



# Barbara Nordhjem

## *Curriculum Vitae*

### Research interests

My goal is to explore the underlying mechanisms of visual perception, mental states, neuroplasticity, and visual processing in health and disease. I also have a strong interest in methods development in computational neuroimaging and eye tracking analysis.

### Education

- 2011–present **PhD Researcher**, *University Medical Center Groningen*, The Netherlands.
- 2009–2011 **Research Master**, *Leiden University*, The Netherlands.
- 2005–2008 **Bachelor in Psychology**, *University of Aalborg*, Denmark.

### Work experience

- 2016–2017 **Program manager**, *EGRET and EGRET+*, European research consortia coordinated from the University Medical Center Groningen, the Netherlands.
- 2014–2017 **Program manager**, *NextGenVis*, European research consortium coordinated from the University Medical Center Groningen, the Netherlands.
- 2011–2017 **Teaching**, *Visual Neuroscience (MSc)*, *Art and Science (elective)*, *Glaucoma (BA)*, *Scientific mentor groups (BA)*, University of Groningen, University Medical Center Groningen, the Netherlands.
- 2008–2010 **Project manager**, *V2 Institute for Unstable Media*, Rotterdam, the Netherlands.
- 2006–2007 **Event coordinator**, *1000fryd*, Aalborg, Denmark.
- 2005–2006 **Director**, *Display/Ground*, Festival for live visuals and video art, Aalborg, Denmark.

### Research abroad

- 2016 Visiting researcher at the Edmond and Lily Safra Senter for Brain Sciences, Jerusalem, Israel with Dr. Aviv Metzger.
- 2015 Visiting researcher at the York NeuroImaging Centre, United Kingdom with Prof. Tony Morland.

2010 Research internship at the Laboratory of Neurobiology, University College London, United Kingdom with Prof. Semir Zeki.

## Publications

- accepted Nordhjem B, Ghedini F, Cornelissen FW. The neural correlates of geometrical and figural bistable perception. *Vision Research*.
- accepted Cardena, E, Nordhjem, B, Marcusson-Clavertz, Holmqvist, K. The "Hypnotic State" and Eye Movements: Less there than Meets the Eye? *PLoSone*.
- accepted Nordhjem B, Klug J, and Otten B. Faces in motion: Embodiment, Emotion and Interaction. *Leonardo*.
- submitted Nordhjem B, Marsman JB, Cornelissen FW, Renken R. EyeCourses – a toolbox for the statistical analysis of eye tracking data for temporal analyses within and between subjects.
- 2015 Nordhjem B, Curcic-Blake BJ, Meppelink AM, Renken R, De Jong BM, Leenders KL, van Laar T, and Cornelissen FW. Lateral and medial ventral occipitotemporal regions interact during the recognition of images revealed from noise. *Frontiers in Human Neuroscience*, 9, 678.
- 2015 Nordhjem B, Petrozzelli CI, Gravel N, Renken R, and Cornelissen FW. Eyes on emergence: Fast detection yet slow recognition of emerging images. *Journal of Vision*, 15(9), 8-8.
- 2014 Gravel N, Harvey B, Nordhjem B, Haak, KV, Dumoulin, SO, Renken R, Curcic-Blake B, and Cornelissen FW. Cortical connective field estimates from resting state fMRI activity. *Frontiers in Neuroscience*, 8.

## Conference proceedings

- 2014 Nordhjem B, Kurman Petrozzelli CI, Gravel N, Renken R, Cornelissen FW. Systematic eye movements during recognition of emerging images. *Journal of Vision* 14:1293.
- 2013 Nordhjem B, Petrozzelli CK, Gravel N, Renken R, Cornelissen FW. Eye movements while viewing coarse and fine image information. *Perception* 42:41.
- 2012 Nordhjem B, Meppelink AM, Curcic-Blake B, Renken R, de Jong BM, Leenders KL, van Laar T, Cornelissen FW. Making sense of noisy visual input: interactions between lateral and medial ventral brain regions associated with object recognition. *Perception* 41:196.

## Awards

- 2017 Thesis Grant Award Prof. Mulder Foundation, Groningen, the Netherlands.
- 2016 Travel award: ELSC Annual retreat, Ein Gedi, Israel.
- 2011 Travel award: Bayesian Inference, From Spikes to Behaviour, Bernstein Center for Computation Neuroscience, Tübingen, Germany.
- 2011 Annual Dutch MSc Thesis Award for Cognitive Neurosciences.

## Art exhibits and performances

- 2016 STATE festival, Berlin Science Week, Berlin, Germany.
- 2014 400 years of academic science, Aa Kerk, Groningen, the Netherlands.
- 2014 GenderBlender, MU gallery, Eindhoven, the Netherlands.
- 2012 Freeze festival, De Harmonie, Leeuwarden, the Netherlands.
- 2012 Noorderzon festival, Groningen, the Netherlands.
- 2012 Night of Art and Science, Groningen, the Netherlands.
- 2008 Live performances and LP+DVD release with musician Kilton, the Netherlands, Germany, Belgium, Denmark.

## Invited public talks

- 2016 Synesthesia and art, Night of art and science, Groningen, the Netherlands.
- 2016 Sensorium of the Animals, Critical Media Lab at Academy of Art and Design, Basel, Switzerland.
- 2016 Crosspollination between art and science, Studium Generale, Groningen, the Netherlands.
- 2015 Matter of life, presentation and panel discussion, MU gallery, Eindhoven, the Netherlands.
- 2014 Stand van Stad, TV talkshow, the Netherlands.
- 2014 Science, art and embodied emotions, Science Acts, Aa Kerk, Groningen, the Netherlands.

## Technical skills

- Behavioral experiments
- fMRI
- MATLAB
- EyelinkToolbox
- SPM
- Freesurfer
- MAX MSP
- Eye tracking
- population Receptive Field mapping
- PsychToolbox
- mrVista
- FSL
- ITK
- Several programs for photo and video editing

## Referees

- Prof. dr. Frans W. Cornelissen, Department of Ophthalmology, University Medical Center Groningen, the Netherlands, f.w.cornelissen@umcg.nl, +31 503 612 510.
- Dr. Remco Renken, University Medical Center Groningen, the Netherlands, r.j.renken@umcg.nl, +31 50 361 6945.
- Dr. Branislava Curcic-Blake, Department of Neuroscience, University Medical Center Groningen, the Netherlands, b.curcic@umcg.nl, +31 619 493 273.