomington, Indiana,
US
Centre for Applied Hearing Research, Technical University of Denmark (DTU), DK
Institute of Psychology, Hamburg University, D
Department of Neuropsychology, University of Zürich, Zürich, CH
- 2012 German Society for Medical Physics (43rd Annual Meeting), Jena, D
Oticon Symposium, Hamburg, D
Clinical Neuropsychology Research Group, Klinikum Bogenhausen (Munich), D
European Society for Cognitive and Affective Neuroscience, Marseille, FR

- Department of Psychology, University of Oldenburg, Oldenburg, D
 Institute of Medical Psychology, University of Frankfurt, D
 Eriksholm Research Centre, Oticon, Helsingør, DK
- 2011 German Society for Aphasia and its Treatment, Konstanz, D
 International Symposium on Auditory and Audiological Research (ISAAR),
 Nyborg Strand, DK
 Max Planck Institute for Human Development, Berlin, D
 HEAD Seminar Series, University of Linköping, SE
 Workshop on Speech in Noise: Intelligibility and Quality, Lyon, FR
- 2010 Department of Linguistics, University of Oxford, UK
 Department of Psychology, University of Konstanz, D
 Max Planck Institute for Psycholinguistics, Nijmegen, NL
- 2009 GIPSA Laboratory, Grenoble, FR
- 2008 Centre for Integrative Neuroscience, Tübingen, Germany, D
 Institute of Cognitive Neuroscience, University College London, UK
 Acoustics (formerly Acoustical Society of America), Paris, FR
- 2007 Department of Linguistics, University of Konstanz, D
 Department of Linguistics, University of Potsdam, D
- 2006 F.C. Donders Centre for Cognitive Neuroimaging, Nijmegen, NL
 Max Planck Institute for Hum Cogn Brain Sci, Leipzig, D
- 2005 Institute for Biomagnetism and Biosignal analysis, Muenster, D

ORGANISATION OF CONFERENCES, WORKSHOPS, SYMPOSIA

- 2018 Symposium committee member, Cognitive Neuroscience Society (CNS)
- 2017 Chair & Organisation, *Signal and Noise in the Auditory Pathway (SNAP) 2017*, 2-day international workshop, University of Lübeck, Lübeck
- 2015 2017 Poster committee member, Cognitive Neuroscience Society (CNS)
- 2014 2017 Program committee member, Advances and Perspectives in Auditory Neuroscience (APAN; annual SfN-Satellite)
- 2015 Chair, Nanosymposium *Cortical processing of complex sound*, Society for Neuroscience Meeting, Chicago
- 2013 Chair & Organisation, *Hearing and Balance Social*, Society for Neuroscience Meeting, San Diego

Chair & Organisation, *Signal and Noise in the Auditory Pathway (SNAP)*, 2-day international workshop, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig

Chair, *Alpha re-visited: Neural oscillations in human perception and cognition*, Psychologie und Gehirn Meeting, Würzburg, with Christoph Herrmann

2010 Co-Chair, *Networks for Communication: Between human, ape, monkey and bird brains*, International Congress of Neuroethology, Salamanca, with Chris Petkov

2007 Chair, *Speech comprehension as a psychological process*, Tagung experimentell arbeitender Psychologen (TEAP), Trier

OTHER SELECT TALKS

- 2016 Psychologie und Gehirn 2016, Berlin
- 2016 Deutsche Jahrestagung für Akustik (DAG) 2016, Aachen
- 2015 Ageing and Cognition, Dortmund
- 2010 Society for Neuroscience Annual Meeting, San Diego
- 2008 Society for Neuroscience Annual Meeting, Washington, D.C.
- 2006 Society for Neuroscience Annual Meeting, Atlanta
- 2007 Tagung experimentell arbeitender Psychologen (TeaP), Trier
- 2005 Tagung experimentell arbeitender Psychologen (TeaP), Regensburg
- 2004 Tagung experimentell arbeitender Psychologen (TeaP), Gießen
- 2003 Arbeitstagung für Psychophysiologische Methodik (APM), Würzburg
International Congress of Phonetic Sciences, Barcelona

