# Lara Rösler



## PROFESSIONAL EXPERIENCE

# Current

### Postdoctoral Researcher, SLEEP AND COGNITION GROUP, Netherlands Institute for Neuroscience

03/2020

> Investigating which mechanisms of insomnia are linked to anxiety and depression vulnerability.

fMRI EEG Psychophysiology Matlab R

02/2020

### PhD Student, DEPARTMENT OF PSYCHOLOGY, University of Würzburg

04/2016

> Investigating the neural and behavioral correlates of social attention under the supervision of Prof. Dr. Matthias Gamer.

Eye-Tracking | fMRI | MVPA | GLMM | Matlab | R

10/2019 02/2019

## PhD Exchange and Research Assistant, DEPARTMENT OF PSYCHOLOGY, University of Cambridge

> Investigating dissimilarities of tonotopic auditory maps in wakefulness versus sleep under supervision of Dr. Anat Arzi and Prof. Dr. Tristan Bekinschtein.

fMRI | EEG | Decoding Analyses | fmriprep | BIDS | Linux |

04/2016 10/2015

### Research Assistant, Brain Imaging Center, University Hospital Frankfurt am Main

> Investigating the neurophysiological underpinnings of attention and working memory dysfunction in patients with schizophrenia and patients with bipolar disorder

fMRI Matlab

01/2015 07/2014

### Research Assistant, 7-Tesla-MRI Flow-Manager, Psychiatry, University Hospital Utrecht

> Planning, execution and supervision of all scans at the 7Tesla MRI scanner.

12/2014 01/2014

### Research Intern, STAR LAB, BRAIN CENTER RUDOLF MAGNUS, Utrecht

> Investigating behavioral, structural, and metabolic correlates of agency dysfunction in schizophrenia under the supervision of Prof. Dr. Bas Neggers and Dr. Katharine Thakkar.

1H-MRS Eye-Tracking Matlab

### PUBLICATIONS

- Kocevska, D., Blanken, T., van Someren, E. & Rösler, L. . Sleep quality during the COVID-19 pandemic: Not 2020 one size fits all. Sleep Medicine
- 2020 Rösler, L., Göhring, S., Strunz, M. & Gamer, M. Social anxiety is associated with heart rate but not gaze in a real social interaction. Journal of Behavior Therapy and Experimental Psychiatry https://doi.org/10.1016/j.jbtep.2020.101600
- Rösler, L., Rubo, M. & Gamer, M. Artificial faces predict gaze allocation in complex scenes. Frontiers in Psy-2019 chology.
- 2019 Rösler, L. & Gamer, M. . Freezing of gaze during action preparation under threat imminence. Scientific Reports. Preprint available from: https://psyarxiv.com/a2pfh/
- Yao, B., Neggers, S.F.W., Rolfs, M., Rösler, L., ... & Thakkar, K.N. Structural thalamo-frontal hypoconnectivity 2019 is related to oculomotor corollary discharge dysfunction in schizophrenia. Journal of Neuroscience.
- 2018 Flechsenhar\*, A., Rösler\*, L. & Gamer, M. Investigating the dynamics of social attention with a gazecontingent display and recurrence quantification analysis. Scientific Reports. \*Both authors contributed equally.
- 2017 Rösler, L., End, A., & Gamer, M. Orienting towards social features in naturalistic scenes is reflexive. PloS ONE.
- Thakkar, K.N., Rösler, L., Wijnen, J.P., Boer, V.O., Klomp, D.W.O., Cahn, W., Kahn, R.S. & Neggers, S.F.W. 7T proton magnetic resonance spectroscopy of GABA, glutamate, and glutamine reveals altered concentrations in schizophrenia patients and healthy siblings. Biological Psychiatry.
- 2015 Rösler, L., Rolfs, M., Van der Stigchel, S., Neggers, S. F.W., Cahn, W., Kahn, R. S., & Thakkar, K. N.. Failure to use corollary discharge to remap visual target locations is associated with psychotic symptom severity in schizophrenia. Journal of Neurophysiology.



