

# CURRICULUM VITAE

Sander van Bree

Centre for Cognitive Neuroimaging (CCNi)  
Institute of Neuroscience and Psychology  
University of Glasgow  
62 Hillhead Street  
Glasgow, G12 8QB  
United Kingdom

sandervanbree@gmail.com  
sandervanbree.com  
orcid.org/0000-0003-4894-5938

## Professional

2019

### Assistant Lab Manager & MEG Operator

MRC Cognition and Brain Sciences Unit at University of Cambridge  
*Oversight over MEG laboratory, equipment checks, user management, and resource monitoring  
Data acquisition, sensor tuning, instructing and supporting researchers, testing participants*

2018 – 2019

### Research Assistant

MRC Cognition and Brain Sciences Unit at University of Cambridge  
Supervised by Benedikt Zoefel and Matt Davis  
*Study design, coding experimental paradigms, data acquisition (tACS, MEG, EEG, fMRI), analysis, writing*

2018

### Student Research Assistant

Maastricht University  
*Study design, coding experimental paradigms, data acquisition (EEG, vibrotactile stimulation), analysis, writing*

2014 – 2016

### Science column writer

Brainmatters.nl  
*Communicated results from high-impact neuroscience studies for a lay target audience in Dutch*

## Education

2019 – present

### PhD Student

University of Glasgow (Centre for Cognitive Neuroimaging)  
University of Birmingham (Centre for Human Brain Health)  
Supervised by Maria Wimber and Simon Hanslmayr  
*Transfer from Birmingham to Glasgow following lab relocation*

2016 – 2018

### Research Master in Cognitive Neuroscience

Maastricht University  
Master thesis supervised by Lars Riecke  
*grade: 9.5/10  
Thesis work resulted in Brain Stimulation publication listed below*

2015 - 2016

### MaRBLEx Excellence Research Program

Maastricht University  
*Excellence opportunity to conduct empirical research during undergraduate studies*

2014 – 2015	<b>Bachelor Honours Program</b> Maastricht University <i>Excellence program for top 20 students in academic cohort</i>
2013 – 2016	<b>Bachelor in Psychology and Neuroscience</b> Maastricht University Bachelor thesis supervised by Tom de Graaf <i>Thesis work included in European Journal of Neuroscience publication listed below</i>
2011 – 2013	<b>Applied Psychology</b> Fontys Eindhoven

### First author publications

van Bree, S. (2023). A Critical Perspective on Neural Mechanisms in Cognitive Neuroscience: Towards Unification. *Perspectives on Psychological Science*.

van Bree, S., Melcón, M., Kolibius, L. D., Kerrén, C., Wimber, M., & Hanslmayr, S. (2022). The brain time toolbox, a software library to retune electrophysiology data to brain dynamics. *Nature Human Behaviour*, 1–10.

van Bree, S., Alamia, A., & Zoefel, B. (2022). Oscillation or not—Why we can and need to know (commentary on Doelling and Assaneo, 2021). *European Journal of Neuroscience*, 55 (1), 201–204.

van Bree, S., Sohoglu, E., Davis, M. H., & Zoefel, B. (2021). Sustained neural rhythms reveal endogenous oscillations supporting speech perception. *PLOS Biology*, 19 (2), e3001142.

van Bree, S., Formisano, E., van Barneveld, D., George, E., & Riecke, L. (2019). No evidence for modulation of outer hair-cell function by 4-Hz transcranial alternating current stimulation. *Brain Stimulation*, 12 (3).

### Contributing author publications

Kerrén, C., van Bree, S., Griffiths, B. J., & Wimber, M. (2022). Phase separation of competing memories along the human hippocampal theta rhythm. *eLife*.

Melcón, M., van Bree, S., Sánchez-Carro, Y., Barreiro-Fernández, L., Kolibius, L. D., Alzueta, E., Wimber, M., Capilla, A., & Hanslmayr, S. (2021). The spotlight of attention turns from rhythmic exploration-exploitation to a stable exploitation state. *BioRxiv*.

de Graaf, T. A., Thomson, A., Janssens, S. E. W., van Bree, S., ten Oever, S., & Sack, A. T. (2020). Does alpha phase modulate visual target detection? Three experiments with tACS-phase-based stimulus presentation. *European Journal of Neuroscience*, 51 (11).

Riecke, L., Snipes, S., van Bree, S., Kaas, A., & Hausfeld, L. (2019). Audio-tactile enhancement of cortical speech-envelope tracking. *NeuroImage*, 202.