SELECT INTERNATIONAL COLLABORATIONS

- 2002 2006 Josef Rauschecker, Georgetown University, Washington, DC, USA
- 2006 2009 Sophie Scott, University College London, UK
- 2007 2013 Frank Eisner, Max Planck Institute for Neurolinguistics, Nijmegen, NL
- 2007 Sonja Kotz, Manchester University, UK / Maastricht University, NL
- 2008 Christopher Petkov, University of Newcastle, UK
- 2008 Nathan Weisz, University of Trento, IT
- 2011 Thomas Lunner, Eriksholm Research Centre, DK & University of Linköping, SE
- 2011 Carolyn McGettigan, Royal Holloway, London, UK
- 2013 Ed Bartlett, Purdue University, USA
- 2014 Peter Lakatos, NYU / Nathan Kline Institute, US
- 2015 Christiane Thiel, Oldenburg University, DE

2017 Jennifer Bizley, University College London, UK

PUBLIC OUTREACH AND MEDIA

- 05-2017 Invited speaker, Public science event (lecture series “Weltanschauung”), Church St. Petri, Lübeck, Germany
- 10-2016 Panelist, Public science event, Hörregion Hannover, Hannover, Germany
- 06-2016 Winner, 1st Lübeck “Rock your life” Professorial Science Slam
- 04-2016 German TV feature (“Schleswig-Holstein Magazin”, NDR) on Wöstmann et al. (2016) PNAS study and our in-ear EEG research
- 02-2015 Various German radio features (“MDR Info”, SWR) and international press coverage on Wöstmann et al. (2015) J Neurosci study
- 04-2014 Interview for 1-hour radio feature “The costs of knowledge” (SWR2, Lorenz Schroeter)
- 03-2013 German Science TV (“Nano”, 3Sat) feature on Henry & Obleser (2012) PNAS study
- 11-2012 Various German radio features (“DRadio Kultur”, “Wissen“) and international press coverage on Henry & Obleser (2012) PNAS study
- 09-2012 International press coverage on Obleser et al. (2012) J Neurosci study
- 07-2012 German radio (“DRadio Wissen”), 5-min feature on Erb et al. (2012) study
- 03-2012 German radio (“WDR3 Forum”), panel discussion on speech and hearing
German radio (“Mephisto Leipzig”), scientific commentary on auditory processing
- 2012 Guest writer for the Public science blog “NeuroCognition” at scilogs.eu
- 02-2012 Interview for dpa [German Press Agency] on Paisley et al., PloS Biology 2012
- 08-2011 Scientific American, The Atlantic, Folha de Sao Paolo and Hürriyet report on the “Slow Science Academy”
- 10-2010 Public science talk, German Finals for the International JuniorScienceOlympics, Merseburg
- 06-2010 Public science talk, “Biotech meets Public”, Biosaxony, at the Leipzig Zoo
- 04-2010 Foundation of the “Slow Science Academy”, [http:// slow-science.org](http://slow-science.org)
- 08-2009 Public science talk (joint event with the Max Planck Institute for Evolutionary Anthropology) for “Science Express – Research Expedition Germany”
- 08-2008 This Week in the Journal, The Journal of Neuroscience: “Lateralization of Speech Comprehension”
- 03-2007 Wellcome Trust Media: “Making sense of the world through a cochlear implant”
Medical Research Council News: “Tuning out: researchers make sense of background noise”
German and Austrian Press: “Lärm aktiviert Gehirn für besseres Sprachverständnis”

Sponsored PhD students:

2017	Lea-Maria Schmitt, Neural encoding of semantic predictability
2016	Leonhard Waschke, Auditory decision-making in the aging brain
2015	Lorenz Fiedler, Real-time EEG of the listening brain
2012 2015	Malte Wöstmann, Auditory degradation and compensatory processes
2011 2014	Julia Erb, Neural dynamics of perceptual adaptation to degraded speech
2011 2014	Antje Strauß, Cognitive linguistic expectancies in degraded speech
2011 2014	Anna Wilsch, Working memory in degraded speech

LIST OF PUBLICATIONS

Bibliographical Record

⇒ [Jonas Obleser's profile at Google Scholar](#)

h-Index	<i>how many papers with at least h citations</i>	38	(Google Scholar)
i10-Index	<i>how many papers with at least 10 citations</i>	82	
Total number of citations		~ 4500	(Google Scholar)

Based on a total of	106 peer-reviewed publications
of which as first author	21
of which as senior author	57