- Phd, Neuroscience, University of Würzburg, Summa Cum Laude 2020
- Master of Science, Neuroscience and Cognition, Utrecht University, Cum Laude, highest distinction 2013 - 2015
- 2010 2013 Bachelor of Liberal Arts, Philosophy and Cognitive Neurosciences, University College Utrecht, Magna Cum Laude

### CONFERENCE CONTRIBUTIONS

- 2019 Rösler, L. & Gamer, M. Freezing of gaze supports action preparation under threat imminence. Poster presented at WASAD Congress, Würzburg, Germany.
- 2018 Rösler, L. & Gamer, M. Early visual cortex and amygdala activity is modulated by reflexive social attention. Poster presented at Gentner Symposium "Understanding Others: From Psychological Concepts to Neural Mechanisms", Jerusalem, Israel.
- Rösler, L. & Gamer, M. The influence of social anxiety on a real-life social interaction. Talk presented at 2018 Science Conference of Zentrum für Psychische Gesundheit, Würzburg, Germany.
- Rösler, L. & Gamer, M. Behavioral and neural mechanisms of reflexive social attention. Talk presented at 2018 Psychologie und Gehirn Conference, Giessen, Germany.
- 2018 Rösler, L. & Gamer, M. Neural mechanisms of reflexive social attention: a combined eye-tracking and fMRI study. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, Boston, United States.
- 2017 Rösler, L., End, A., & Gamer, M. Orienting towards social features in naturalistic scenes is reflexive. Poster presented at the International Conference for Cognitive Neuroscience, Amsterdam, The Netherlands.
- 2016 Rösler, L., Thakkar, K.N., Wijnen, J.P., Boer, V.O., Klomp, D.J.W., Cahn, W., Kahn, R.S. & Neggers, S.F.W. Altered Glutamine, Glutamate and GABA Levels in Schizophrenia Patients and Their Healthy First-Degree Relatives: A 1H-MRS Study at 7T. Talk presented at the biennial meeting of the Schizophrenia International Research Society, Florence, Italy.



## TEACHING AND MENTORING

### 2019 Clinical Psychology Seminar, BACHELOR OF PSYCHOLOGY, University of Würzburg

> Discussing emotional disorders in depth with a focus on network theory

### 2019 Biopsychology Seminar, BACHELOR OF PSYCHOLOGY, University of Würzburg

2016 > Teaching biopsychological methods in a seminar setting

> Acquainting students with the study of scientific literature

### June 2018 Biopsychology Lecture, BACHELOR OF PSYCHOLOGY, University of Würzburg

> Two lectures on functional magnetic resonance imaging physics, analyses and applications

### 2019 Thesis Supervision, B.Sc. and M.Sc., University of Würzburg

2016

- > Sandrine Michelberger, Master thesis: Does social anxiety modulate social attention? An eyetracking study.
- > Teresa Wörsdörfer, Master thesis: The neural correlates of social attention.
- > Stefan Göring, Master thesis: The influence of social anxiety on gaze during a real social interaction.
- > Michael Strunz, Master thesis: How social anxiety influence a real social interaction An eye-tracking and psychophysiology study.
- > Julia Jochim, Bachelor thesis: The influence of fear on visual attention.
- > Alexandra Vogt, Bachelor thesis: Intraindividual stability of visual exploration patterns from the lab to the real life.

## Honors and Awards

- Poster Award, World Association for Stress Related and Anxiety Disorders (WASAD) Congress 2019 2019
- Neuroscience Research Award, Graduate School of Life Sciences, Würzburg
- 2017 Travel Grant from the Graduate School of Life Sciences Würzburg travel award to attend the Statistical Parametric Mapping (SPM) workshop, London
- 2016 Travel Grant from the University Hospital Frankfurt to attend the Schizophrenia International Research Society Conference, Florence
- 2014-2015 U/Select Honors Program, Utrecht University

# </> Languages



# + Programming

- > Matlab
- > R
- Neurobehavioral Systems PresentationBashPython