## Reviewing

Journal of Neuroscience (2x) • Psychophysiology (2x) • eLife

## Memberships

Organization for Human Brain Mapping (OHBM) • Society for Neuroscience (SfN) • The International Society for the Philosophy of the Sciences of the Mind (ISPS)

## Software

Brain Time Toolbox: Warp electrophysiological data from clock time to brain time and analyze the dynamic neural patterns of cognitive processes – a MATLAB toolbox ([github](#))

## Community contributions & Outreach

2021 – present	<b>Centre for Cognitive Neuroimaging Journal Club</b> University of Glasgow <i>Host</i>
2021 – present	<b>Blog</b> ( <a href="#">read</a> ) <ul style="list-style-type: none"><li>• <i>Introducing the Brain Time Toolbox</i></li><li>• <i>Why neuroscience can't do without philosophy</i></li><li>• <i>The scope and limits of oscillations in language comprehension</i></li></ul>
2018 – 2019	<b>MRC Cognition and Brain Sciences Unit Environmental Committee</b> University of Cambridge <i>Committee member</i>
2020	<b>SolidariTEA 2 Podcast</b> <i>SolidariTEA 2 - Green Advocacy With Sander van Bree. Advocating for workplace activism in an academic setting</i> ( <a href="#">listen</a> )
2019	<b>MRC Cognition and Brain Sciences Unit Lecture</b> <i>Actions to mitigate climate change: what's effective? Advocating for workplace activism in an academic setting</i>
2018	<b>Straight From A Scientist Podcast</b> <i>Episode 27: Free and Open Science: Reworking peer review and null results with Sander van Bree</i> ( <a href="#">listen</a> )

## Teaching

University of Glasgow Master students

*Training three masters students to acquire, analyse, and report on EEG data for master thesis*

## Poster Presentations

van Bree, S., Mackenzie, A., Wimber, M. (2023). Evaluating visual pings as a method to enhance the readout of long-term memory contents. *Generative Episodic Memory (GEM)*

van Bree, S., Melcón, M., Kolibius, L. D., Kerrén, C., Wimber, M., & Hanslmayr, S. (2023). Clock time: a foreign measure to brain dynamics – introducing the brain time toolbox. *Learning & Memory (LEARNMEM)*

van Bree, S., Melcón, M., Kolibius, L. D., Kerrén, C., Wimber, M., & Hanslmayr, S. (2022). Clock time: a foreign measure to brain dynamics – introducing the brain time toolbox. *Organization for Human Brain Mapping (OHBM)*

van Bree, S., Melcón, M., Kolibius, L. D., Kerrén, C., Wimber, M., & Hanslmayr, S. (2022). Clock time: a foreign measure to brain dynamics – introducing the brain time toolbox. *International Conference of Cognitive Neuroscience (ICON)*

van Bree, S., Melcón, M., Kolibius, L. D., Kerrén, C., Wimber, M., & Hanslmayr, S. (2021). Clock time: a foreign measure to brain dynamics. *Society for Neuroscience (SfN)*

van Bree, S., Melcón, M., Wimber, M., & Hanslmayr, S. (2020). Brain Time Toolbox: Warping electrophysiological data to detect recurrence of active cognitive processes. *SfN: Global Connectome*

van Bree, S., Sohoglu, E., Davis, M. H., & Zoefel, B. (2019). Sustained oscillations in MEG and tACS demonstrate true neural entrainment in speech processing. *Society for Neurobiology of Language (SNL)*

van Bree, S., Sohoglu, E., Davis, M. H., & Zoefel, B. (2019). Does rhythmic stimulation produce sustained neural entrainment? *British Association for Cognitive Neuroscience (BACN)*

van Bree, S., Sohoglu, E., Davis, M. H., & Zoefel, B. (2019). Does rhythmic stimulation produce sustained neural entrainment? *MEG UK*

van Bree, S., Thomson, A., Janssens, S. E. W., ten Oever, S., Sack, A. T. & de Graaf, T. A. (2018). No evidence for a causal effect of tACS individual alpha phase on visual awareness. *Dutch Neuroscience Meeting (DNM)*

van Bree, S., de Graaf, T. A. (2016). What is the causal effect of alpha phase on visual awareness? *MaRBLExcellence Meeting*

## **Academic theses**

van Bree, S. (2018). Transcranial alternating current stimulation does not modulate distortion product otoacoustic emissions. *Master thesis*

van Bree, S. (2016). The causal role of alpha phase on visual awareness. *Bachelor thesis*

van Bree, S. (2015). The zombie and modal argument against physicalism: Claims of conceivability, imaginability and possibility. *Honours programme thesis*