Cumulated 5-year impact factor (IF) of all journals 565

Peer-reviewed publications

1. Alavash, M., Tune, S., & Obleser, J. (2018/2019). Modular reconfiguration of an auditory-control brain network supports adaptive listening behavior. *Proceedings of the National Academy of Sciences of the United States of America (P N A S)*. *In press*.
2. Mamashli, F., Khan, S., Obleser, J., Friederici, A.D., & Maess, B. (2018/2019). Oscillatory dynamics of cortical functional connections in semantic prediction. *Human Brain Mapping*. *In press*.
3. Fiedler, L., Wöstmann, M., Herbst, S.K., & Obleser, J. (2018). Late cortical tracking of ignored speech facilitates neural selectivity in acoustically challenging conditions. *Neuroimage*. *In press*.
4. Wöstmann, M., Waschke, L., & Obleser, J. (2018). Prestimulus neural alpha power predicts confidence in discriminating identical auditory stimuli. *European Journal of Neuroscience*. *In press*.
5. Kreitewolf, J., Mathias, S.R., Trapeau, R., Obleser, J., & Schönwiesner, M. (2018). Perceptual grouping in the cocktail party: contributions of voice-feature continuity. *Journal of the Acoustical Society of America (JASA)*. *In press*.

6. Wilsch, A., Henry, M.J., Herrmann, B., Herrmann, C.S., & Obleser, J., (2018). Temporal expectation modulates the cortical dynamics of short-term memory. *The Journal of Neuroscience*. 38(34), 7428–7439.
7. Herbst, S.K., Fiedler, L., & Obleser, J. (2018). Tracking temporal hazard in the human electroencephalogram using a forward encoding model. *eNeuro*. 5 (2)
8. Wöstmann, M., Vosskuhl, J., Obleser, J., & Herrmann, C. (2018). Opposite effects of lateralised transcranial alpha versus gamma stimulation on auditory spatial attention. *Brain Stimulation*. 11(4):752–758.
9. Erb, J., Ludwig, A., Kunke, D., Fuchs, M., & Obleser, J., (2018). Temporal sensitivity measured shortly after cochlear implantation predicts six-month speech recognition outcome. *Ear and Hearing*. *In press*.
10. Lim, S.J., Wöstmann, M., Geweke, F., & Obleser, J. (2018). The benefit of attention-to-memory depends on the interplay of memory capacity and memory load. *Frontiers in Psychology* 9:184.
11. Tune, S., Wöstmann, M., & Obleser, J. (2018). Probing the limits of alpha power lateralization as a neural marker of selective attention in middle-aged and older listeners. *European Journal of Neuroscience*. *In press*.
12. Alavash, M., Lim, S.J., Thiel, C., Sehm, B., Deserno, L., & Obleser, J. (2018). Dopaminergic modulation of hemodynamic signal variability and the functional connectome during cognitive performance. *Neuroimage*. 172:341–356.
13. Wilsch, A., Neuling, T., Obleser, J., & Herrmann, C.S. (2018). Transcranial alternating current stimulation with speech envelopes modulates speech comprehension. *Neuroimage*. 172:766–774.
14. Waschke, L., Wöstmann, M., & Obleser, J., (2017). States and traits of neural irregularity in the age-varying brain. *Scientific Reports*. 17381.
15. Obleser, J., Henry, M.J., & Lakatos, P. (2017). What do we talk about when we talk about rhythm? *PLOS Biology*, 15(9):e2002794.
16. Herbst, S.K., Obleser, J. (2017). Implicit variations of temporal predictability: Shaping the neural oscillatory and behavioural response. *Neuropsychologia*. 101:141-152.
17. Henry, M.J., Herrmann, B., Kunke, D., Obleser, J. (2017). Aging affects the balance of neural entrainment and top-down neural modulation in the listening brain. *Nature Communications*. 8:15801
18. Fiedler, L., Wöstmann, M., Graversen, C., Brandmeyer, A., Lunner, T., & Obleser, J. (2017) Single-channel in-Ear-EEG detects the focus of auditory attention to concurrent tone streams and mixed speech. *Journal of Neural Engineering*. 14:036020
19. Wöstmann, M., Lim, S.J., Obleser, J. (2017). The human neural alpha response to speech is a proxy of attentional control. *Cerebral Cortex*. 27(6):3307-3317
20. Alavash, M., Daube, C., Wöstmann, M., Brandmeyer, A., Obleser, J. (2017). Large-scale network dynamics of beta-band oscillations underlie auditory perceptual decision-making. *Network Neuroscience*. 1(2):166–191

21. Scharinger, M., Bendixen, A., Herrmann, B., Henry, M.J., Mildner, T., & Obleser, J. (2016). Predictions interact with missing sensory evidence in semantic processing areas. *Hum Brain Mapp.* 37(2):704-16.
22. Maess, B., Mamashli, F., Obleser, J., Helle, L., Friederici, A.D. (2016). Prediction signatures in the brain: Semantic pre-activation during language comprehension. *Frontiers in Human Neuroscience.* 10:591
23. Wöstmann, M., Fiedler, L., Obleser, J. (2016). Tracking the signal, cracking the code: Speech and speech comprehension in non-invasive human electrophysiology. *Language, Cognition and Neuroscience.* *In press.*
24. Wöstmann, M., Obleser, J. (2016). Acoustic detail but not predictability of task-irrelevant speech disrupts working memory. *Frontiers in Human Neuroscience.* 10:538.
25. Petersen, Eline B., Wöstmann, M., Obleser, J., Lunner, T. (2016). Neural tracking of attended versus ignored speech is differentially affected by hearing loss. *Journal of Neurophysiology.* *In press.*
26. Herrmann, B., Henry, M.J., Johnsrude, I., Obleser, J., (2016). Altered Temporal Dynamics of Neural Adaptation in the Aging Human Auditory Cortex. *Neurobiology of Aging.* 45:10-22
27. Wöstmann, M., Herrmann, B., Maess, B., Obleser, J. (2016). Spatiotemporal dynamics of auditory attention synchronize with speech. *Proceedings of the National Academy of Sciences of the United States of America (P N A S).* 113(14):3873-3878.
28. Henry, M.J., Herrmann, B., Obleser, J., (2016). Neural microstates govern perception of auditory input without rhythmic structure. *The Journal of Neuroscience.* 36(3):860-871
29. Lim, S.J., Wöstmann, M., Obleser, J. (2015). Selective attention to auditory memory neurally enhances perceptual precision. *The Journal of Neuroscience.* 35(49):16094-104
30. Wilsch, A., Obleser, J. (2015/2016). What works in auditory working memory? A neural oscillations perspective. *Brain Research.* 1640(Pt B):193-207
31. Herrmann, B., Parthasarathy, A., Han, E.X., Obleser, J., Bartlett, E.L. (2015) Sensitivity of rat inferior colliculus neurons to frequency distributions. *Journal of Neurophysiology.* 114(5):2941-54
32. Herrmann, B., Henry, M.J., Haegens, S., Obleser, J. (2015) Temporal Expectations and Neural Amplitude Fluctuations in Auditory Cortex Interactively Influence Perception. *Neuroimage.* 124:487-497
33. Petersen, E.B., Wöstmann, M., Obleser, J., Stenfelt, S., Lunner, T. (2015) Hearing loss impacts neural alpha oscillations under adverse listening conditions. *Front Psychol* 6:177
34. Herrmann, B., Henry, M.J., Fromboluti, E.K., McAuley, J.D., Obleser, J. (2015) Statistical Context Shapes Stimulus-Specific Adaptation in Human Auditory Cortex. *Journal of Neurophysiology.* 13(7):2582-91
35. Strauß, A., Henry, M.J., Scharinger, M., Obleser, J. (2015) Alpha phase determines successful lexical decision in noise. *The Journal of Neuroscience.* 35(7):3256-62

36. Wilsch, A., Henry, M.J., Herrmann, B., Maess, B., Obleser, J. (2015) Slow-delta phase concentration marks improved temporal expectations based on the passage of time. *Psychophysiology*. 52(7):910-8.
37. Wöstmann, M., Herrmann, B., Wilsch, A., Obleser, J. (2015) Neural alpha dynamics reflect acoustic challenges and predictive benefits in adverse listening situations. *The Journal of Neuroscience*. 35(4):1458-67.
38. Henry, M.J., Herrmann, B., Obleser, J. (2015) Selective attention to temporal features nested in time. *Cerebral Cortex*. 25(2):450-9.
39. Wöstmann, M., Schröger, E., Obleser, J. (2014) Acoustic detail cues allocation of attention in a selective listening task. *Journal of Cognitive Neuroscience*. 12:1-13.
40. Scharinger, M., Henry, M.J., Obleser, J. (2014) Acoustic cue selection and discrimination under degradation: Differential contributions of inferior parietal and posterior temporal cortex. *Neuroimage*. 106:373-81.
41. Henry, M.J., Herrmann, B., Obleser, J. (2014) Entrained neural oscillations in multiple frequency bands co-modulate behavior. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*. 11(41): 14935-14940.
42. Hartwigsen, G., Golombek, T., Obleser, J. (2014) Repetitive transcranial magnetic stimulation over left angular gyrus modulates the predictability gain in degraded speech comprehension. *Cortex*. 68:100-10.
43. Herrmann, B., Henry, M.J., Scharinger, M., Obleser, J. (2014) Supplementary motor area activations predict individual differences in temporal-change sensitivity and its illusory distortions. *Neuroimage*. 101:370-9.
44. Wilsch, A., Henry, M.J., Herrmann, B., Maess, B., Obleser, J. (2015) Alpha oscillatory dynamics index temporal expectation benefits in working memory. *Cerebral Cortex*. 25(7):1938-46.
45. Herrmann, B., Schlichting, N., & Obleser, J. (2014). Dynamic range adaptation to spectral stimulus statistics in human auditory cortex. *The Journal of Neuroscience*. 34(1):327-31.
46. Obleser, J. (2014) Putting the listening brain in context. *Language and Linguistics Compass*. 8(12): 646-658.
47. Meyer, L., Cunitz, K., Obleser, J., Friederici, A.D. (2014) Sentence processing and verbal working memory in a white-matter-disconnection patient. *Neuropsychologia*. 61:190-6.
48. Scharinger, M., Herrmann, B., Nierhaus, T., Obleser, J. (2014) Neural dynamics of auditory cue utilisation in simultaneous EEG-fMRI. *Frontiers in Neuroscience*. 8:137.
49. Strauß, A., Wöstmann, M., Obleser, J. (2014) Cortical alpha oscillations as a tool for auditory selective inhibition. *Frontiers in Neuroscience*. 8:350.
50. Strauß, A., Kotz, S.A., Scharinger, M., Obleser, J. (2014) Alpha and theta brain oscillations index dissociable processes in spoken word recognition. *Neuroimage*. 97:387-95.
51. Bendixen, A., Scharinger, M., Strauß, A., Obleser, J. (2014) Prediction in the Service of Speech Comprehension: Modulated Early Brain Responses to Omitted Speech Segments. *Cortex*. 53:9-26.

52. Weisz, N. & Obleser, J. (2014). Synchronisation signatures in the listening brain: a perspective from noninvasive neuroelectrophysiology. *Hearing Research*. 307:16-28.
53. Erb, J. & Obleser, J. (2013) Upregulation of cognitive control networks in older adults' speech comprehension. *Frontiers in Systems Neuroscience*. 7:116.
54. Keil, J., Timm, J., San Miguel, I., Schulz, H., Obleser, J., Schönwiesner, M. (2013) Cortical brain states and corticospinal synchronization influence TMS-evoked motor potentials. *Journal of Neurophysiology*. 111(3):513-9.
55. Henry, M.J. & Obleser, J. (2013) Dissociable neural response signatures for slow amplitude and frequency modulation in human auditory cortex. *Plos One*. 8(10):e78758.
56. Herrmann, B., Henry, M.J., Grigutsch, M., Obleser, J. (2013) Oscillatory Phase Precision in Neural Entrainment Underpins Illusory Percepts of Time. *The Journal of Neuroscience*. 33(40):15799-15809.
57. Scharinger, M., Henry, M.J., Erb, J., Meyer, L., Obleser, J. (2013) Thalamic and parietal brain morphology predicts auditory category learning. *Neuropsychologia*. 53:75-83.
58. Sehm, B., Schnitzler, T., Obleser, J., Groba, A., Ragert, P., Villringer, A., Obrig, H. (2013) Facilitation of inferior frontal cortex by tDCS induces perceptual learning of severely degraded speech. *The Journal of Neuroscience*. 33(40):15868-15878.
59. Erb, J., Henry, M.J., Eisner, F., Obleser, J. (2013) The brain dynamics of rapid adaptation to adverse listening conditions. *The Journal of Neuroscience*. 33(26):10688-10697.
60. Herrmann, B., Henry, M.J., Scharinger, M., Obleser, J. (2013) Auditory filter width affects response magnitude but not frequency specificity in auditory cortex. *Hearing Research*. 304:128-136.
61. Strauß, A., Kotz, S.A., Obleser, J. (2013) Narrowed expectancies under degraded speech: Revisiting the N400. *Journal of Cognitive Neuroscience*. 25(8):1383-95.
62. Müller, N., Keil, J., Obleser, J., Schulz, H., Grunwald, T., Huppertz, H.J., Weisz, N. (2013) You can't stop the music – reduced auditory alpha power and enhanced auditory parahippocampal coupling facilitate the illusion of continuity during noise. *Neuroimage*. 79:383-93.
63. Golestani, N., Hervais-Adelman, A., Obleser, J., Scott, S.K. (2013) Semantic versus perceptual interactions in neural processing of speech-in-noise. *Neuroimage*. 79:52-61.
64. Herrmann, B., Henry, M.J., Obleser, J. (2013) Frequency-specific adaptation in human auditory cortex depends on the spectral variance in the acoustic stimulation. *Journal of Neurophysiology*. 109(8):2086-96.
65. Henry, M.J. & Obleser, J. (2012) Frequency modulation entrains slow neural oscillations and optimizes human listening behavior. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*. 109(49):20095-20100.
66. Obleser, J., Herrmann, B. and Henry, M.J. (2012). Neural oscillations in speech: Don't be enslaved by the envelope. *Frontiers in Human Neuroscience*. 6:250.
Comment on: Giraud AL, Poeppel D. Nat Neurosci. 2012 15(4):511-7.

67. Obleser, J., Woestmann, M., Hellbernd, N., Wilsch, A., Maess, B. (2012) Adverse listening conditions and memory load drive a common alpha oscillatory network. *The Journal of Neuroscience*. 32(36):12376–83.
68. Scharinger, M., Henry, M.J., Obleser, J., (2013). Prior experience with negative spectral correlations promotes information-integration during auditory category learning. *Memory & Cognition*. In press.
69. Meyer, L., Obleser, J., Kiebel, S.J., Friederici, A.D. (2012) Spatiotemporal dynamics of argument retrieval and reordering: an fMRI and EEG study on sentence processing. *Frontiers in Psychology* 3:523
70. Tuomainen, J., Savela, J., Obleser, J., Aaltonen, O. (2013). Attention modulates the use of spectral attributes in vowel discrimination: Behavioral and event-related potential evidence. *Brain Research*. 1490:170-83
71. Obleser, J., Weisz, N. (2012) Suppressed alpha oscillations predict intelligibility of speech and its acoustic details. *Cerebral Cortex*. 22: 2466-2477.
72. Scharinger, M., Bendixen, A., Trujillo-Baretto, N., Obleser, J. (2012) A sparse neural code for some speech sounds but not for others. *PloS One*. 7(7):e40953.
73. Herrmann, B., Obleser, J., Kalberlah, C., Haynes, J.D., Friederici, A.D. (2012) Dissociable neural imprints of perception and grammar in auditory functional imaging. *Human Brain Mapping*. 33(3):584–95.
74. Meyer, L., Obleser, J., Anwender, A., Friederici, A.D. (2012) Sentence processing: Linking syntax in Broca's area to working memory in left temporo-parietal regions. *Neuroimage*. 62(3):1987–1998.
75. Erb, J., Henry, M.J., Eisner, F., Obleser, J. (2012) Auditory skills and brain morphology predict individual differences in adaptation to degraded speech. *Neuropsychologia*. 50(9):2154–64.
76. Knoll, L.J., Obleser, J., Schipke, C.S., Friederici, A.D., and Brauer, J. (2012) Left prefrontal cortex activation during sentence comprehension covaries with grammatical knowledge in children. *Neuroimage*. 62(1):207–16.
77. Jessen, S., Obleser, J., Kotz, S.A. (2012) How Bodies and Voices Interact in Early Emotion Perception. *PloS One*. 7(4):e36070.
78. Meyer, L., Obleser, J., Friederici, A.D. (2012) Left parietal alpha enhancement during working memory-intensive sentence processing. *Cortex*. 49(3):711–721.
79. McGettigan, C., Faulkner, A., Altarelli, I., Obleser, J., Scott, S.K. (2012) Speech comprehension aided by multiple modalities: behavioural and neural interactions. *Neuropsychologia*. 50(5): 762–76.
80. Obleser, J., Meyer, L., Friederici, A.D. (2011) Dynamic assignment of neural resources in auditory comprehension of complex sentences. *Neuroimage*. 56:2310–2320.
81. Obleser, J., Kotz, S.A. (2011) Multiple brain signatures of integration in the comprehension of degraded speech. *Neuroimage*. 55:713–723.

82. Weisz, N., Hartmann, T., Müller, N, Lorenz I, Obleser, J. (2011) Alpha rhythms in audition: cognitive and clinical perspectives. *Frontiers in Psychology*. 2:73.
83. Obleser, J., Leaver, A.M., Van Meter, J., Rauschecker, J.P. (2010) Segregation of vowels and consonants in human auditory cortex: Evidence for distributed hierarchical organization. *Frontiers in Psychology*. 1:232.
84. Obleser, J., Kotz, S.A. (2010) Expectancy constraints in degraded speech modulate the speech comprehension network. *Cerebral Cortex*. 20(3): 633–640.
85. Friederici, A.D., Kotz, S.A., Scott, S.K., Obleser, J. (2010) Disentangling Syntax and Intelligibility in Auditory Language Comprehension. *Human Brain Mapping*. 31(3):448–57.
86. Holle, H., Obleser, J., Rüschemeyer, S.A., Gunter, T. (2010) Integration of iconic gestures and speech in left superior temporal areas boosts speech comprehension under adverse listening conditions. *Neuroimage*. 49(1): 875–884.
87. Obleser, J., Eisner, F. (2009) Pre-lexical abstraction of speech in the auditory cortex. *Trends in Cognitive Sciences*. 13(1):14–19.
88. Petkov, C., Logothetis, N., Obleser, J. (2009) Where are the human speech and voice regions and do other animals have anything like them? *The Neuroscientist*. 15(5):419–429.
89. Assadollahi, R., Meinzer, M., Flaisch, T., Obleser, J., Rockstroh, B. (2009) The representation of the verb's argument structure as disclosed by fMRI. *BMC Neuroscience*. 10:3.
90. Obleser, J., Eisner, F., Kotz, S.A. (2008) Bilateral speech comprehension reflects differential sensitivity to spectral and temporal features. *The Journal of Neuroscience*. 28(32):8116–8124.
91. Obleser, J., Wise, R.J.S., Dresner, M.A., Scott, S.K. (2007) Functional integration across brain regions improves speech perception under adverse listening conditions. *The Journal of Neuroscience*. 27:2283–2289.
See also comment by: Ghazanfar AA and Pinsky MA (2007) Current Biology; 17: R420-R422.
92. Obleser, J., Zimmermann, J., Van Meter, J., Rauschecker, J.P. (2007) Multiple stages of auditory speech perception reflected in event-related fMRI. *Cerebral Cortex*. 17(10):2251–2257.
93. Meinzer, M., Obleser, J., Flaisch, T., Eulitz, C., Rockstroh, B. (2007) Recovery from aphasia as a function of language therapy in an early bilingual patient demonstrated by fMRI. *Neuropsychologia*. 45(6):1247–1256.
94. Eulitz, C., Obleser, J. (2007) Perception of acoustically complex phonological features in vowels is reflected in the induced brain-magnetic activity. *Behavioral and Brain Functions*. 3:26.
95. Hannemann, R., Obleser, J., Eulitz, C. (2007) Top-down knowledge supports the retrieval of lexical information from degraded speech. *Brain Research*. 1153:134–143.
96. Tavabi, K., Obleser, J., Dobel, C., Pantev, C. (2007) Auditory evoked fields differentially encode speech features: An MEG investigation of the P50m and N100m time courses during syllable processing. *European The Journal of Neuroscience*. 25(10):3155–3162.
97. Obleser, J., Scott, S.K., Eulitz, C. (2006) Now you hear it, now you don't: Transient traces of consonants and their nonspeech analogues in the human brain. *Cerebral Cortex*. 16(8):1069–1076.

98. Obleser, J., Boecker, H., Drzezga, A., Haslinger, B., Hennenlotter, A., Roetlinger, M., Eulitz, C., Rauschecker, J.P. (2006) Vowel sound extraction in anterior superior temporal cortex. *Human Brain Mapping*. 27(7):562–571.
99. Meinzer, M., Flaisch, T., Obleser, J., Assadollahi R., Djundja D., Barthel, G., Rockstroh B. (2006) Brain regions essential for improved lexical access in an aged aphasic patient: A case report. *BMC Neurology*. 6:28.
100. Obleser, J., Lahiri, A., Eulitz, C. (2004) Magnetic brain response mirrors extraction of phonological features from spoken vowels. *Journal of Cognitive Neuroscience*. 16(1):31–39.
101. Obleser, J., Elbert, T., Eulitz, C. (2004) Attentional Influences on Functional Mapping of Speech Sounds in Human Auditory Cortex. *BMC Neuroscience*. 5:24.
102. Obleser, J., Eulitz, C., Rockstroh, B. (2004) Gender differences in hemispheric asymmetry of syllable processing: Left-lateralized magnetic N100 varies with syllable categorization in females. *Psychophysiology*. 41(5):783–788.
103. Eulitz, C., Obleser, J., Lahiri, A. (2004) Intra-subject replication of brain magnetic activity during the processing of speech sounds. *Brain Research*. 19(1):82–91.
104. Obleser, J., Lahiri, A., Eulitz, C. (2003) Auditory evoked magnetic field codes place of articulation in timing and topography around 100ms post syllable onset. *NeuroImage*. 20(3):1839–1847.
105. Obleser, J., Elbert, T., Lahiri, A., Eulitz, C. (2003) Cortical representation of vowels reflects acoustic dissimilarity determined by formant frequencies. *Brain Research*. 15(3):207–213.
106. Obleser, J., Eulitz, C., Lahiri, A., Elbert, T. (2001) Gender differences in functional hemispheric asymmetry during processing of vowels as reflected by the human brain magnetic response. *Neuroscience Letters*. 314(3):131–134.

Editorials and Comments

1. Obleser, J. (2016). Tell me something I don't know. *eLife*. 5:e15853
2. Obleser, J. (2015). Re-visiting the electrophysiology of language. Guest Editorial. *Brain and Language*. 148:23-4

Monographs

1. Obleser, J. (2013/2015). The brain dynamics of comprehending degraded speech. Der Fakultät für Biowissenschaften, Pharmazie und Psychologie der Universität Leipzig eingereichte Habilitationsschrift. Leipzig.
2. Obleser, J. (2004). Neurobiology of Speech Perception: Evidence from Functional Brain Mapping. Dissertationsschrift. Konstanz. <http://nbn-resolving.de/urn:nbn:de:bsz:352-opus-12617>

Book chapters

1. Tune, S., & Obleser, J. (2019). A Parsimonious Look at Neural Oscillations in Speech Perception. In: Springer Handbook of Speech Perception. Holt, L., Lotto, A., Popper, A.N., Fay, R.R. (Eds.)

2. Obleser, J., & Erb, J. (2019). Neural filters for challenging listening situations. In: *The Cognitive Neurosciences VI*, Gazzaniga, M., Magun, G.R., Poeppel, D. (Eds.)
3. Obleser, J., & Koelsch, S. (2018). Sound in den Neurowissenschaften [Sound in the Neurosciences]. In: *Handbuch Sound*. Morat, D., & Ziemer, H.J. (Eds.)

Conference Proceedings

1. Fiedler, L., Obleser, J., Lunner, T., Graversen, C. (2016). Ear-EEG allows extraction of neural responses in challenging listening scenarios – a future technology for hearing aids?, *Conf Proc IEEE Eng Med Biol Soc.* 5697-5700
2. Obleser, J., Strauß, A., & Wilsch, A. (2011). Neurocortical mechanisms of comprehension in degraded speech. In T. Dau, M. L. Jepsen, J. Cristensen-Dalsgaard, & T. Poulsen (Eds.). *Speech perception and auditory disorders* (pp. 251–262). Presented at the 3rd International Symposium on Auditory and Audiological Research, Nyborg, Denmark: The Danavox Jubilee Foundation.
3. Lohmann, G., Obleser, J., Friederici, A. D., Turner, R. (2009) Spectral clustering of low-frequency fluctuations in fMRI data reveal a distinct separation between the superior temporal sulcus and the superior temporal gyrus. In: *ISMRM (Ed.) 17th Meeting of the Int. Soc. for Magn. Resonance in Medicine*.
4. Obleser, J., Eulitz, C., Reetz, H., Lahiri, A. (2003) Phonological features of speech segments are reflected in the auditory evoked brain response around 100 ms post stimulus onset. In: *Proceedings of the 15th International Congress of Phonetic Sciences (2003)*, 1643–1645.
5. Eulitz, C., Lahiri, A., Obleser, J., Reetz, H. (2003) Brain electric activity reflects the underspecification of phonological features in the mental lexicon. In: *Proceedings of the 15th International Congress of Phonetic Sciences*, 1631–1633.
6. Obleser, J., Eulitz, C. (2002) Extraction of phonological features from spoken vowels is mirrored by the MEG response. In: Nowak, H., Haueisen, J., Gießler, F., Huonker, R. (Eds.), *Proceedings of the 13th International conference on Biomagnetism*, pp. 359–361, Berlin: VDE.
7. Eulitz, C., Obleser, J., Reetz, H., Lahiri, A. (2002) Cortical structures, underspecification and mental representation. In: *Proceedings of the 9th Australian International Conference on Speech Science & Technology*, 521–526.